



## **CORE CONSULTATIVE COMMITTEE ON WASTE (3C) RESPONSE TO SUBMISSIONS MADE ON THE EXHIBITED SHORT LISTED SITE – KEMERTON INDUSTRIAL PARK**

**The Core Consultative Committee would like to thank all individuals/groups who provided comments on the Exhibited sites. This document summarises all submissions received that are specific to the Kemerton Industrial Park and contains the 3C’s responses to these. Any comments in submissions that are generic to all sites (i.e., are not site specific), have been summarised in a separate document titled “Response to Submissions on Non-Site-Specific Issues”.**

**In order to analyse and respond to comments, submissions have been summarised and presented in tabular format with 3C responses to the issues raised also provided. To protect the privacy of submission writers, a unique code has been allocated to each submission. A letter will be sent to advise you of your code when the final summary of submissions document is released after the Cabinet decision has been made. Any submissions made by public authorities (e.g. Local and State Government Agencies) or broad stakeholder interest groups (e.g. the eight Representative Community Groups, clubs, churches, chambers etc) are publicly identifiable and are listed in the final table appended to the end of this report.**

**Table 1 contains comments relating specifically to the site selection criteria. The remaining tables relate to non-criteria specific factors.**

**These documents have been provided to State Cabinet in support of our advice on preferred sites.**

**Table 1: Kemerton Industrial Park - Summary of submissions against the Site Selection Criteria**

No.	Specific Factor	Criteria	Submissions	Response
1	Flood plains	At least 500mm above a 100 year ARI floodplain.	<ol style="list-style-type: none"> <li>1. An approximate calculation of the developable area (after eliminating all areas that do not meet essential criteria) reveals that a single area of the required size (45+ha) is not available in the KIP. Council requests that the 3C review the area requirements of the proposed site, and conformation that sufficient land is available outside the floodplain. (SoH)</li> <li>2. Site area required exceeds the available land area above the 100yr ARI flood Level. (Kem49, Kem155, Kem121-122, Kem125-133, Kem135-137, Kem140-145, Kem149, Kem151, Kem168, Kem212, Kem338, Kem365-394)</li> <li>3. For large parts of the year, significant areas of the park are under water, especially in a good rain season. This would include the eastern 3C site. (Kem207, Kem302, Kem313, Kem314)</li> <li>4. It is doubtful there is sufficient area above flood levels without an extreme cut and fill of a ridgeline or the introduction of outside fill that would present its own set of problems. (Kem334)</li> <li>5. I don't believe the area designated for this plant is totally above the 100yr flood level. (Kem310)</li> <li>6. High rain fall area with 5-6 months of rain a year. Between 45-50 inches of rainfall a year. (Kem5, Kem12, Kem8, Kem7, LPA)</li> <li>7. Flooding is a risk factor for the KIP (Elder Market Research, Advice to Kemerton Community Committee, 2006, p10-12). (Kem123)</li> <li>8. Flooding of much of the KIP in extreme weather events may also cause problems for the precinct operations. (ACE, CSA)</li> <li>9. Excessive rain and flooding will affect the site. (Kem10, Kem221) – All roads would be cut off and mopping up capabilities do not exist. (Kem5)</li> <li>10. Access routes to the site may well be cut by a major flood – limiting the site access. (Kem49, Kem121, Kem155, Kem122, Kem125, Kem126, Kem127, Kem128, Kem129-133, Kem135-137, Kem140-145, Kem149, Kem151, Kem168, Kem201, Kem202, Kem205-206, Kem212, Kem338, Kem365- 394)</li> </ol>	<ol style="list-style-type: none"> <li>1. The assumption for the need of 45+ hectares was based upon the use of evaporation ponds. There are other alternatives for dealing with waste water and will be determined by the proponents with approval from regulatory authorities.</li> <li>2-8 The expected size required for a precinct in the south west region is 20ha. 3C believe sufficient land is available at the KIP 500mm above the 100 year ARI floodplain to meet this criterion. Evidence supports that the areas that the 3C have identified as suitable for a precinct are at least 500mm above the 100 year ARI floodplain.</li> <li>9-10 The flooding potential of roads within, or to, the KIP is not a site selection criterion. However if sections of the KIP access roads proved to be susceptible to flooding this could managed by improved drainage or culverts.</li> </ol> <p><u>3C Conclusion:</u> The 3C believes that sufficient land within the site meets the criterion.</p>
2	Natural Waterways/Wetlands/Marine Systems	Not less than 1000m from high conservation/ecological value aquatic ecosystems, not less than	<ol style="list-style-type: none"> <li>1. DCLM's concerns with the GIS selection process for Kemerton is that sites within the Kemerton area have been selected because they are slightly more elevated within a broader area that is widely covered with wetlands and groundwater close to the surface. (DCLM)</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted. The more elevated portions of the KIP were selected because they conformed to Site Selection Criteria 1 by being at least 500mm above the 100yr ARI floodplain.</li> </ol>

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		<p><i>500m from a slightly to moderately disturbed systems and not less than 250m from highly disturbed aquatic systems.</i></p>	<ol style="list-style-type: none"> <li>2. The selected sites are within 150m of wetlands which, even if degraded, are believed to have hydraulic connections to other wetlands of higher conservation rating. (DCLM)</li> <li>3. Eastern edge of the KIP site contains EPP (Environmental Protection Policy) wetlands and is about 800 metres to the east of the Wellesley River. (DCLM)</li> <li>4. Kemerton is largely a wetland area – vulnerable to seepage into groundwater. (Kem15, Kem7, Kem173, Kem126, Kem302, Kem314, SoDard)</li> <li>5. The eastern site is close to conservation wetlands (Kem49, Kem338)</li> <li>6. The western site is less than 500 metres from waters and subject to local flooding. (Kem49, Kem338)</li> <li>7. Adjacent to swamps, sumpland, dampland and pulusplain wetlands. (Kem49, Kem338)</li> <li>8. A significant number of wetlands have been identified within the KIP. The predominant portion of these wetlands have been identified as being of high conservation significance as either ‘Conservation Category (CCW)’ or ‘Resource Enhancement (REW)’ wetlands under the DoE’s Wetland Position Statement (2001) or under the Environment Protection Policy for Lakes (1992) or Wetlands (2004, Draft). The eastern portion has been identified as containing 2 REW, and being adjacent to both CCW and EPP wetlands. Considering appropriate buffering and precautionary approach to risk to these wetlands the eastern fragment should be removed from consideration. (LCC)</li> <li>9. Western Australian Land Information System identifies a number of wetland areas in close proximity to the KIP. Conservation, Resource Enhancement and Multiple Use EPP Wetlands. (SoH) <a href="http://www.walis.wa.gov.au">www.walis.wa.gov.au</a></li> <li>10. Based on information from the Water and Rivers Commission, there are less than 5% of the original permanent wetlands remaining on the Swan coastal plain. The wetlands associated with KIP were recognized decades ago for their conservation value and are meant to be protected under system 6 requirements. (Kem175, Kem197)</li> <li>11. As is stated in your initial analysis (EC2), the eastern area is within 1000m of the Wellesley River and its environs and thus is not suitable for siting the plant. (Kem315)</li> <li>12. Consideration of site disregards sensitive waterways (Kem210)</li> <li>13. Large sections of the site constitute sensitive wetlands. (Ind)</li> </ol>	<p>2-13 The DoE has advised that wetlands within the KIP are ephemeral and therefore assessed under the desirable criterion. The DoE has further advised that the wetlands near the western site are designated as Multiple Use (MU) management category wetlands. The WRC Position Statement: Wetlands (2001) describes MU wetlands as having few important ecological attributes and functions remaining. As a highly disturbed aquatic system these wetlands have a 250m buffer applied to them.</p> <p>The 3C believe the larger 3C site on the western side of the estate meets both the essential and desirable components of this criterion. The 3C believes that the smaller site in the eastern portion of the KIP meets the essential component of the criterion, but does not meet the desirable component, as it is within 1000m of ephemeral Conservation Category wetlands 250m of degraded ephemeral wetland systems.</p> <p>14. Noted.</p> <p>15. The Peel-Yalgorup wetlands are located approximately 8.5 km to the north of the KIP in the Yalgorup National Park, which is outside of the 1000m buffer of this criterion. Any potential impacts on listed wetlands of international significance would be assessed during the detailed Environmental Impact Assessment (EIA) studies.</p> <p>16. Agreed. The 3C understands that this should happen at the EIA stage if the site at the KIP is recommended as a location for a HWTP.</p> <p>17. The combined site selection criteria and technology suitability criteria are some of the most stringent criteria for any type of industrial facility. When implemented together, these criteria should ensure the risks of impacts on the environment can be managed.</p> <p>18. Any clearing of native vegetation at all precinct sites would have to meet all the requirements of the clearing regulations.</p>

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			<p>14. KIP contains vegetation and wetlands of regional significance and their associated values should be managed to ensure that they are retained and protected, and it is the EPA's preference that the Conservation Category wetlands are not disturbed (EPA 2005). (DoE)</p> <p>15. A listed wetland of international significance, the Peel-Yalgorup system is In the Kemerton area and listed migratory birds associated with that wetland are likely to be in the area. (DoEH)</p> <p>16. A wetland identification and evaluation survey should be conducted. (LCC)</p> <p>17. The site is close to important wetlands and the Wellesley River, which flows into the Leschenault inlet. This area is important for bird migration and breeding and pollution by toxic waste would be disastrous. There have already been problems in the past with spills from the Laporte (SCM) plant at Australind (now moved to Kemerton) and these mistakes must not be repeated. (WCS, Kem123, Kem134, Kem173, Kem175, Kem180, Kem222-243, Kem298)</p> <p>18. A precinct would also require significant clearing of native vegetation and there may be difficulties in finding a site with sufficient buffers from wetlands. (NTN)</p>	<p><u>3C Conclusion:</u> The 3C believe the western portion of the KIP meets the essential and desirable components of this criterion. The 3C believe the eastern portion of the KIP meets the essential component of the criterion, but not the desirable component, as it is within 1000m of ephemeral Conservation Category wetlands and within 250m of degraded ephemeral wetlands.</p>
3	Groundwater	Not within Public Drinking Water Source Areas (PDWSAs) P1-P3 priority areas identified in published development plans.	<p>1. KIP is located within the Groundwater resources of the Kemerton Sub Area and there is a Local Area Management Plan relating to this catchment. Although this is not a public drinking water source area this water is used for domestic purposes, agricultural use and for the surrounding ecosystem. (SoH)</p> <p>2. The Local Area Management Plan specifies the importance of groundwater on surrounding ecosystems which can be impacted by even a slight reduction in groundwater levels or contamination of this water source. (SoH)</p> <p>3. Water and Rivers Commission report (Dec 2005) Local Area Management Plan for the Groundwater Resources for the Kemerton Subareas: states that this is a catchment area for the region as verified by the signage adjacent to Kemerton. The report states the need to increase the area of the catchment to sustain groundwater use into the future. (Kem37, Kem341)</p> <p>4. Leschenault River and Inlet would be affected as confirmed in the EPA Report and Recommendations – proposed Aluminum Smelter – Kemerton, Bulletin 241 June 1985, 7.2.2.5 Groundwater Resources: <i>The Kemerton area is a proclaimed ground water area, and as such</i></p>	<p>1-27 The 3C have received advice from the Department of Water (DoW) that the proposed site is not in a PDWSA and is not considered a risk to the public water supply. Further to this the DoW recommend domestic users of bore water from the <i>superficial</i> aquifer should be guided by the Dept of Health brochure 'Using bore Water Safely' which is available at <a href="http://www.population.health.wa.gov.au/environmental/resources/using%20bore%20water%20safely.pdf">http://www.population.health.wa.gov.au/environmental/resources/using%20bore%20water%20safely.pdf</a>.</p> <p>The KIP straddles 2 Ground Water Supply Areas (GWSA). GWSA's cover land that has been proclaimed under the <i>Rights in Water Irrigation Act 1914</i> to protect the quantity of ground water available for extraction. The DoW has recommended amalgamating the two GWSA's straddled by the KIP into the Bunbury Groundwater Area.</p>

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			<p><i>all bores must be licensed by the Public Works Department. The superficial groundwater in the region is a major source of freshwater, which salinities usually less than 500 milligrams per litre. This resource is extensively used for irrigation purposes via shallow, low capacity bores. In the vicinity of Bunbury, the deeper Leederville formation contains freshwater, and this is used to supply Bunbury with water for domestic and industrial supplies and for irrigation. This report demonstrated the susceptibility of the area to ground water pollution risk in detail. (Kem37, Kem152)</i></p> <ol style="list-style-type: none"> <li>5. Kemerton is the recharge for the Leederville Aquifer via the Mialla mound. Water from the Mialla mound flows directly in a North West direction towards Australind where public drinking water is drawn from the Leederville aquifer. It also flows to the Leschenault estuary on the West and the Wellesley River on the East. (Kem333)</li> <li>6. A Department of Water (DoW) local water allocation plan was issued in December 2005 and legislative changes will occur during 2006, bringing the area under the Bunbury Groundwater area with allocations for public drinking water supplies. (Kem49, Kem152, Kem201, Kem205 Kem206, Kem313, Kem338, Kem347).</li> <li>7. The KIP lies within the Leschenault Catchment Area. Legislative changes in 2006 will bring the area under the Bunbury Groundwater Area with allocations for drinking water supplies. (Kem121-122, Kem155, Kem125-137, Kem140-145, Kem149, Kem151-152, Kem168, Kem194, Kem212, Kem302, Kem327, Kem334, Kem347, Kem365-394)</li> <li>8. KIP straddles the South West, Coastal and Bunbury groundwater areas – Bunbury and Australind are serviced by underground water for drinking and it is essential for use as stock water and horticultural use. (Kem5, Kem49, Kem207, Kem338, Kem340)</li> <li>8. Despite the 3C's claim this criterion is met because Kemerton is not a published PDWSA, the area is a published catchment area. Its close proximity to bore water supplies both private and scheme is undeniable and a waste precinct poses a very real threat to this water supply. (Kem184)</li> <li>9. The park lies over a valuable drinking water source for this States future use. (Kem321)</li> <li>10. There are families who draw their drinking water supplies from this groundwater. Any spills of hazardous waste liquids in this area would result in immediate contamination of the groundwater.</li> </ol>	<p>The combined site selection criteria and technology suitability criteria are some of the most stringent criteria for any type of industrial facility. When implemented together, these criteria should ensure the risks of impacts on groundwater from the proposed precinct can be managed. Further to this the DoW has advised the 3C that it is unlikely any contamination from the proposed site at the KIP would move south west towards production bores in Australind or Eaton, and if it did it would be several thousands of years or longer, if at all, that it reached the bore sites. That said PDWSA are given high level protection by law, and bores are protected by bylaws. Private drinking water supplies are protected by private laws and the onus is on the individual to ensure what they are drinking is safe. The DoW recommends that domestic users of bore water from the <i>superficial</i> aquifer should be guided by the Dept of Health brochure 'Using bore Water Safely' which is available at <a href="http://www.population.health.wa.gov.au/environmental/resources/using%20bore%20water%20safely.pdf">http://www.population.health.wa.gov.au/environmental/resources/using%20bore%20water%20safely.pdf</a>.</p>

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			<p>(Kem155, Kem121-122, Kem125-133, Kem135-137, Kem139-146, Kem149, Kem151-152, Kem154, Kem168, Kem175-176, Kem183, Kem191A, Kem196, Kem207, Kem294, Kem300, Kem302, Kem311, Kem321, Kem338, Kem340, BCA, Kem352, Kem365-394)</p> <p>11. Household is dependent on licensed bore water for all water – including drinking purposes. (Kem2A, Kem10, Kem47, Kem197, Kem214, Kem222- 243)</p> <p>12. Family lives 4km from site – uses rainwater as only source of drinking water supplemented by bore water. Neighbour uses bore water as main drinking water source (Kem16)</p> <p>13. Rely on rainwater for drinking water and a bore for garden and vegetables. (Kem12, Kem123, Kem179, Kem196, Kem221, Kem292, Kem330, Kem340)</p> <p>14. The proposed site will affect our ground water, which we use for our gardens, pool, and general maintenance of our property. (Kem179)</p> <p>15. Treated bore water is utilized by the 25% of the district population not connected to scheme water. (Kem126, Kem194)</p> <p>16. The residents west of the area have always used groundwater to augment stored rainwater, and as rainfall is not as plentiful in some seasons as it used to be, this groundwater will be more important to them in the future. (Kem163)</p> <p>17. Live approx 6km from KIP, No scheme water connected; rely on bore/rain water for all drinking water. (Kem154)</p> <p>18. Whether from our own bores, from shallow streams or scheme water, the whole of Bunbury and the surrounding areas draw water which comes from under Kemerton. (Kem174)</p> <p>19. All surrounding settlements, Binningup, Australind, Eaton, Brunswick and Bunbury depend on bore water for their town supplies. (Kem312, Kem4)</p> <p>20. Site is incompatible with PDWS catchments. (Kem186, Kem217)</p> <p>21. Evidence sourced by Elder Market Research (reference 142 in Pain 2006) indicates water flows permeating the Leederville Aquifer which is a PDWSA. (Kem49, Kem139, Kem176, Kem201, Kem205, Kem334, Kem338)</p> <p>22. Piped water for household purposes in the following areas: Myalup, Binningup, Leschenault, Australind and Eaton, is fed from underground aquifers and intermixing with water tables in the area (Kem2A)</p> <p>23. The Leederville aquifer extends beneath the KIP. Water supplying</p>	

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			<p>the 15,000+ residents of Australind, Leschenault, Westgarth and Eaton is drawn from the Leederville aquifer. (Kem324)</p> <p>24. Water Board bore water from the Yarragadee Aquifer is reticulated to all other areas including the whole of Bunbury City from under Kemerton. (LPA)</p> <p>25. The surface waters in the area recharge the Leederville aquifer, which supplies many residents with water. Any spillage of hazardous waste liquids would result in contamination of this water source. (Kem121, Kem122, Kem125-133, Kem135-139, Kem140-145, Kem149, Kem151-153, Kem155, Kem156, Kem158-161, Kem164-166, Kem171, Kem168, Kem202, Kem212, Kem299, Kem301, Kem302, Kem307-310, Kem322, Kem324, Kem338, Kem349, Kem350, Kem353-394, Kem400)</p> <p>26. Risk to water supply outweighs benefits of a precinct. (Kem216, Kem293, Kem299, Kem301, Kem303, Kem334, Kem339, PAN)</p> <p>27. We know the water for our irrigation bores flows from the proposed site in an S-S.W. direction and it is available at a very shallow depth down to various deeper layers. (Kem163)</p>	<p><u>3C Conclusion:</u> The site meets this criterion.</p>
4	Groundwater	Groundwater should be maintained at least 5m below the surface.	<ol style="list-style-type: none"> <li>1. Shire questions this in the light of a larger site being required to accommodate for the bigger evaporation Ponds. Further investigation is required. (SoH)</li> <li>2. Testing for acid sulfate risk, and surveys for depths to groundwater and analysis of water quality and the physical properties of the soils should be undertaken. (DCLM, Kem208)</li> <li>3. It should be recognized also that development of the site will require ground levelling which will also have the effect of bringing the development floor closer to the groundwater. (DCLM, Kem49, Kem153, Kem156, Kem158-161, Kem164-166, Kem171, Kem202, Kem217, Kem322, Kem327, Kem330, Kem331, Kem338, Kem343, Kem349, Kem350, Kem353-364)</li> <li>4. Depth to groundwater over the area is variable, often less than 5 metres below the surface and with surface expressions associated with very high hydraulic conductivity. (DCLM)</li> <li>5. A study shows that groundwater ranges from 0.5 – 5 meters deep. (Kem5, Kem49, Kem175, Kem197, Kem217)</li> <li>6. Superficial water varies from 0 to 2m from the surface. (Kem152)</li> <li>7. Groundwater in Kemerton is less than 2m below the surface and local knowledge provides evidence of how the site ‘floats’ during winter months, particularly during average and above average rainfall years.</li> </ol>	<ol style="list-style-type: none"> <li>1. Evaporation ponds may not be the only solution to dealing with treated waste water. There are other alternatives for dealing with waste water and these will be determined by the proponents with approval from regulatory authorities. A solution will be site specific.</li> <li>2. Depth to groundwater will be measured and appropriate solutions adopted should this site be selected for a precinct. Groundwater depths would need to be confirmed prior to any development. The 3C expect this would happen at the works approval and EIA stage.</li> </ol> <p>3-14 he 3C acknowledge groundwater at the KIP typically ranges from 0 to greater than 5 metres below surface level. The DoE has advised that the groundwater below the green areas exhibited by the 3C is likely to be greater than 5m below the surface. The 3C of groundwater levels at the KIP was based on the <i>Kemerton Water study – Phase 2 final Report</i> by Aquaterra (2002) which takes into account reasonable variations in ground water level. The 3C consider</p>

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			<p>(Kem339)</p> <p>8. Water table is very high in the KIP. (Kem10, Kem302, SoDard, Kem342, Kem400), which could be disastrous if there is a spill (Kem33, Kem317, Kem318) -depth to water being anywhere from 0 to 5 metres. (Kem338)</p> <p>9. The shallow depth of groundwater across the entire KIP presents a higher risk to the shallow superficial aquifer from a potential pollution spill. (LCC)</p> <p>10. The proposed Kemerton site has a water table being in very close proximity to the ground surface and also experiences major seasonal fluctuations in ground water table height with many reports indicating that the water table will rise above the ground surface level at times of high water table pressure as the ground water is recharged from seasonal rain falls. (Kem341)</p> <p>11. The water table is high in this area and it is prone to flooding. It is therefore a very inappropriate site for a waste treatment precinct. (WCS)</p> <p>12. The original testing of the Kemerton site for industry warned of high water tables (Kem163)</p> <p>13. In certain areas, the water level frequently comes to just below ground level and this can cause significant problems with structure such as swimming pools. (Kem207)</p> <p>14. It has not been indicated whether depth to groundwater takes in seasonal variability. (LCC)</p> <p>15. Concerned that water levels will be compromised. (Kem210)</p> <p>16. Should be an essential criterion. (Kem208, Kem217, Kem318)</p> <p>17. Predicted rising ocean levels may cause groundwater to rise. (Kem2A, Kem222-243)</p>	<p>sufficient land on the elevated western side of the site is likely to meet this desirable criterion.</p> <p>15. Noted. It has been estimated that a precinct would require 1040 m<sup>3</sup>/a of potable water for its operation per year, which is not a large amount. The 3C cannot confirm if this would come from scheme water or a bore on site, but either way it should not affect ground water levels.</p> <p>16. Essential and desirable site selection criteria were determined by a public process involving community and industry stakeholders. The outcomes of this process were ratified by Cabinet. The 3C is not in a position to change the classifications of the site selection criteria.</p> <p>17. Noted.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
5	Groundwater	Hydraulic conductivity of any soil (natural or engineered) above ground water shall ensure that the transport time of contaminants to groundwater is more than 2 years.	<p>1. CALM would expect that the soil on the more elevated sands in the Kemerton area would have a very high hydraulic conductivity (contrary to one of the essential criterion) (DCLM).</p> <p>2. Is situated on Bassendean sands and any contamination of the soil would permeate the underground water supply (DOIR).</p> <p>3. The 3C assessment is incorrect – the site lies on Bassendean and Spearwood sands which are porous. (Kem5, Kem21, Kem49, Kem123, Kem146, Kem152-154, Kem156, Kem158-161, Kem164-166, Kem171, Kem170, Kem175, Kem176, Kem183, Kem190, Kem191A, Kem208, Kem211, Kem316, Kem221-243, Kem298, Kem302, Kem313, Kem315, Kem322, Kem327, Kem331, Kem334,</p>	<p>1-11 It is acknowledged that the inherent capacity of the site in its natural state to limit transport time of potential contaminants to groundwater is low. However, this criterion allows for engineered approaches to be used to ensure that the transport time of contaminants to ground water is more than 2 years. Any development of this site is likely to require soil engineering to adequately address the aspects of this criterion. The 3C is confident that this criterion can be met.</p> <p>12. Costs related to the development of any precinct site</p>

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			<p>KIPCC, SoDard, Kem342, Kem343, Kem349, Kem350, Kem353-364)</p> <ol style="list-style-type: none"> <li>4. Eventual filtration of substances will occur to pollute ground water/farming pastures and the Wellesley River. (Kem5, Kem33, Kem15, Kem175, Kem221, Kem324)</li> <li>5. Not confident that two year transmission time from base of infrastructure to the groundwater table can be achieved within the confines of the existing geology of the site. (LCC, Kem174, Kem201, Kem205, Kem206, Kem310, Kem338)</li> <li>6. The site lies on Bassendean and Spearwood sands. The permeability of these sands is high. Contamination would occur in hours not years. (Kem322, Kem327, Kem330, Kem331, Kem333, Kem349, Kem350, Kem353-364)</li> <li>7. The site sits on permeable and conductive Bassendean and Spearwood sands which are above the Bunbury recharge water table. These are of insufficient height to absolutely guarantee no risk to either this or nearby lakes and estuaries. (Kem139)</li> <li>8. Contamination of groundwater could happen due to sandy soils and closeness of water to the surface, or from spills or run off from storms or if there was a fire at the plant. (Kem332)</li> <li>9. Research has shown that the area is a re-charge for Leederville underground water. Seepage into sand will take less than 2 yrs. (Kem5, Kem21, Kem49, Kem339)</li> <li>10. High soil permeability to 40 m/d. (Kem49, Kem338)</li> <li>11. In its natural state the site does not conform to this criterion. By the admission of the 3C, soil would have to be removed and replaced with a combination of different soils treated to meet certain specifications (engineered soils) before it conforms to the requirements. (Kem322, Kem330, Kem331, Kem343, Kem349, Kem350, Kem353-364)</li> <li>12. Engineering soils will be costly. (Kem153, Kem156, Kem158-161, Kem164-166, Kem171, Kem316, Kem315, Kem322, Kem334, Kem342, Kem349, Kem350, Kem353)</li> <li>13. a). While the 3C has incorporated some very good preventative measures to avoid groundwater contamination (through bunds and engineered soils) b). the risk of transport spills in the vicinity of the precinct is too high to consider. (ACE, CSA, Kem174, Kem184, Kem208)</li> <li>14. Council and community seek confirmation from the 3C on how the</li> </ol>	<p>are to be considered separately by Government and will be a factor in Cabinet's decision as to the most suitable sites for precincts.</p> <p>13. a) Noted. b) This criterion relates specifically to the precinct and similar risks relate to all precinct sites.</p> <p>14-17 How best to manage groundwater to meet this criterion will be determined by the proponent and approved by the regulator. The 3C has stated that a combination of engineered soils, containment and groundwater monitoring could prevent groundwater contamination. Individual processes and technologies will be assessed to ensure they meet the criterion.</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>site will be managed and monitored to ensure that contamination does not occur. (SoH)</p> <p>15. Engineered solution is not ideal for a precinct – should be located in an environment where the soil systems are not as permeable. (SoH).</p> <p>16. It may be claimed by supporters of the facility being located at KIP that engineering can overcome any difficulty with KIP soils, the engineering solutions are not necessarily trusted or failsafe. (KIPCC, Kem169, Kem342)</p> <p>17. 3C has not articulated how ground water management could be achieved (Kem153, Kem156, Kem158-161, Kem164-166, Kem171, Kem322, Kem327, Kem330, Kem331, Kem343, Kem349, Kem350, Kem353-364)</p>	<p><u>3C Conclusion:</u> The site meets this criterion.</p>
6	Constructed drainage systems e.g. storm water or road drainage	Not within 100m of an entry point of a constructed drain.	<ol style="list-style-type: none"> <li>1. Shire questions 3C assessment that sufficient land is available more than 100m from constructed drainage in the light of the possibility that the minimum site area of 20ha has been miscalculated. Further assessment of this criterion is warranted should Kemerton be considered for selection. (SoH)</li> <li>2. Major and minor drainage channels have been put into the area as required by the KIP – these drain into the Wellesley River. (Kem5)</li> <li>3. The KIP requires slotted drains every 100 metres for all customers. (Kem49, Kem198, Kem201, Kem202, Kem205, Kem206, Kem217, Kem338)</li> <li>4. Proposed slotted-pipe drainage system would allow contamination to reach the Wellesley River and subsequently the Leschenault Estuary. (Kem324, Kem339)</li> <li>5. No road drainage or storm water facility at present. (Kem217, Kem338)</li> <li>6. Criterion should be upgraded to essential. (Kem217)</li> </ol>	<p>1-4 The 3C expect that the maximum footprint of the precinct will be 20 hectares. The 3C believes that there is sufficient land greater than 100m from an entry point of a constructed drain. The western portion of the KIP exhibited by the 3C is on the higher ground, which is greater than 100m from areas that would be subject to any requirements to drain sub-surface waters.</p> <p>5. Noted.</p> <p>6. Essential and desirable site selection criteria were determined by a public process involving community and industry stakeholders. The outcomes of this process were ratified by Cabinet. The 3C is not in a position to change the classifications of the site selection criteria.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
7	<b>Hydrogeology</b>	<b>Should be located in an area where the hydrogeology can be readily monitored and managed with confidence.</b>	<ol style="list-style-type: none"> <li>1. Hydrogeology shows that the site lies on the Mialla mound that drains under the KIP in a south west direction to the extent of 3 GL per annum. (Kem49, Kem190, Kem191A, Kem201, Kem205, Kem206, Kem221, Kem338)</li> <li>2. A hydrogeological assessment of the site should be conducted, as hydrogeology of the area is regionally known but not site specific, to identify the susceptibility of the soil profile to pollution transmission and to determine the scale of required engineering and soil solutions</li> </ol>	<p>1-5 The 3C notes the information presented in submissions. However, the 3C has a high level of confidence that the site specific hydrogeology at Kemerton site satisfies this criterion that groundwater can be monitored and managed with confidence. This is based on a detailed study undertaken of the <i>Kemerton Water study – Phase 2 final Report</i> by Aquaterra (2002).</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>to protect shallow groundwater. (LCC)</p> <ol style="list-style-type: none"> <li>3. Presence of Bassendean and Spearwood sands means that site fails this criterion. (Kem190)</li> <li>4. More studies need to properly assess the potential for pollution of groundwater and the stream system feeding the Leschenault Inlet (Kem200)</li> <li>5. There can be no widespread alteration to the water table height. This limitation has been imposed over the entire KIP for protection of wetlands. (Kem334)</li> </ol>	<p><u>3C Conclusion:</u> The site meets this criterion.</p>
8	<b>Geological Stability</b>	<b>Located on stable ground; ie, not in a seismically active area, areas susceptible to soil sinking, landslides or swelling, karst or sinkhole terrain.</b>	<ol style="list-style-type: none"> <li>1. There are scaled records of ground movement in the area – Meckering earthquake was felt strongly in the area. (Kem5, Kem2A)</li> <li>2. Geological stability is a risk factor for the Kemerton area. (Kem123)</li> <li>3. The site is at the base of the Darling Ranges and we have had recordable tremors in this area in the past, even from great distances. (Kem313).</li> </ol>	<p>1-3 The 3C has received advice that there is no expected impediment to a precinct at the site due to geological stability or underlying geological formations. The KIP meets the definition of a seismically stable area based on the Global Seismic Hazard Assessment Program, which was adopted by the 3C as a measure of seismicity. The KIP is in an area with an acceleration coefficient of 0.08 to 0.09g, representing a low to moderate seismic hazard.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
9	Acid Sulfate Soils	Not located on soils with high acid sulfate generating potential.	<ol style="list-style-type: none"> <li>1. Testing for acid sulfate risk and the physical properties of the soils should be undertaken (DCLM, DA).</li> <li>2. Risks of Acid Sulfate Soils in the area would need to be monitored and managed to ensure no impact on groundwater systems and on-flow impacts to surrounding landowners and local ecosystems. Council queries the monitoring and management programs which could be put in place to safeguard against potential impacts of Acid Sulfate Soils. (SoH)</li> <li>3. KIP is a high risk acid sulfate soils area. When mixed with air this mineralisation will contain traces of aluminum and arsenic. (Kem5)</li> <li>4. The whole KIP core is identified as a risk area for acid sulfate soils. (Kem49, Kem170, Kem202, Kem217, Kem338)</li> <li>5. The proposed Kemerton site has been identified as an area with acid sulphate soil risk. Liberation of acid sulphate soils in this area has the potential to produce a broad range of detrimental effects on waterways and the broader environment. (Kem341)</li> <li>6. The proposed site would be vulnerable to acid sulfate soil problems if the land was cleared and wetlands drained. This could pollute</li> </ol>	<p>1-10 The 3C acknowledge that acid sulfate soils risk is an issue for the entire coastal region. The criterion relates specifically to soils with a ‘high’ acid sulfate generating potential and the 3C will recommend that assessment for potential acid sulfate soils is taken into account as part of the environmental impact assessment of any recommended site. This assessment and any management strategies required would be worked out between the proponent and regulator. However, as this is a desirable criterion, the site cannot be removed from consideration on the basis of this criterion alone.</p> <p>11. The 3C have reviewed the report mentioned. There are other alternatives for dealing with waste water and these will be determined by the proponents with approval from regulatory authorities.</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>surrounding wetlands, rivers and the Leschenault inlet. (WCS)</p> <p>7. Disturbance could liberate arsenic into public drinking water and environmental flows into the Leschenault catchment. (Kem49, Kem175, Kem217, Kem332, Kem338)</p> <p>8. The eastern site is in a high risk acid sulfate soils area. (Kem338)</p> <p>9. Disturbance of any part of this area could illicit an acid sulfate soil response. With the proximity of wetlands and waterways, infiltration of acidic water could significantly contaminate the nearby waterways and wetlands. (LCC, Kem139, Kem169, Kem190, Kem191A, Kem197, Kem200, Kem221, BCA)</p> <p>10. Land above flood level near the Wellesley River is in an area with high risk acid sulphate soils. (Kem202)</p> <p>11. The 3C would be advised to study the Government of WA “<i>Local Area Management Plan for the Groundwater Resources of Kemerton Subareas</i>” dated December 2005. This document and in particular Section 6.13 refers to acid sulphate soil which will be affected by excavation for evaporation ponds. (Kem152)</p>	<p><u>3C Conclusion:</u> The site meets this criterion.</p>
10	Topography	Not located in an area with a slope >4 %.	<p>1 Dr Pain’s report advises that because of the underestimation of the evaporation pond sizes this may require substantial earthworks to achieve acceptable gradient over the 40+ ha – requires further investigation by the 3C. (SoH)</p> <p>2 Area required for evaporation ponds would require extensive earthworks to bring it to engineered levels. (Kem5).</p>	<p>1-2 Evaporation ponds are not necessarily part of an established precinct. There are other alternatives for dealing with waste water and these will be determined by the proponents with approval from regulatory authorities.</p> <p><u>3C Conclusion:</u> A re-evaluation of the site by the 3C indicates that the western portion of the KIP does not meet this criterion.</p>
11	<i>Threatened Flora, Fauna and Ecological Communities</i>	<i>Not within 500m of known habitats of threatened species of flora or fauna or threatened ecological communities except where the maintenance of threatened species or threatened ecological community values can be clearly demonstrated.</i>	<p>1. Because of the potential increase in the size of the site (due to the requirements of the larger than anticipated evaporation ponds) this criterion should be reviewed. EPA recently advised the Council that a site located within the Kemerton buffer (and less than 4 km from the site) was part of the conservation valued Yoongarillup vegetation complex. The EPA subsequently advised this is land of high conservation value and clearing of this land is unlikely to be supported. Detailed spring site surveys are also essential for the site prior to the 3C accepting compliance with this criterion. (SoH)</p> <p>2. There are a number of species of Declared Rare Flora (DRF) recorded in the area and Priority Flora (PF) occur on, or near, the eastern boundary and to the south of the area. Many are associated with wetland habitats. (DCLM)</p>	<p>1. The assumption for the need of 45+ hectares is based upon the use of evaporation ponds. There are other alternatives for dealing with waste water and these will be determined by the proponents with approval from the regulatory authorities. Yoongarillup vegetation complex is found along the coast from Mandurah to Bunbury, 45% of original 24,767ha remains, of which 3,998ha is in secure tenure. However as the vegetation is located 4km from the site it is outside the 500m buffer for this criterion.</p> <p>2. Agreed.</p> <p>3. Noted. Any clearing of native vegetation at all precinct sites would have to meet all the requirements</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>3. The site has potential to impact DRF and PF and fauna, and would result in the loss of Bassendean Central and South vegetation complex. (DCLM)</p> <p>4. The Black-striped Jollytail (a Priority 4 fish species) occurs in Gwalia Nature Reserve wetlands 4 or 5 km south and may occur in suitable wetlands nearer the area. (DCLM)</p> <p>5. The Muchea Limestone threatened ecological community occurs near the proposed Gwalia nature reserve wetlands approximately 4 km to the south. (DCLM)</p> <p>6. Migratory birds associated with nearby listed wetlands of international significance are likely to be in the area. This would need investigation. (DoEH)</p> <p>7. From Dr Pain's report there is rare flora which occurs in the western boundary of the KIP core and Vulnerable Fauna inhabiting the area including the Chuditch and Quenda. Migratory birds which are included in international treaties inhabit the area at times. (SoH, Kem49, Kem121, Kem122, Kem125-133, Kem135-137, Kem140-145, Kem149, Kem151-153, Kem155, Kem156, Kem158-161, Kem164-166, Kem171, Kem168, Kem194, Kem198, Kem202, Kem205-207, Kem211, Kem212, Kem302, Kem322, Kem329-331, Kem343, Kem349, Kem350, Kem353-394)</p> <p>8. The Chuditch is in danger of local extinction and is known to live in this area. It has a large range, the female using numerous burrows and fallen timber. (Kem338)</p> <p>9. The public works department of the day purchased all land in the Bengier swamp to protect the endangered Freckled Duck – <i>Stictonetta Naevosa</i> –this area is adjacent to the KIP which means any evaporation ponds would attract these birds threatening their survival. (Kem38)</p> <p>10. Endangered species occur on the site and rare habitats occur here. (Ind)</p> <p>11. With over 300 flora species, including 19 native orchids, significant large blocks of remnant bush and habitat for rare fauna such as the Chuditch that requires large areas of untouched forest, Kemerton is recognised for its biodiversity. It forms part of three ecological linkages and its territory for migratory birds protected under international treaties. The water birds would be attracted to a large artificial toxic water body and suffer the consequences. (Kem49, Kem194, Kem201, Kem205, Kem206, Kem338)</p>	<p>of the clearing regulations.</p> <p>4-5. Noted. As the Gwalia Nature Reserve is in excess of 500m from the exhibited site, the site is considered to meet the criterion. However, these issues should be addressed during any studies undertaken to obtain regulatory approvals.</p> <p>6. Noted. This would be investigated at the regulatory approvals stage if the KIP were recommended as a precinct site.</p> <p>7-18. Advice from DCLM indicates that the sites exhibited by the 3C within the KIP are not within 500m of known habitats of threatened species of flora or fauna or threatened ecological communities, although they are known to occur on or near the eastern boundary and in the south of the park. It is considered that sufficient land within the site meets this criterion. The proponent of any facility within a precinct would be required to clearly demonstrate that their project could be managed to ensure the maintenance of threatened species or threatened ecological community values. As noted in response to 1, above, there are other alternatives for dealing with waste water than evaporation ponds that may attract bird life. These will be determined by the proponents with approval from the regulatory authorities.</p> <p>19-21. The 3C agree that a detailed flora and fauna survey should be conducted before any precinct is established and it is the 3C's expectation that a comprehensive flora and fauna survey would occur at regulatory approvals stage. Any clearing of native vegetation at all precinct sites would have to meet all the requirements of the clearing regulations.</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>12. Priority Flora (PF) <i>Caladenia speciosa</i> is located in close proximity to the eastern fragment. Both the eastern and western fragments are within 2km of PF and 4 species of Declared Rare Flora (DRF), a detailed flora survey would be required as part of a more detailed consideration of the viability of either site. (LCC)</p> <p>13. We have a long standing International Agreement with China and Japan not to endanger their migratory birds – which are known to breed in the wetlands at Kemerton and feed in the Leschenault Estuary. (Kem2A, Kem329)</p> <p>14. The presence of important wetland systems around the potential sites in Kemerton under consideration by the 3C is indicative of connections between important ecological communities that may be impacted by the precinct if a fire or major incident occurs. (ACE, CSA)</p> <p>15. Development of the site for a hazardous waste facility could involve destruction of 40 hectares of native forest immediately adjacent to the located priority flora <i>drakaea elastica</i> and reported habitat of the rare Chuditch and other fauna, including water birds listed under CAMBA and JAMBA. (PAN)</p> <p>16. Wildlife and vegetation should be protected at all costs. (Kem199, Kem313)</p> <p>17. Abundance of bird life – migratory. (Kem35)</p> <p>18. Migratory birds are supposedly protected. Evaporation ponds will not protect them. (Kem197)</p> <p>19. A flora and fauna identification and assessment survey should be conducted. (LCC, Kem334)</p> <p>20. KIP contains Bassendean Central and South Hedde Vegetation Complex which is currently recognised as being at 27% of its original extent across the Swan Coastal Plain. This vegetation complex is considered “vulnerable” by the Commonwealth Dept of Natural resources and Environment 2002 Audit. (LCC)</p> <p>21. Clearing of important conservation vegetation to establish a 20 hectare footprint could be avoided by choosing an alternative site. (ACE, CSA, Kem334)</p>	<p><u>3C Conclusion:</u> The site meets the essential and desirable components of this criterion.</p>
12	<b>Conservation Value</b>	<b>No negative impact on national parks, nature reserves, or areas under conservation covenants.</b>	<p>1. Should the 40+ha be cleared this would have a significant conservation value – a detailed survey should be undertaken for flora and fauna should this be undertaken. (SoH)</p> <p>2. Nearby CALM-managed lands include the CALM Act section 5(1) (g) reserve (Kemerton buffer) which adjoins the site to the west;</p>	<p>1. The 3C expect that the maximum footprint the precinct will be 20 hectares. The 3C agree that a detailed flora and fauna survey should be conducted before any precinct is established and it is the 3C’s expectation that a comprehensive flora and fauna</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>Leschenault Peninsula Conservation Park 5 km to the west; Benger Nature Reserve 2.5 km to the east; proposed Gwalia Nature reserve 4 km to the north; State Forest 6 km to the north and Yalgorup National Park 8.5 km to the north. (DCLM)</p> <ol style="list-style-type: none"> <li>3. Area includes a CALM area of protected vegetation – removal of this could lead to the ultimate possibility of acid and/or arsenic entering groundwater – there are already acid sulfate soils in the area. (Kem2)</li> <li>4. The Leschenault Peninsular Conservation Park is located very close to the proposed waste treatment site. (Kem153, Kem156, Kem158-161, Kem164-166, Kem171, Kem322, Kem329-331, Kem343, Kem349, Kem350, Kem353-364)</li> <li>5. Remnant Jarrah forest would have to be destroyed and approval is considered unlikely. (Kem49, Kem153, Kem156, Kem159-161, Kem164-166, Kem171, Kem186, Kem198, Kem201, Kem205, Kem206, Kem211, Kem216, Kem322, Kem331, Kem338, Kem340, Kem343, Kem349, Kem350, Kem353-364)</li> <li>6. The area contains remnant vegetation that would need to be cleared to establish the treatment ponds. Clearing remnant vegetation has been halted in WA and therefore this site is not suitable for the proposed plant. (WCS)</li> <li>7. I endorse the findings of Dr Pain’s report on this item. (Kem152, Kem153, Kem156, Kem204, Kem322, Kem329-331, Kem349, Kem350, Kem353)</li> <li>8. The western elevated areas and eastern areas have considerable potential conservation value but have not yet been declared. (Kem207)</li> <li>9. Significant remnant vegetation on the west side of KIP has been suggested for preservation by CALM and EPA. (Kem315)</li> <li>10. While the site itself contains no areas presently subject to preservation for conservation values, apart from the presence of rare and priority listed flora, there are areas to the North West and East of KIP, which are subject to preservation due to their conservation values. (Kem315)</li> <li>11. Kemerton is currently recognized for its biodiversity, which would be destroyed with the introduction of a toxic waste facility. (Kem329, Kem330, Kem334, Kem343, Kem349, Kem350, Kem353-364)</li> <li>12. Sections of the KIP are recognised wildlife corridors linking other parts of the adjacent coastal plain with the Darling Scarp. The ridgeline immediately to the west of the most likely site forms part of</li> </ol>	<p>survey would occur at regulatory approvals stage.</p> <ol style="list-style-type: none"> <li>2-4. The 3C believes that there will be no impact on these sites occurring as a result of the development of a site at any of the exhibited 3C sites.</li> <li>5-6. Any clearing of native vegetation at all precinct sites would have to meet all the requirements of the clearing regulations.</li> <li>7. Noted.</li> <li>8-11. Noted. The 3C can only assess sites against current legislation, not what could potentially occur sometime in the future. The wildlife corridors are to the west of the exhibited site. However any clearing of native vegetation at all precinct sites would have to meet all the requirements of the clearing regulations.</li> <li>12. The 3C acknowledge that wildlife corridors occur in the area. The 3C expect that appropriate buffers would be applied if a precinct were established near a wildlife corridor. This would be determined during the approvals process.</li> <li>13. This is a Cabinet endorsed site selection criterion and the 3C is not in a position to change or amend site selection criteria.</li> </ol> <p><u>3C Conclusion:</u> The Western portion of the site meets this criterion. However due to the proximity of Conservation Category Wetlands to the Eastern portion and despite the stringent</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>a North/South wildlife corridor. (Kem334)</p> <p>13. Council argues that the conservation value of a place cannot be solely measured by protected areas. The DoE has previously identified land in the immediate surrounds of Kemerton as being of a high conservation value, and providing essential corridor links. (SoH)</p>	<p>technology suitability criteria the 3C are not confident a precinct in this location would have no negative impact.</p>
13	<b>“Bush Forever” sites</b>	<b>Not within areas designated or proposed as ‘Bush Forever’ sites.</b>	<ol style="list-style-type: none"> <li>1. There are no “Bush Forever” sites located at the KIP because these sites are restricted to the Perth metropolitan area. (Kem219)</li> <li>2. LCC is aware that the investigation process associated with the southern expansion of the Swan Bioplan is to commence in the near future. This work, to be undertaken by the DoE, is intended to identify new sites for inclusion on the Bush Forever register. Given the low representation of the local vegetation complex and proximity to Priority and Declared Rare Flora and wetlands of conservation significance, it is considered that a number of areas in the KIP will be considered for registration. (LCC)</li> </ol>	<ol style="list-style-type: none"> <li>1. Agreed.</li> <li>2. This criterion applies to the Perth Metropolitan area, and as such, does not apply to this site. However any clearing of native vegetation at all precinct sites would have to meet all the requirements of the clearing regulations.</li> </ol> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
14	<b>Public Acceptability</b>	<i>A minimum 3km buffer from the nearest sensitive land use, with a desirable buffer distance of 6km from the nearest sensitive land use.</i>	<ol style="list-style-type: none"> <li>1. If HWTP were located in the western portion of KIP, its 3km buffer zone would extend to residential areas west of Old Coast Rd and this is not a permissible outcome. (CoB)</li> <li>2. In the recently published Harvey Shire Strategy Plan land adjoining the Kemerton buffer is recommended for residential rural sub division – which includes their farm. (Kem15)</li> <li>3. There are existing sub divisions adjoining the buffer (Leschenault, Settlers Estate etc). (Kem15, Kem146)</li> <li>4. The proposed site is within 6km of a sensitive land use. (DoE)</li> <li>5. Shire of Harvey/WA planning Commission Strategic Planning (2006) for the land between Buffalo Rd, north to Myalup acknowledges population growth will extend to within 6km radius of the nominated site. (Kem49, Kem338)</li> <li>6. Urban areas within the 6km preferred buffer. (Kem321)</li> <li>7. Should be an essential criterion. (Kem208, Kem217)</li> <li>8. 3km buffer inadequate. (Kem37, Kem190, Kem212, Kem292, Kem315)</li> <li>9. Why is the arbitrary 6km buffer not an essential criterion? (Kem206)</li> <li>10. This buffer is entirely arbitrary, decided with no local consultation and little or no local practical knowledge. Environmental justice, a principal upheld by the USA EPA acknowledges that communities have the right to have effects to lifestyle, property values, safety of movement and enjoyment of natural resources considered when decisions are being formulated and made on the proximity of such</li> </ol>	<ol style="list-style-type: none"> <li>1-3. No sites will be recommended within 3km of a sensitive land use.</li> <li>4-6. It is acknowledged that the site does not meet the 6km desirable buffer distance. However as the 6km buffer is a desirable criterion, the site cannot be removed from consideration on the basis of this criterion alone.</li> <li>7-11. Essential and desirable site selection criteria were determined by a public process involving community and industry stakeholders. The outcomes of this process were ratified by Cabinet. The 3C is not in a position to change the classifications of the site selection criteria.</li> <li>12-17. It is acknowledged that there are people living within 3km of the KIP. The 3km public acceptability buffer was negotiated between stakeholders to remove the potential for encroachment by areas zoned residential, hotels, motels and hostels, caravan parks, hospitals and nursing homes, schools and other educational establishments, shopping centres, some public buildings, and indigenous communities. This buffer is not related to the level of risk that may be associated with the establishment and operation of the precinct, nor does it imply public acceptance of</li> </ol>

No.	Specific Factor	Criteria	Submissions	Response
			<p>things as HWTP. Arbitrary decisions in this case, made relatively from afar, do not allow this. (Kem334)</p> <ol style="list-style-type: none"> <li>11. Buffer zones for toxic chemical treatment plants need to be considerable. They should be measured in tens of km, not hundreds of metres. (Kem147)</li> <li>12. Public acceptability has been shown to be absent. (Kem186, Kem217, Kem313, Kem343)</li> <li>13. We believe we live within the 3km buffer zone. (Kem10-12, Kem139, Kem175)</li> <li>14. People currently reside well within the 3km buffer zone. (Kem28, Kem2, Kem49, Kem121, Kem122, Kem125-133, Kem135-137, Kem139-145, Kem149, Kem151, Kem155, Kem168, Kem197, Kem201, Kem205, Kem206, Kem217, Kem222-43, Kem313, Kem314, Kem338, Kem365-394)</li> <li>15. Live approximately 3km from the KIP. (Kem5, Kem197)</li> <li>16. Significant population lives between 3 &amp; 4 km from KIP and this number is likely to increase. (Kem315, Kem313)</li> <li>17. My farm adjoins the buffer zone to the north east of the proposed toxic waste treatment precinct at Kemerton. (Kem147)</li> <li>18. There are planned subdivisions on Buffalo Road, Myalup (Kem2A)</li> <li>19. The eastern boundary of the site is within 1-5km of the Wellesley River. For a 3-6km buffer to be applied would encroach on the farmland on the eastern side of the river. (Kem5)</li> <li>20. Extremely valuable, highly productive irrigated agricultural, horticultural and viticulture areas are located within the 3-6km buffer zones. (Kem339)</li> <li>21. I endorse the findings of Dr Pain's report on this item. (Kem152, Kem176)</li> <li>22. KIP, with its large buffer zone and established emergency service planning is ideally situated for the establishment of such a facility. (Kem177).</li> </ol>	<p>the proposed HWTP.</p> <p>18-19. The 3C can only assess its criterion against the current Town Planning legislation and residentially zoned areas.</p> <p>19-22. The technology suitability criteria require that emissions are eliminated or minimised to ensure the protection of the community and the environment, including farming practices. It is these criteria, rather than the 3km public acceptability buffer, that are designed to protect all land uses, including agriculture and individual farm houses from possible effects and emissions. The application of the public acceptability buffer does not preclude landuses not covered by the definition of "sensitive landuses" from occurring within the buffer.</p> <p><u>3C Conclusion:</u> The site meets the essential 3km component of this criterion. The site does not meet the desirable 6km component of this criterion.</p>
15	<b>Heritage Value</b>	<b>No negative impact on sites of recognised cultural or historical significance.</b>	<ol style="list-style-type: none"> <li>1. Aboriginal sites in the area should be respected. (Kem302)</li> <li>2. Lack of investigation into Aboriginal heritage sites. (Kem28, Kem313, Kem334)</li> <li>3. Given the existence of the river and mosaic of wetlands and the wildlife they would attract, it is to be expected further Aboriginal sites will be found here, especially around the wetlands within the KIP. (Ind)</li> <li>4. There are proven native title sites within this area, on the eastern side.</li> </ol>	<p>1-3. The 3C recognize that it is extremely important to protect significant sites of Indigenous and European heritage (whether registered or not) from impacts arising from industrial development. It is understood by the 3C that more detailed studies will be undertaken to identify the best location within the exhibited site for a precinct. It is at this stage that detailed studies would be undertaken.</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>(Kem5)</p> <ol style="list-style-type: none"> <li>5. Numerous Aboriginal sites have been located on the eastern side and western sides of the KIP and experts and local indigenous elders state further investigation is necessary and mandated in legislation. (Kem49, Kem201, Kem202, Kem205, Kem206, Kem338)</li> <li>6. I endorse the findings of Dr Pain's report on this item. (Kem152, Kem334)</li> <li>7. Thirteen sites are recorded on the DIA register in the area around KIP, of which 5 are mythological sites associated with rivers and wetlands and the rest are artefact scatters. (Ind)</li> <li>8. Two sites are recorded on the proposed Kemerton location. They were exposed in a road cutting where Mariott Road crosses the Wellesley River. (Ind)</li> </ol>	<p>4-8. The 3C has made all reasonable efforts to identify sites of Indigenous and European heritage within the KIP. This includes searching databases held by the Department of Indigenous Affairs and engaging Nyaarla Projects P/L to liaise with Indigenous stakeholders who's Country may be affected. The Elder Market Research Report includes a map (on page 28) which was produced by Sinclair Knight Merz for Western Power which shows 7 sites of Indigenous or European heritage in the eastern and western sides of the KIP buffer and 2 sites partially or wholly within the KIP core. None of the sites depicted encroach on land exhibited by the 3C for locating a hazardous waste treatment precinct.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
16	Transport Routes	Must be within 25km of major transport routes or suitable railway lines.	<ol style="list-style-type: none"> <li>1. From Main Roads viewpoint this site does not present any issues. (MR)</li> <li>2. Road safety is an important issue to local residents. (Kem49, Kem338)</li> <li>3. Putting large numbers of hazardous waste trucks into the mix is unacceptable to public safety. A rail facility would be a superior option. (Kem155, Kem121, Kem122, Kem125-133, Kem135, Kem136, Kem140-145, Kem149, Kem151, Kem168, Kem217, Kem291, Kem365-394)</li> <li>4. Who pays to upgrade Roads on the transport route and in the area (e.g. merging lanes)? (Kem217, Kem201, Kem338, Kem349, Kem350, Kem353-364)</li> <li>5. This criterion should be upgraded to essential. (Kem217)</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted.</li> <li>2. The 3C acknowledge the concerns about road safety issues but do not believe truck movements will substantially increase the risk to road safety in the area. It is estimated that if all of the hazardous wastes currently treated in the State were directed to a precinct, that there would be between 10 and 20 truck movements per day. The movement of controlled wastes on the road are regulated under the Environmental Protection (Controlled Waste) Regulations. The transport of dangerous goods is done in accordance with the existing suite of procedures flowing from the Australian Code for the Transport of Dangerous Goods by Road and Rail, associated dangerous goods regulations and emergency response procedures would apply.</li> <li>3. See response 2 above. While using rail to transport waste to a precinct is an option, given the volumes of waste generated in Western Australia transport by rail may not be viable.</li> <li>4. If road upgrades are required, the 3C understands that the cost would be met by government. Main Roads</li> </ol>

No.	Specific Factor	Criteria	Submissions	Response
				<p>would be consulted and involved in an assessment of preferred transport routes if this site were recommended as a location for a HWTP.</p> <p>5. Essential and desirable site selection criteria were determined by a public process involving community and industry stakeholders. The outcomes of this process were ratified by Cabinet. The 3C is not in a position to change the classifications of the site selection criteria.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
17	<b>Transport Routes</b>	<b>Any traffic on local roads must be within acceptable congestion and safety limits.</b>	<ol style="list-style-type: none"> <li>1. From Main Roads viewpoint this site does not present any issues. (MR)</li> <li>2. Perth- Bunbury road is dangerous with 6 fatalities a year. Bottlenecks regularly occur in Mandurah. (Kem37, Kem152, Kem314, Kem332)</li> <li>3. The Old Coast Rd is one of the most hazardous in WA, accidents doubled in the last decade. (Kem21, Kem49, Kem121-123, Kem125-133, Kem135-137, Kem139-145, Kem148, Kem149, Kem151-153, Kem155, Kem156, Kem158-161, Kem164-166, Kem168-171, Kem174, Kem207, Kem213, Kem214, Kem217, Kem306, Kem310, Kem311, Kem313, Kem314, Kem322, Kem327, Kem329-332, Kem334, Kem338, Kem343, BCA, Kem347, Kem349, Kem350, Kem353-394, Kem400)</li> <li>4. Old Coast Road would be the main road used to access the KIP – many crosses line the road – testament that it is a dangerous road. (Kem27)</li> <li>5. Toxic waste would be transported to the site via either of the two busiest rural highways in the state, namely the South western Highway or the old Coast roads (or, quite likely the proposed new Perth-Bunbury highway) which in turn increase the likelihood of accidents and exposure of the public to raw toxic chemicals. (Kem298, Kem303)</li> <li>6. The main road between Preston Beach and Bunbury is rated as one of the WA’s worst roads with a collective risk of 0.68 casualty crashes per km in 1999 – 2003. (Kem176)</li> <li>7. There has been numerous traffic accidents on the Old Coast Road and in fact on the Australia weekend this year there were 4 fatalities in the Lake Clifton area. (Kem329)</li> </ol>	<ol style="list-style-type: none"> <li>1 Noted.</li> <li>2-16. It is agreed that increasing the movement of materials can increase the risk of spillage. However the movement of controlled wastes on the road are regulated under the Environmental Protection (Controlled Waste) Regulations. The transport of dangerous goods is done in accordance with the existing suite of procedures flowing from the Australian Code for the Transport of Dangerous Goods by Road and Rail, associated dangerous goods regulations and emergency response procedures would apply. It is unlikely that a precinct would result in an increase in congestion to South West roads. It is estimated that if all of the hazardous wastes currently treated in the State were directed to a precinct, that there would be between 10 and 20 truck movement per day. Traffic volume data provided by Main roads indicates that in April 2004 7139 vehicles travelled south past Lake Clifton on average per day on the Old Coast Rd, off which 7.4%, or 528 were classed as heavy vehicles. Main Roads expect vehicle movements south of the Peel Deviation to increase to 12000 – 15000 by the year 2021.</li> <li>17. Noted.</li> <li>18. Noted.</li> <li>19-20 Maintenance of roads is a matter for Main Roads and beyond the scope of the 3C.</li> </ol>

No.	Specific Factor	Criteria	Submissions	Response
			<p>8. If chemicals cannot be transported safely in the Perth Metro area, what likelihood is there of getting them to Kemerton, up to 160km away without incident (submission contains an article from Sat Feb 18 2006 West Australian about a spill from a truck of 1000+ litres of chemicals in Warnbro). (Kem148, Kem332)</p> <p>9. Increase in traffic on Old Coast Road will increase noise pollution, affect safety of road users and cause congestion – will turn away tourists. (Kem27, Kem28, Kem30, Kem5, Kem2A, Kem35, Kem21, Kem8, Kem1, Kem49, Kem139, Kem153-156, Kem158-161, Kem163-166, Kem126, Kem201, Kem219, Kem310, Kem311, Kem322, Kem327, Kem329, Kem331, Kem332, Kem342, Kem343)</p> <p>10. The Coast and South West highways are not adequate for more vehicles. (CoB)</p> <p>11. Current road structure unable to cope with existing traffic. (Kem186, CoB)</p> <p>12. Disagree with 3C assumption that a precinct will not compromise safety or cause congestion. (Kem194)</p> <p>13. Both the Old Coast Road and the South West Highway are marked as tourist routes and are heavily congested at holiday times. (Kem310, Kem311, Kem347)</p> <p>14. Presence of additional hazardous wastes on the major routes is a concern to the public. (SoH, Kem47, Kem123, Kem139, Kem146, Kem150, Kem152, Kem154, Kem163, Kem170, Kem174, Kem176, Kem183, Kem219, Kem292, Kem298, Kem306, Kem308, Kem310, Kem311, Kem313, Kem321, Kem322, Kem327, Kem330-332, Kem334, SoDard, Kem338, Kem343, BCA, Kem346, Kem349, Kem350, Kem353-364, Kem400)</p> <p>15. Presence of additional hazardous wastes on the major routes is a concern to the public. (SoH)</p> <p>16. Hazardous waste being delivered by road (or rail) is of grave concern. (Kem30, Kem195, Kem196, Kem207, SoDard)</p> <p>17. School buses are a special factor in this area. (Kem7, Kem347)</p> <p>18. Waste should not be transported on public roads. (Kem188, Kem308, Kem329, Kem330)</p> <p>19. Roads will deteriorate with constant and heavy traffic. (Kem35, Kem174, Kem201)</p> <p>20. Current roads in KIP in poor condition. (Kem207, Kem310, Kem311)</p> <p>21. Rail facility would be a better option. (Kem212)</p> <p>22. 3C GIS Webmap shows that the coastal plain between Mandurah to</p>	<p>21. Noted, however given the relatively small volume of hazardous/industrial waste currently generated in WA and that it will be sent to the precinct from many different sources it is likely that the use of rail transport will not be viable.</p> <p>22. Main Roads have advised that transport to the KIP present no issues from their viewpoint. The 3C accepts this advice.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>

No.	Specific Factor	Criteria	Submissions	Response
			South of Bunbury does not meet the criterion. (Kem37)	
18	Emergency Services	Within approximately 25 minutes of adequate off-site emergency services including medical and firefighting facilities.	<ol style="list-style-type: none"> <li>1. It is in reasonable proximity to the Bunbury Fire Station, which is a career station and is, located about 20 km from the proposed site and would have a response time of about 20 minutes. (FESA)</li> <li>2. Our local Bunbury office however advise that because there are so few permanent staff from Bunbury, they could require back up support from Fire &amp; Rescue Service volunteers, and would have an expected response time of about 30 minutes. (FESA)</li> <li>3. Local FESA does not have the equipment or experience to deal with toxic waste fires or chemical spills. (Kem2A, Kem21, , Kem121, Kem122, Kem125-133, Kem135-137, Kem140-145, Kem149, Kem151, Kem155, Kem156, Kem158-161, Kem164-166, Kem171, Kem168, Kem176, Kem212, Kem302, Kem310, Kem311, Kem314, Kem329, Kem330, SoDard, BCA, Kem365-394, Kem400)</li> <li>4. Volunteer fire and rescue do not have HAZMAT training – delays in appropriately trained persons from Perth would be unacceptable. (Kem27, Kem28, Kem49, Kem201, Kem205, Kem206, Kem217, Kem310, Kem311, Kem338)</li> <li>5. Local fire brigades are voluntary and rely on Bunbury services for backup, taking at least 30 minutes to become operative. (Kem139, Kem313)</li> <li>6. Local knowledge points to inadequate fire fighting and emergency services, especially if bushfires are being fought. (Kem49, Kem123, Kem202, Kem217, Kem338)</li> <li>7. FESA is currently trying to justify getting rid of small rural volunteer Fire Brigades from many of the rural council areas through which materials will travel on the way to the precinct. So who will fight your fires when your truck rolls over on the Old Coast Road and sets the bush on fire? (Kem163)</li> <li>8. A recent bushfire in the Park highlights the inappropriateness/risk of a toxic waste plant being located there. (Kem123, Kem139, Kem153, Kem163, Kem184, Kem196, Kem202, Kem207, Kem300, Kem302)</li> <li>9. What would happen if a bushfire got into the facility? (Kem124)</li> <li>10. There is a high danger to residents in the event of a bush fire, as Kemerton is in a high risk bushfire area. (Kem332, Kem342)</li> <li>11. Bunbury Hospital does not have capabilities to handle a major accident – traffic or pollution. Patients are being air lifted to the city. No full ICU available – would necessitate an upgrade of hospital system at additional cost to ratepayer. (Kem37, Kem33, Kem49,</li> </ol>	<ol style="list-style-type: none"> <li>1. Agreed. The site meets this criterion.</li> <li>2. Noted.</li> <li>3-15 FESA have advised that the KIP is within 25 minutes of offsite emergency services. St John Ambulance advises that KIP is within 25 minutes of adequate offsite emergency services, with the Australind volunteer substation within 5km and Bunbury paramedic station approximately 20km away as is the Bunbury Regional Hospital. Therefore the site is considered to meet this criterion. However this was set as a desirable criterion rather than an essential criterion in acknowledgement that on-site emergency services could be provided if required.</li> <li>16. Agreed.</li> <li>17. Essential and desirable site selection criteria were determined by a public process involving community and industry stakeholders. The outcomes of this process were ratified by Cabinet. The 3C is not in a position to change the classifications of the site selection criteria.</li> </ol>

No.	Specific Factor	Criteria	Submissions	Response
			<p>Kem332, SoDard, Kem338, Kem343, Kem349, Kem350, Kem353-364, Kem400)</p> <p>12. Bunbury Regional Hospital does not have a burns unit. (Kem2A, Kem33, Kem121, Kem122, Kem125-133, Kem135-137, Kem140-145, Kem149, Kem151, Kem153, Kem155-156, Kem158-161, Kem164-166, Kem171, Kem168, Kem212, Kem322, Kem329-332, SoDard, Kem343, Kem353-394, Kem400)</p> <p>13. Our regional health service is not supplied with staff trained or equipped to admit patients requiring acute intensive care beyond emergency triage, which could only prepare severely injured patients for transfer to Perth by RFDS or road ambulance. (Kem139)</p> <p>14. South West Health Campus could not cope with toxic waste emergency. (Kem211, Kem318)</p> <p>15. The nearest unit with Breathing Apparatus gear suitable for Hazardous Chemical Response is Bunbury. (Kem310)</p> <p>16. The Kemerton Industrial Park (KIP) with its large buffer zone and established emergency service planning is ideally situated for the establishment of such a facility. (Kem177)</p> <p>17. Should be an essential criterion. (Kem208, Kem217)</p>	<p><u>3C Conclusion:</u> The site meets this criterion.</p>
19	Proximity to waste generating areas	Within 150km from where 80% of the waste it treats is generated.		
20	Land Ownership	Located on State Government owned land.		
21	<b>Legislative Jurisdiction</b>	<b>Within the jurisdiction of Western Australian legislation, policies or regulations; ie, not on Commonwealth land.</b>	<p>1. Any proposal to establish toxic evaporation ponds at Kemerton would be subject to Federal oversight – the EPBC Act 1999, and CAMBA and JAMBA treaties. Under the above treaties, pollution sources must not be introduced into areas where migratory birds feed and breed. (Kem49, Kem152, Kem169, Kem184, Kem201, Kem206, Kem322, Kem330, Kem331, Kem338, Kem343, Kem349, Kem350, Kem353-364)</p> <p>2. 3C states the site is within jurisdiction of WA legislation, policy and regulations. Of course this is true but State powers can be overlaid by Federal International treaties eg. Migratory bird agreement JAMBA &amp; CAMBA. (Kem334)</p>	<p>1-2 The nature of the criterion was to ensure that State environmental regulators could execute their jurisdictional requirements at the proposed precinct sites. The 3C welcome the ability of Federal regulators to also affect the conservation rules on this site.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
22	Equity/ employment	Within a reasonable commuting distance of a centre providing adequate	<p>1. People can travel long distances to get to work so the equity/employment criterion is not necessary. (Kem5)</p>	<p>1. Essential and desirable site selection criteria were determined by a public process involving community and industry stakeholders. The outcomes of this</p>

No.	Specific Factor	Criteria	Submissions	Response
		facilities for a skilled workforce and their families.		<p>process were ratified by Cabinet. The 3C is not in a position to change the site selection criteria.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
23	<b>Services</b>	<b>Ability to provide adequate access to water, telephone and electricity.</b>	<ol style="list-style-type: none"> <li>1. Council queries the source of any required water for the precinct and any impact on the site will have on the level and quality of available groundwater. (SoH)</li> <li>2. Services in area (power especially) struggles to cope with demand. Weekly power loss experienced. (Kem28)</li> <li>3. Site is currently inadequately serviced – no water supply, phone service inadequate, electricity connection possible at considerable expense, gas connection. Approval very difficult. (Kem49, Kem202, Kem338)</li> <li>4. I endorse the findings of Dr Pain’s report on this item. (Kem152, Kem201, Kem206)</li> <li>5. Mobile coverage in this area is extremely poor. (Kem207)</li> <li>6. Services may be available but they are not present e.g. Power station meant to run on natural gas but runs on Diesel because no gas connection provided. (Kem315)</li> <li>7. I am aware there are restrictive phone services in the area. (Kem313)</li> <li>8. There is no power or gas on the site at the moment. (Kem313)</li> <li>9. Services are available, but they are not present at this stage. Western Power’s peak load power station just completed at the northern end of the KIP is meant to run on natural gas from the Dampier-Bunbury pipeline, but is presently running on diesel as although the gas pipeline runs right next to the power station, no connection has been made. (Kem315)</li> </ol>	<p>1-9 The criterion requires that there be ability for services to be provided to a precinct. These services are either available at the precinct, or could be upgraded relatively easily to ensure their reliable provision. The KIP site has the capacity to provide adequate access to services. Government will provide essential services required for a precinct.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
24	Climate/ landform	Not in an area prone to frequent temperature inversions.	<ol style="list-style-type: none"> <li>1. Dr Pain has indicated that studying wind rose data indicates prevailing winds in summer months have potential to carry odour to Binningup. Further details of this and that temperature inversions occur at the site are in Dr Pain’s report. (SoH)</li> <li>2. Temperature inversions in the area will cause the local community to be affected by any airborne pollution. (Kem37, Kem19, Kem221–243)</li> <li>3. Rainfall, evaporation, wind, temperature inversion and cyclone data discovered during the exhibition show the site is unsatisfactory and uneconomic. (Kem49, Kem338)</li> <li>4. Temperature inversions most of the year. (Kem49, Kem338)</li> </ol>	<p>1-8 The 3C acknowledges that the site may be susceptible to temperature inversions and this criterion has not been shown to be met. However, as this is a desirable criterion, the site cannot be removed from consideration on the basis of this criterion alone. Prevailing wind directions do not form part of the site selection criteria.</p>

No.	Specific Factor	Criteria	Submissions	Response
			<p>5. Area prone to temperature inversions. (Kem175, Kem197)</p> <p>6. Frequent temperature inversions and the proximity of a significantly large and expanding community make the Kemerton site totally unacceptable. (Kem324)</p> <p>7. Atmospheric temperature inversions that occur in May-September create possibility of evaporated chemicals remaining relatively close to the ground and contaminating the recharge water to the Leederville Aquifer and rainwater entering. (Kem2A, Kem222-243)</p> <p>8. Local community already receives odour nuisance from a piggery and would suffer from temperature inversion, preventing adequate dispersal of chronic or acute releases. (Kem49, Kem121-122, Kem125-133, Kem135-137, Kem140-145, Kem149, K151, Kem155, Kem168, Kem198, Kem201-202, Kem205-206, Kem212-213, Kem314, Kem338, Kem365-394)</p>	<p><u>3C Conclusion:</u> The site does not appear to meet this criterion.</p>

## NON SITING CRITERIA MATTERS – KEMERTON INDUSTRIAL PARK

**Table 2: Kemerton Industrial Park - Socio-Economic Issues**

Issue	Raised By
I fully endorse the findings of Dr Pains report.	Kem37, Kem38, Kem47, Kem119, Kem153, Kem156-161, Kem164-167, Kem169, Kem174, Kem176, Kem178, Kem180, Kem184-185, Kem192-193, Kem198, Kem201, Kem204-206, Kem211, Kem215, Kem219, Kem319, Kem322, Kem329-331, BCC, Kem343, Kem348-350, Kem353-364
House values will be devalued by 50% if the precinct is established, plans for developing the coastal strip opposite the plant is underway for residences.	Kem120
Psycho-social impact of a facility on nearby residents – this issue is supported by the Wagerup (Yarloop) Alcoa health issues.	Kem1
Land values would be affected (negatively).	Kem5, Kem21, LPA, Kem49, Kem134, Kem153, Kem156, Kem158-161, Kem164-166, Kem171, Kem173-174, Kem186, Kem211, Kem299, Kem322, Kem327, Kem329-332, Kem338, Kem343, Kem348-350, Kem353-364
Little economic benefits from a precinct at Kemerton.	Kem292
I understand that this treatment plant will employ only 12 people. The area required for this plant decreases the opportunity for other industries that would employ more people, to locate here.	Kem310
At best only a handful of jobs would be created locally and you can be sure that any person moving to the area to work at such a facility would not want to live within a 20km radius, at a minimum.	Kem153, Kem156, Kem158-161, Kem164-166, Kem171, Kem322, Kem329-331, Kem349, Kem350, Kem353-364
Why locate a low-value waste processing plant on scarce industrial land at Kemerton when it could be located at one of a number of alternative sites of low economic value, that are not suitable for high-value industrial development?	Kem33
'Clean and green' image is vital for success of tourism, horticultural, viticulture, agricultural and other businesses/industries – the precinct would jeopardize this.	Kem2A, Kem2B Kem1, Kem138, Kem33, Kem21, Kem13, Kem8, Kem49, Kem124, Kem147, Kem150, Kem154, Kem174-175, Kem180, Kem186, Kem197, Kem205, Kem207, Kem217, Kem218, Kem292, Kem299, Kem300, Kem302, Kem303, Kem305, Kem310, Kem329, Kem338, Kem339, Kem342, BCA
Precinct will deter people coming to the area.	Kem35, Kem150, Kem175, Kem13, Kem195, Kem309, Kem343, BCA
All 4 shires in the district have now unanimously opposed the Kemerton Industrial Park being a site for a waste precinct. The communities in the district are also opposed to this.	Kem174, Kem186, Kem220
City of Bunbury obliged to support neighbouring shires – Harvey, Capel and Dardanup formally oppose the precinct.	CoB
The Shire of Harvey does not support a hazardous waste treatment facility in KIP on the grounds of opportunity cost. The Shire stands to be potentially financially disadvantaged through loss of rates revenue.	KIPCC
The Dardanup Shire Council advises the Core Consultative Committee on Waste and the Minister for the Environment, Hon. Mark McGowan MLA that it supports the Shire of Harvey position and strongly opposes the proposed location of a hazardous waste precinct within the KIP.	SoDard

Issue	Raised By
The KIP has been assessed, researched, investigated and monitored over and over and over again and as the DEP is well aware there have been no significant adverse environmental or social impacts in over twenty years of continuous operation.	Kem177
We currently use rainwater for drinking and cooking – the thought of more toxic gases and dust settling on our roof and contaminating this water supply is worrying.	Kem170
Residents are dependent on rainwater for domestic use and bore water for garden, fire fighting, stock and outdoor use. The risk of these water supplies being contaminated by toxic gases, spillage and seepage from the ponds/spills is of grave concern.	Kem123, Kem183, Kem300,
Our fresh water tanks, which will be affected by “acid rain”, are primarily used for all drinking, bathing and cleaning for my family.	Kem179
Rainwater tanks used widely in the bush areas could be affected by toxic gas or dust landing on the roof.	Kem308,
Shire of Mt Marshall a more suitable site in terms of socio-economic terms.	CoB
Lived close to Brookdale and witnessed first hand the debilitating effect of this industry. Criminal to establish the precinct close to where pregnant women, babies and young children live and play.	Kem198
My sister was a neighbour of the Brookdale site and I believe some of her health issues today stem from Brookdale.	Kem297
Have worked in the KIP and believe the precinct should be in a more remote and less sensitive area of WA.	Kem202
Frustrated that KIP values are being compromised by precinct proposal and initial assurances are being cast aside.	Kem210
Precinct is a threat to aquatic lifestyle pursuits in Leschenault area.	Kem292, Kem305, Kem312, Kem329, Kem343
Precinct is a threat to Leschenault Inlet and marine life.	Kem4, Kem294, Kem304, Kem312, Kem329, Kem352
Protect the Greater Bunbury area, especially major subdivisions in Eaton, Australind and Dalyellup from contamination of our ground and water storage, air from toxic gases, waste spillages, toxic fumes, wildlife and habitat and lifestyle.	Kem296
<p>If the proposal is to go ahead at Kemerton</p> <ul style="list-style-type: none"> <li>• I would ask that compensation be paid to the Shire of Harvey for their loss of revenue from areas that would have become urban areas.</li> <li>• that compensation is paid to landowners within the 6km buffer for any affects on land values</li> <li>• that water is provided to all homes that do not have drinking water provided by the reticulated system</li> <li>• that a compensation process be put in place should the plant affect people’s lives or health in any adverse way</li> </ul>	Kem321
As a resident of Binningup, the community closest to the Industrial Park I feel it will impact in a major negative way to our lifestyle.	Kem310, Kem311
Employment of 12 persons will not improve the local community to the same degree that a more intensive use of the land would.	Kem311
If land values are affected full monetary compensation would be expected.	Kem21
A financial burden is imposed by the buffer on the Harvey Shire due to the restriction of urban growth resulting from the buffer.	Kem321
If the values of land and housing go down as of the day you recommend Kemerton as the chosen site I will expect full monetary compensation from this present government.	Kem332
There is a lack of public acceptance of the location and proposal. The community is overwhelmingly opposed to the proposal.	SoDard, Kem338, Kem342, Kem399

Issue	Raised By
If the toxic waste precinct is established there will be no stopping the development of the KIP into a highly desirable location for industries that generate all sorts of hazardous waste. We do not wish to live in another Kwinana.	Kem348
<b>3C responses</b> <ul style="list-style-type: none"> <li>Any request or need for compensation is the responsibility of the government and beyond the scope of the 3C process</li> <li>The 3C expectations that a precinct could create more jobs and add to the job opportunities in the area. From an employment perspective, skilled jobs are preferable to lower skilled jobs; and sustainable jobs are preferable to unsustainable jobs. This precinct represents both of these beneficial outcomes.</li> <li>It is understood that people's perceptions of living, or farming near an industrial park, or a waste treatment facility, may result in a lower sale price for their property.</li> </ul>	

**Table 3: Kemerton Industrial Park - Air Quality**

Issue	Raised By
The summer time wind pattern results in morning prevailing wind coming from the N.E resulting in any gaseous leakage or spillage blowing in a S.W direction straight towards the second largest residential centre in WA and one of the fastest growing areas in Australia.	Kem298
The air could be contaminated with toxic gases from chemicals emptied into the proposed evaporation ponds. Obnoxious smells are a gross side effect for surrounding residential areas, let alone people with chest and bronchial problems.	Kem138, Kem188, Kem308, Kem324, Kem332, Kem352
The thought of having evaporation ponds with toxic fumes only 6km away from our homes is sickening.	Kem299
On Monday 6 <sup>th</sup> of March there was a large bush fire in the area immediately south of Simcoa, less than 3km south of the larger of the proposed sites. The whole of the Leschenault residential area was covered by smoke which remained visible at ground level like a morning mist for 36 hours. Plume dispersion models accurately predicted the smoke dispersion and demonstrate how emissions from the proposed site will behave.	Kem184
Detailed noise and odour modelling should be considered prior to the site being considered further.	SoH
Odour and emissions travel with the slightest wind.	Kem7, Kem1, Kem2A, Kem120-122, Kem124-126, Kem127-133, Kem135-137, Kem140-145, Kem149, Kem151, Kem155, Kem168, Kem174, Kem210, Kem310, Kem327, BCA, Kem365-394
Odours and emissions could affect the health of many residents.	Kem2B, Kem10, Kem8, Kem30, Kem138, Kem147, Kem150, Kem159, Kem174, Kem175, Kem180, Kem23, Kem195, Kem211, Kem216, Kem299, Kem316, Kem324, Kem327, Kem329, Kem330, Kem332, SoDard, Kem343, BCA, Kem400
Strong winds in the area.	Kem5
The cumulative effect of settled airborne contaminants on the surrounding land has not been addressed. Deposition of contaminants from pond emissions and other sources on the surrounding area will occur, diminishing with increased distance from source. Over the summer period considerable levels of contaminants will accumulate on the ground and foliage of the surrounding area. The first rain of the season will result in contaminants reaching sensitive wetlands and the superficial water table.	Kem184
There are very serious omissions in the 3C lists of criteria, for example the effect on the health of community living in close proximity to such a plant or precinct, and the obnoxious smells emitted by such a precinct.	Kem152, Kem175
Prevailing south/west winds will bring any toxic emissions to Binningup and coastal areas. The criterion of public	Kem167, Kem175, Kem176, Kem306, SoDard, BCA

acceptability [3km buffer] is absolutely unsuitable with prevailing winds blowing.	
Noticed the occasional caustic and chemical odours that are evident whilst driving between Australind and Binningup. This is apparent NOW, without the waste treatment plant, so I can only guess that with time it will become worse.	Kem170
<p><b>3C Response:</b></p> <ul style="list-style-type: none"> <li>The 3C notes these submissions</li> <li>The Cabinet endorsed technological suitability criteria require that operators must eliminate or minimise emissions to air, land and water. These criteria combined with the site suitability criteria should ensure impacts to the environment and community in areas around the proposed precincts are managed</li> <li>Evaporation ponds may not be the only solution to dealing with treated waste water. There are other alternatives for dealing with waste water and these will be determined by the proponents with approval from regulatory authorities. A solution will be site specific. However the intention of evaporation ponds at precincts is to evaporate treated waste water once the other treatment processes at the precinct have removed waste or contaminants from liquid waste that comes to the precinct. The ponds themselves will not be used to treat hazardous waste.</li> </ul>	

**Table 4: Kemerton Industrial Park - Impacts on Farming**

Issue	Raised By
Beef producers in the area export to overseas markets, Federal Government would be held accountable to contaminated meat. Beef stock drink groundwater. Quality Assurance may be affected.	Kem5, Kem339, Kem340
Proximity to farming areas – the prevailing winds would carry any discharge across valuable dairy, beef, grape, citrus and hay producing land.	Kem146, Kem175, Kem298, Kem300, Kem302, Kem305, Kem306, Kem332, Kem339, Kem342, Kem400
Possible loss of overseas markets for our agricultural products if contamination occurred.	Kem321
Effect on horticultural belt which incorporates Binningup and Myalup which relies on the under ground water.	Kem5, Kem147, Kem163, Kem173
The future of agriculture and associated regional communities will be compromised through the establishment of the Hazardous Waste treatment Precinct in the KIP. The Kemerton site is virtually surrounded by agriculture.	Kem339
There is a pipeline through a private property – if this is deviated due to heavy industry would make it impossible to continue farming.	Kem23
Leaching from evaporation ponds could impact on quality of organically grown crops.	Kem129
<p><b>3C Response:</b></p> <p>The combined site selection criteria and technology suitability criteria are some of the most stringent criteria for any type of industrial facility. When implemented together, these criteria should ensure the risks of impacts on groundwater from the proposed precinct can be managed.</p>	

**Table 5: Kemerton Industrial Park - Environmental Issues**

Issue	Raised By
The consultants report (Dr Pain) has highlighted a range of environmental issues including the possibility of groundwater contamination and biodiversity loss.	PAN
Our major concern with Kemerton is the current lack of a clearly viable mechanism for handling water removal. The area required for evaporation ponds is very large and would result in significant clearing of native vegetation.	NTN
Do not support the Kemerton site for a precinct. There are too many environmental constraints including groundwater that is utilised for irrigation, human consumption and other sensitive uses overlain by highly permeable sand.	ACE

Issue	Raised By
Feel that if a site needs ‘engineering’ to meet most of the criteria, then the site should be deemed unacceptable.	Kem49, Kem338
Our committee is concerned that given our centre is on the banks of the Brunswick River, and given that for the last few years the Brunswick river has burst its banks and flooded and its waters come to within metres of our centre. We are concerned that should the flood waters be contaminated and then when the flood waters recede contaminants are left to dry and then be blown into our centre.	Kem329
How will migratory birds be protected from the evaporation ponds? Netting 40 hectares of ponds would be expensive.	Kem120
Of the view that the hazardous waste facility should be on the eastern side of the Darling Scarp to minimize potential risk to the valuable groundwater resource known as the Yarragadee aquifer that is now subject to debate to be used for drought proofing Perth. Regardless of the aquifer being used to supply water to Perth it is a valuable and essential resource for the South West of WA and any possibility of destroying this asset should be avoided.	SoDard
Changes to designated groundwater areas – will these be brought under scrutiny at the time of development if a number of years elapse?	Kem25
Recommend the eastern fragment of KIP be excluded from consideration and that the western fragment undergo a number of rigorous site specific studies to quantify the environmental values of the area.	LCC
How will permission be given to clear scrub in Kemerton, especially in the pristine bushland areas given the State clearing regulations?	Kem120, Kem174
Permission to clear from the Soils Commissioner would be required and is not certain.	Kem49
Evaporation ponds will impact on treaty protection.	Kem186
Treatment ponds could cause problems for wildlife, especially migratory birds.	WCS, Kem186, Kem315, Kem302, Kem315, Kem329, BCA
It is a well known fact that wherever polluting industry is established, sooner or later there will be a fault in the operation or maintenance, and one must accept the fact that Kemerton will not be an exception. The construction of evaporation ponds in porous soils is in itself a danger of leading to a pollution problem, irrespective of protective layers of clay or other sealing processes.	Kem152
Impact on rare flora and fauna in the area is a concern.	Kem1, Kem124, Kem138, Kem154, Kem174, Kem180, Kem199-302, Kem305, Kem308, Kem310, Kem315, Kem327, Kem329, Kem352, Kem400
Very concerned about water and air pollution, fire, contaminants in the soil.	Kem47, Kem342, BCA, Kem352
Concern that an incident such as a fire would produce fire wastewater that would feed into the waterway and groundwater via the Spearwood sand – the fire water would need to be captured adequate.	Kem2A
There are fresh water springs in the Leschenault Estuary near the northern end which in the early morning and evening are watering points for swans and ducks, which could be adversely affected if the groundwater in these springs were polluted.	Kem163
As a result of investigations done for an outfall pipe directly west of Kemerton, uprisings of fresh water was found at sea, creating ‘sand volcanoes’ where fresh water bubbled from the seabed. Contamination of groundwater would then get into the ocean also.	Kem163
Clearing 20 to 40 hectares of pristine bushland will result in changes to the water table which in turn will affect the sensitive wetland areas.	Kem174
Large populations of birds attracted to the area would need to be protected from the ponds by netting.	Kem174
The populations of crabs, fish and birds in the estuary will be in immediate danger in the event of a leak or spillage.	Kem174, Kem302

Issue	Raised By
Quality of water at the Leschenault Inlet has deteriorated considerable in the past four years.	Kem207, Kem303
The KIP has been assessed, researched, investigated and monitored over and over and over again and as the DEP is well aware there have been no significant adverse environmental or social impacts in over twenty years of continuous operation.	Kem177
The superficial water table is dependent on the interaction between water gain in the form of rainfall and water loss from surface evaporation, drainage and uptake by vegetation. The local hydrological cycle would be modified by the exclusion of an area as large as the proposed evaporation ponds. Adverse affects on sensitive local EPP wetlands is highly likely.	Kem184
In the event of a groundwater contamination event, it is my understanding that remedial action involves drilling a number of bores around the affected area to remove large quantities of contaminated water. Such remedial action at Kemerton would result in lowering the watertable which would destroy the sensitive wetlands in the area. This is unacceptable.	Kem184
Ocean outfall would require dilution at plant before dilution at sea due to high inorganic loads. There is no local large dilution source available.	Kem49, Kem217, Kem338, Kem186, BCA
Rainwater tanks could be affected by toxic gas or dust landing on the roof.	Kem188
An accident involving a “toxic waste truck” would have horrendous environmental implications. Waste should not be transported on public roads.	Kem188
How is winter run-off of potentially contaminated water to be kept out of the KIP drainage system, which discharges into the Wellesley River?	Kem191
If water is polluted the consequences just flow on into all communities, both natural and man-designed. A health happy community will save the Government money in the long run.	Kem197
Should be a ban on all clearing due to the value of native bush to ecosystem services and the estimation that his biodiversity hotspot we live in is now undergoing the most rapid extinction rate for 65 million years.	Kem200
The area is one of the last natural bush lands in this fast growing South West area.	Kem302
I am also concerned about the risk of air and water pollution.	Kem1, Kem303, BCA, Kem352
The wetlands within the immediate area will have hydraulic connections to other wetlands of significant ecological importance and the associated hydraulic conductivity places it in a high risk category for a potential toxic plume occurring, should contaminants make their way into the groundwater hydraulic connections.	DCLM
CALM has concerns that the KIP site does not meet the criteria in relation to impacts on biodiversity, with potential impacts on wetlands, groundwater and vegetation.	DCLM
Ground water, aquifers, rainwater (on which many in this area rely) would almost certainly be endangered by the establishment of such a plant in this location. This is probably supported by DoE, CALM, and the appropriate water authorities.	Kem304
There has already been leakage of salt from one of the current industries in the KIP – this reportedly polluted groundwater at the time.	Kem2, Kem222-243
Any vegetation remaining on the Swan Coastal Plain is becoming more and more important as the ever increasing pressure for housing land develops.	Kem315
Studies carried out in 1989 concluded that “the Kemerton Industrial Park was classified by the Geological Survey of Western Australia of having a very high vulnerability to nutrient pollution”.	Kem329
Wetlands should be protected.	Kem197, Kem205, Kem301, Kem302

Issue	Raised By
The Kemerton Industrial Estate drains into the Leschenault Estuary.	Kem324
Surrounding area has significant ecological communities that would likely be detrimentally impacted by the precinct activities.	DOIR
Drainage to the Wellesley River is a potential problem.	Ind
<b>3C Response:</b> <ul style="list-style-type: none"> <li>Concerns about potential impacts on the environment are noted. However, the combined site selection criteria and technology suitability criteria are some of the most stringent criteria for any type of industrial facility. When implemented together, these criteria should ensure the risks of impacts on the environment from the proposed precinct can be managed.</li> <li>There are other alternatives to evaporation ponds for dealing with waste water and these will be determined by the proponents with approval from the regulatory authorities.</li> <li>Any clearing of native vegetation at precinct sites would have to meet all the requirements of the clearing regulations.</li> <li>Appropriate emergency response and fire fighting requirements, including fire wastewater control, for operations within a precinct would be determined during the approvals and licensing process.</li> <li>The movement of controlled wastes on the road are regulated under the Environmental Protection (Controlled Waste) Regulations. The transport of dangerous goods is done in accordance with the existing suite of procedures flowing from the Australian Code for the Transport of Dangerous Goods by Road and Rail, associated dangerous goods regulations and emergency response procedures would apply.</li> </ul>	

**Table 6: Kemerton Industrial Park - Buffer Zone**

Issue	Raised By
The Stanley Road landfill also appears to be within the 3-6km desirable buffer of the precinct and therefore may invalidate the site against essential criteria.	ACE, Kem320
The Stanley Rd Bunbury Harvey Regional Land fill site and the J W Cross and Sons land fill site both fall within 3.26 Km of the southern tip of the proposed western site. This is unacceptably close.	Kem49, Kem338
Three kilometres for a buffer is not considered a safe distance, nor even 6km.	Kem176
The 3km buffer is insufficient for safety due to prevailing winds.	Kem176
One of the larger sites (third site) being considered is actually located in the buffer zone between the industrial core and the light industrial zone to the east, near the Wellesley River.	Kem198, Kem206
The local community, business and government leaders will be opposing any increase or amendments to the KIP save for it being reduced in size.	Kem206, Kem219
This criterion does not in any way apply to what is generally known as acceptability to the public.	Kem207, Kem219
3C definition of public acceptability flawed. Arbitrary definition which did not include nearby residents.	Kem213, Kem310
3km and 6km distance must be drastically revised upwards.	Kem213
Other plants in other countries have had difficulties when placed too close to urban areas. The present 3km buffer would not be sufficient.	Kem321
When the 3C seemingly has not yet determined the exact waste treatment site within the Kemerton estate, how can the 3C confidently declare that provenance as “the result of lengthy negotiations between industry and community/environment stakeholders”?	Kem346
Not until the site selection is firmly agreed (wherever in WA) could any proper decision be made about the extent of any buffer zone for that particular site and its circumstances? Or has the state government predetermined Kemerton is it, and any ordinary public consultation is a placatory charade played out for the benefit of residents in the SW region?	Kem346

Issue	Raised By
A complete long term ban on incineration and landfill within the 3-6km buffer zone of any hazardous waste treatment precinct.	CSA
More appropriate buffer should be imposed on the category of wetlands (Criterion 2). Suggested that 'conservation' classified wetlands should have the highest level of protection.	SoH
<p><b>3C Response:</b></p> <ul style="list-style-type: none"> <li>The Stanley Road Landfill is outside the 3km Essential buffer. Establishing a precinct with a landfill or incinerator within the 3km essential buffer would be inconsistent with the 3C's intention when it recommended that landfilling and incineration of hazardous wastes are unacceptable technologies in precincts. This Cabinet endorsed 3C recommendation was based on strong public views regarding unacceptable technologies</li> <li>The 3km public acceptability buffer was negotiated between stakeholders to remove the potential for encroachment by areas zoned residential, hotels, motels and hostels, caravan parks, hospitals and nursing homes, schools and other educational establishments, shopping centres, some public buildings, and indigenous communities. This buffer is not related to the level of risk that may be associated with the establishment and operation of the precinct, nor does it relate to the expected distance that emissions are expected to travel from a precinct. The technology suitability criteria require that emissions are eliminated or minimised to ensure the protection of the community and the environment. It is these criteria, rather than the 3km public acceptability buffer, that are designed to protect all land uses, including agriculture and individual farm houses from possible effects and emissions.</li> <li>The 3C concurs that incineration and landfills be banned within the 3km essential public acceptability buffer. This Cabinet endorsed 3C recommendation was based on strong public views regarding unacceptable technologies.</li> </ul>	

**Table 7: Kemerton Industrial Park - Conduct and Process**

Issue	Raised By
No true test of public acceptability has been carried out through a properly constructed survey.	Kem207
<p><b>3C Response:</b></p> <p>The eight exhibited sites were assessed against the Cabinet endorsed site selection criteria which do not include surveying public acceptance of the proposal.</p>	

**Table 8: Kemerton Industrial Park - Technology**

Issue	Raised By
In reviewing the 3C document <i>Alternate treatment options for Aqueous Effluents – Haz Wa.pdf</i> it is evident that the cost of these treatments is prohibitive. This is especially the case when there are other more suitable sites. The 3C further fails to indicate storage options prior to treatment and disposal of the residual waste from the process.	Kem152, Kem184
The design and safe operation of a waste treatment facility would be relatively straightforward compared with the industries that are successfully operating in the KIP at present.	Kem177
Concerns about the suitability of evaporation ponds in the Kemerton area have been raised. Issues of evaporation pond design have also been raised.	DOIR, SoH, Kem1, Kem2, Kem10, Kem21, Kem49, Kem152, Kem174, Kem176, Kem184, Kem212, Kem222-243, Kem292, Kem307, Kem310, Kem311, Kem315, Kem332, Kem342, Kem400.
In your newsletter 4/2006, under EVAPORATION PONDS MAY NOT BE THE ONLY SUITABLE OPTION, you infer that the 3C is now trying to find an alternative to evaporation ponds. I have been told of another site in Sydney, where evaporation ponds are not used for waste treatment. The atrocious smells and damage to health are reported to be a serious concern.	Kem152
Concern with the current lack of a clearly viable mechanism for handling water removal.	NTN, Kem49, Kem338, ACE, CSA

Issue	Raised By
As we stated in our comments regarding (EC5), the soils can be engineered, but in our opinion the whole site for a hazardous waste treatment plant would need to be lined with clay or a suitable artificial product in order for all potential leakages or spillages to be contained.	Kem315
<p><b>3C Response:</b></p> <ul style="list-style-type: none"> <li>The mechanisms for dealing with waste water will be determined by the proponents with approval from regulatory authorities if KIP is recommended as a site for a HWTP.</li> <li>Waste storage at a precinct would have to comply with the Explosives and Dangerous Goods (Dangerous Goods Handling and Storage) Regulations 1992 (WA) and applicable Australian Standards. Any residual waste from the treatment processes would be taken off site for disposal at the appropriate class of landfill.</li> <li>Proponents in waste precincts will need identify methods, and have these approved by the regulator, for ensuring any groundwater below a site is protected</li> </ul>	

**Table 9: Kemerton Industrial Park - Miscellaneous**

Issue	Raised By
Opposed to precinct at the short listed site.	SoH, ACE, LCC, CoB, Kem1, Kem2A, Kem4, Kem5, Kem7, Kem8, Kem10-12, Kem15, Kem16, Kem21, Kem34, Kem23, Kem27, Kem28, Kem30, Kem49, Kem119, Kem154, Kem182, Kem183, Kem191A, Kem192, Kem193, Kem196-198, Kem201, Kem203-207, Kem211-213, Kem216 Kem218, Kem219, Kem221-243, Kem291-293, Kem295, Kem297-299, Kem303-311, Kem316-319, Kem322-325, Kem327-331, BCC, Kem338, Kem339, Kem342, Kem343, Kem347-394, Kem399, Kem400
<p>We the undersigned say:</p> <ul style="list-style-type: none"> <li>That a Hazardous Waste Treatment Plant at KIP would impinge on the amenity and safety of neighbouring residents.</li> <li>Public drinking water would be put at risk of contamination.</li> <li>Vulnerable fauna and flora would suffer loss of habitat and suffer from fugitive emissions.</li> </ul>	Kem326 Signed by over four thousand one hundred people (4100+)
The following signatories (211) oppose the construction of a “Hazardous Waste Treatment Plant” at Kemerton in the Harvey Shire.	Kem325
The Shire of Harvey’s motto is “a breath of fresh air”. What a joke this toxic waste treatment plant will make of that.	Kem147
Bencubbin should be the site of choice as it has favourable environmental conditions and an accepting community.	CoB, Kem2A, Kem33, Kem10, Kem139, Kem150, Kem174, Kem310, Kem311, Kem327, Kem332, Kem343, Kem345, Kem347
Knowingly allowing the plant to go ahead would be to knowingly allow a potential disaster to be set up on Bunbury’s doorstep and to wait for the accident(s) to occur, as it surely would be a case of when, not if.	Kem298
Two of the sites are clearly too small so why did the 3C exhibit them?	Kem206
Grateful for opportunity to make a submission.	Kem27, Kem36
I commend the local community for their concern for their local environment. They should be applauded for their efforts and their love of their local environment.	Kem301

Issue	Raised By
Realize the need to deal with our waste responsibly but do not think that a large wetland area which links up to a very large water catchment area, surrounded by growing communities, an area in which endangered flora and fauna inhabit, is an appropriate site.	Kem302
Have been a resident in the area for more than 20 years and choose to live here because of the delightful beaches, bush, climate and lifestyle. I ask again, please do not let a toxic waste plant be built here.	Kem305
Potential degradation of such an area by toxic contamination would be disappointing in the extreme, and would be something we would live to regret for ever. Once damaged, the damage cannot be undone. Please do not let this happen.	Kem305
Who knows over the next 30 years what additional toxic wastes could be channeled to an established processing plant (which may not be designed to handle them).	Kem307
Selection criteria are extremely questionable when the government itself had not included this site in its original list of over 900 potential sites in the state for this type of activity. Previous studies for the Kemerton site have already determined it is not suitable for solid waste disposal, yet here we are, at the suggestion of the CCI, overriding studies and trying to place the plant in Kemerton.	Kem310, Kem311
I would like to formally request that all comments raised by Dr Geoff Pain be thoroughly and objectively investigated as part of the assessment process.	Kem318
In representing the opinions of the overwhelming majority of my constituents, there is no doubt whatsoever from feedback received via telephone calls, submissions, and personal interaction at public meetings that the majority of local residents are vehemently opposed to the establishment of a hazardous waste treatment plant at Kemerton.	Kem318
Suggest the selection of a good site away from our tourist areas, and on the main rail link to the Eastern States, on the standard gauge line, would allow transport of these hazardous substances by rail and stop resulting conflict with tourists and the public.	Kem321
I believe the site should be selected for its soil type in order to protect our water supplies.	Kem321
Through the diligent work of many local volunteers and with support of the State Government through the Department of Environment, this region has an abundance of highly valued, well-maintained natural attractions that are an irreplaceable resource to the local community and regional and international visitors,	Kem324
It is understood that Bush Forever sites only apply to the metro area, and as we are dealing with regional sites one must assume the inclusion of this criteria is an oversight. However maybe a bush forever scheme or similar could be introduced to the quickly developing coastal plain. In that case the bushland at Kemerton should be looked at in that light and brought into consideration.	Kem334
Land for strategic industry in the south of the state is at a premium, with Kwinana Industrial area having only limited land available for new strategic. A conservative estimate of the value of KIA land is that every developed hectare produces \$10 million per annum.	KIPCC
Any development within the industry core should be complimentary to the type of industries expected in the future. To allow a parcel of this valuable land to be used for treating hazardous/industrial waste if not linked to future industry could be seen as downgrading the purpose for which the KIP was established.	KIPCC
Latest technology waste treatment processing could be the catalyst in encouraging the establishment of new industries in the KIP. For example industries might be attracted that produce waste streams treatable at the hazardous/industrial waste treatment precinct. This would be a useful synergy.	KIPCC

Issue	Raised By
KIPCC does not support the permanent storing of waste within the KIP. Any residue from the treatment of waste would have to be disposed of at some other designated location.	KIPCC
The KIP concept involves net value adding (no services in core).	Kem49, Kem338
We believe a single “all waste” facility servicing the South West, located at a remote and geologically stable site is most desirable and because Kemerton would not be able to cater for all classes of waste it would be better to choose a site that could.	Kem342
How can any RCG consultant properly analyse and evaluate anything about a Kemerton ‘precinct’ when the 3C has not yet declared/finalized a proposed site within the precinct.	Kem346
Siting such a plant at Kemerton would be both against the wishes of the community and potentially highly politically damaging.	Kem399
The engineering solutions for the prevention of spillages and for retrieval of contaminated effluent in the event of a spill – do not believe the assurances have any validity here.	Kem2A
At a public meeting 16 years ago the public was assured that the KIP was not destined to become a major industrial park and that development would be kept to a minimum.	Kem2A
<b>3C Responses:</b> <ul style="list-style-type: none"> <li>The 3C notes the opposition to the use of Kemerton Industrial Park as a waste treatment precinct.</li> <li>The 3C acknowledges that neither of the two smaller areas on the map on page 7 of the -listing and Verification of Prioritised Sites: South-West Region is not large enough to provide the anticipated 20ha required for a HWTP. These areas were included on the map simply because they conform to the site selection criteria.</li> <li>Cabinet has endorsed the Technological Suitability Criteria for waste treatment technologies allowed within precincts. Landfilling of waste and incineration is banned under these criteria. Any residue left over after waste has been treated at a precinct would be disposed of offsite at the appropriate class of landfill.</li> </ul>	

**Table 10: Kemerton Industrial Park - Conformance with Criteria (generally)**

Issue	Raised By
The site fails to meet many of the listed essential criteria and also fails to meet many of the listed desirable criteria.	Kem338, Kem349, Kem350, Kem353-364
The community strongly feels that a significant number of the criteria are near failing and this should deem the site marginal at best, making it unacceptable in meeting community concerns.	Kem49, Kem338
This site does not meet the essential and desirable criteria as per your own assessment.	Kem310, Kem311, Kem330
The site fails to meet many criteria that weren’t listed but which the community feels to be pertinent.	Kem338
Kemerton Industrial Park appears to meet the essential criteria and perform well against the desirable criteria, not withstanding the concerns raised amongst stakeholders about groundwater.	CCI
The Kemerton Industrial Park fails 8 essential and 4 desirable criteria.	Kem174
Independent Environmental Scientists have assessed this area and have found that 9 of the 12 essential criteria to be failed. If one essential criterion fails then this area is not suitable.	Kem147
Do not support Kemerton as a site for a precinct. There are too many environmental constraints including groundwater that is utilised for irrigation, human consumption and other sensitive uses overlain by highly permeable sand. Significant doubts as to its suitability for any heavy industry	ACE
While Kemerton meets the 3C requirements for siting it is less than preferable when transport costs and costs to establish the sites are taken into account.	CCI

**3C Response:**

- The 3C are confident that there are areas within the KIP that meets all the essential site selection criteria and most of the desirable criteria.

**Table 11: Kemerton Industrial Park - Representative Community Group**

Issue	Raised By
I wish it to be known that the RCG did not function as the 3C intended with community members excluded from it and no accountability demonstrated as set out in the 3C briefing paper 9.	Kem184
Do not endorse KCC as a representative community group.	Kem169
I do not recognise the KCC as the Representative Community Group as membership includes people who would have a vested interest. I understand the RCG submitted 2 separate submissions due to failure of the group to agree on certain issues. I support the submission by the minority group as I believe the submission truly represents the community.	Kem184, Kem343
<b>3C Response:</b>	
<ul style="list-style-type: none"> <li>The 3C notes these comments.</li> </ul>	

**Table 12: Kemerton Industrial Park - Transport Routes**

Issue	Raised By
Old Coast Road is not a publicly acceptable route for additional toxic waste transportation. Suggest detailed risk assessment and management measures such as double skin trucks and reduced transport speeds are considered.	SoH
A Mr. Jackson was killed at the Myallup/Old Coast Rd intersection when he collided with a vehicle carrying milk crates. The crates and contents ended up in the Harvey drains and were found all the way down the coast to Busselton and Dunsborough.	Kem47
A traffic accident involving a truck carrying toxic waste could have a devastating impact on both people and the environment. A likely scenario for vehicles travelling the Old Coast Rd. 3C cannot guarantee safety on the roads.	Kem138, Kem183, Kem23, Kem308
<b>3C Response:</b>	
The movement of controlled wastes on the road are regulated under the Environmental Protection (Controlled Waste) Regulations. The transport of dangerous goods is done in accordance with the existing suite of procedures flowing from the Australian Code for the Transport of Dangerous Goods by Road and Rail, associated dangerous goods regulations and emergency response procedures would apply.	

**Table 13: Kemerton Industrial Park - Provision of Services and Fire Management**

Issue	Raised By
Kemerton is the only site that has Water Corporation facilities (treatment and/or conveyance) in the vicinity of the short listed sites. Accordingly the Corporation may be able to receive wastewater from a HWTP at Kemerton on a commercial basis. However, as Kemerton Industrial area is outside the sewerage operating area, the Corporation has no obligation to provide services to that area.	WC

A detailed risk assessment plan is essential to determine the true extent of emergency resources available and the probability of containment and management in the event of an incident involving hazardous waste – this responsibility should not fall to LGAs or the community.	SoH
Development of sites adjacent to or near CALM-managed lands will also have implications for bushfire protection and any site should build in its own bushfire protection requirements, including buffers, rather than depending on modified management of adjoining lands.	DCLM
It would be incumbent on the operators of the waste precinct at Kemerton to provide their own on site fire suppression and initial hazardous materials response capability. The local Bunbury office has advised that the proposed site is not reticulated and therefore water supplies will be a concern.	FESA
Storage of hazardous waste – potential for spills/fire.	Kem8
<p><b>3C Response:</b></p> <ul style="list-style-type: none"> <li>The 3C notes these issues.</li> <li>Waste storage at a precinct would have to comply with the Explosives and Dangerous Goods (Dangerous Goods Handling and Storage) Regulations 1992 (WA) and applicable Australian Standards. Appropriate emergency response and fire fighting requirements for operations within a precinct would be determined during the approvals and licensing process.</li> </ul>	

**Table 14: Kemerton Industrial Park - Planning Considerations and/or Original Intent of the Kemerton Industrial Park**

Issue	Raised By
The KIP is a Strategic Industrial Area (SIA) seeking to attract heavy resource processing industry which may produce hazardous waste. The KIPCC therefore recognizes that hazardous/industrial waste needs to be treated in a coordinated and responsible way. The 3C process is therefore strongly supported.	KIPCC
Population in the area is growing rapidly, one of the fastest growing areas in the State.	Kem8, Kem147, Kem150, Kem205, Kem207, Kem298, Kem305, Kem309, Kem312-314, Kem329, SoDard, Kem339, Kem342, Kem348-350, Kem353-364
The location of a HWTP within the KIP is not consistent with the State Government's intent for the Park, as stated in the Govt's strategic framework for addressing the industrial land and port access needs of Greater Bunbury region over the next 30 yrs, "Industry 2030".	CoB
The timeline for development will bring changes to development approval processes (i.e. GBR Scheme) and population growth.	Kem25
Concern about site in proximity to urban expansion.	SoH
The Greater Bunbury Region Scheme allows only low intensity rural use in the area of the eastern site.	Kem315
Using the Greater Bunbury Regional Scheme (GBRS) boundaries as a more appropriate planning instrument, the eastern fragment identified in the Short Listing and Verification of Prioritised Sites (SLVPS) should be immediately removed from consideration as it is not located within industrial zoned land but is actually zoned rural as part of the Special Control Area designated under the KIP Buffer.	LCC
The KIP was developed to allow industries to develop in the Harvey-Bunbury area without conflict with populated areas of housing. The whole purpose of the KIP will be defeated if a toxic waste plant is established there. After years of problems with Alcoa and nearby residents, one can imagine a reluctance to take employment at the KIP.	Kem307
The Kemerton Industrial Park should not be expanded any further. It was a mistake having it there in the first place.	Kem302

Issue	Raised By
Totally support the concept of several toxic waste treatment facilities located throughout WA and for the proposed Kemerton site in particular. The Kemerton Industrial Park (KIP) with its large buffer zone and established emergency service planning is ideally situated for the establishment of such a facility.	Kem177
There is a finite land resource in the Harvey region that can be connected to the Harvey Water Scheme for agriculture, horticulture and viticulture purposes. This is an important land use that should be protected.	Kem205
This site is too close to a rapidly growing population.	Kem170, Kem172, Kem173, Kem182, Kem210, Kem304-306, Kem309, Kem313, Kem316, Kem327, Kem329, Kem330, SoDard, Kem339, Kem342, Kem352, Kem400
Previous/present/future residential development plans for land between Leschenault and Myalup will collapse.	Kem174
Locating a precinct at KIP is not consistent with the State Governments intent for the Park – refer to Greater Bunbury strategic framework ‘Industry 2030’.	CoB
<p><b>3C Response:</b></p> <ul style="list-style-type: none"> <li>• The 3C notes the comments relating to planning considerations</li> <li>• The 3C have been requested to assess sites against the Cabinet endorsed site suitability criteria. This includes the requirement for sites to have at least a 3km buffer to “sensitive land uses”, which are defined as: areas zoned residential, hotels, motels and hostels, caravan parks, hospitals and nursing homes, schools and other educational establishments, shopping centres, some public buildings, and indigenous communities. This buffer is complied with for the Kemerton site and is not related to the level of risk that may be associated with the establishment and operation of the precinct</li> <li>• A HWTP should have no impact on future developments at the Kemerton Industrial Park or the operations or viability of other industries that may choose to establish there.</li> </ul>	

### Key to Summary of Submissions Tables

Code	Received from
ACE	Alliance for a Clean Environment
ALP-Asb	Australian Labor Party Australind Sub-Branch
ALPSH	Australian Labour Party, South Hedland Sub Branch
BCC	Binningup Church of Christ
BCA	Binningup Community Association
BEDA	Bencubbin Economic Development Association
BGPA	Botanic Gardens and Parks Authority
BRLC	Bruce Rock Land Conservation District Committee
BRRCG	Bruce Rock Representative Community Group
CCI	Chamber of Commerce and Industry
CfH	Care for Hedland Environmental Association Inc.
CoB	City of Bunbury
CSA	Contaminated Sites Alliance: Mirrabooka Action Group
DA	Department of Agriculture
DCEP	Department of Consumer and Employment Protection
DCLM	Department of Conservation and Land Management
DoE	Department of Environment
DoEH	Department of Environment and Heritage
DoH	Department of Health
DOIR	Department of Industry and Resources
DPC	Department of the Premier and Cabinet
DPI	Department for Planning and Infrastructure
DSL	Dampier Salt Ltd
FESA	Fire and Emergency Services Authority
Kem338	Facilitation Group of the Kemerton Community Committee
HC	Heritage Council

<b>Code</b>	<b>Received from</b>
Ind	Indigenous Community Liaison as provided via Nyaarla Projects Pty Ltd in their report Aboriginal Community Liaison (May 2006)
KCCFG	KCC Facilitation Group (majority response)
KIPCC	Kemerton Industrial Park Coordinating Committee
KNS	Kalgoorlie Nickel Smelter & Concentrator – Nickel West
KRCG	Kalgoorlie Representative Community Group
LC	LandCorp
LCC	Leschenault Catchment Council
Kem200	Leeuwin Environment
LMCG	Lake McDermott Catchment Group
LPA	The Leschenault Progress Association
MMRCG	Bencubbin Waste Treatment Precinct Reference Group
MR	Main Roads
NTN	National Toxics Network Inc
OIC	Office of the Information Commissioner
PAN	Pollution Action Network
PDC	Pilbara Development Commission
PG	Pilbara Greens Local Group
PHCCI	Port Hedland Chamber of Commerce and Industry Inc
Kem329	Riverlinks Child Care and Community Centre
SBDC	Small Business Development Corporation
SIPH	Soroptimist International Port Hedland
Kem345	Shire of Capel
SoC	Shire of Coolgardie
SoDard	Shire of Dardanup
SoH	Shire of Harvey Council
SoMM	Shire of Mt Marshall
SoN	Shire of Northam

<b>Code</b>	<b>Received from</b>
SoR	Shire of Roebourne
STAR	STAR Alliance
Kem342	South West Environment Centre Inc.
TKAN	The Kemerton Action Network
ToN	Town of Northam
ToNS	Town of Northam Supplementary Submission
TPH	Town of Port Hedland
WAI	Wedgfield Association Inc
WC	Water Corporation
Kem40	Wildflower Society of WA Inc.
A17	Wheatbelt Development Commission
WCS	Wetlands Conservation Society