

CORE CONSULTATIVE COMMITTEE ON WASTE (3C) RESPONSE TO SUBMISSIONS MADE ON THE EXHIBITED SHORT LISTED SITE – AVON 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 Avon 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: Avon 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"> 1. Low risk of flooding, low to moderate risk of water logging. (DoE) 2. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85) 3. There are limited locations within the AIP that can meet this criterion. (ToN, A46, A50, STAR, A94 - based on GHD report) 	<ol style="list-style-type: none"> 1. Agreed. 2. 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 to waterways can be managed. 3. DoE advises that, with the exception of some small areas along the northern boundary of the site, the park is essentially on high ground and is not located within a 100-year ARI floodplain. Any companies operating at the site if selected would need to demonstrate that they are designed to withstand flooding and avoid overflow (e.g. including secondary containment). <p><u>3C Conclusion:</u> The 3C believes the site meets this criterion.</p>
2	Natural Waterways/Wetlands/Marine Systems	<i>Not less than 1000m from high conservation/ecological value aquatic ecosystems, not less than 500m from a slightly too moderately disturbed systems and not less than 250m from highly disturbed aquatic systems.</i>	<ol style="list-style-type: none"> 1. A tributary of the Grass Tree Brook runs through the site and flows into the Mortlock River. There is potential for contaminants entering the river system in the event of surface and groundwater flows. (DCLM) 2. It is recommended a comprehensive study involving the identification, delineation and evaluation of wetlands in the AIP, Shire of Mt Marshall and Site MSW039 is conducted before the final site is selected. (DoE) 3. A high water table, aerial photography and hydrographic mapping indicates there is the potential for ephemeral/seasonal wetlands to be located near the site and this will need to be assessed by a wetland study. (DoE) 4. Minor watercourse in the south west and south east of area. (DoE) 5. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85, A92). 6. The site meets this criterion. (ToN, A46, A50, STAR, A94 - based on GHD report) 	<ol style="list-style-type: none"> 1. The 3C believes that it has sufficient information to indicate that there is enough land outside the required buffer distances that can meet this criterion. 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 to waterways are managed. 2-3 Once a general site has been selected, more detailed studies will need to be undertaken to identify the best location within a site for a precinct. 4. Inspection of the AIP indicates that drainage lines and watercourses are of low conservation value, as the site has been extensively cleared for agriculture. The GHD study concurs with this finding. 5. Refer to response 2 to criterion 1, above. 6. Agreed. <p><u>3C Conclusion:</u> The site meets the essential component of this criterion. The AIP does not meet the desirable component of this criterion.</p>

No.	Specific Factor	Criteria	Submissions	Response
3	Groundwater	Not within Public Drinking Water Source Areas (PDWSAs) P1-P3 priority areas identified in published development plans.	<ol style="list-style-type: none"> 1. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85) 2. The site meets this criterion. (ToN, A46, A50, STAR, A94 - based on GHD report) 	<ol style="list-style-type: none"> 1. 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 to waterways can be managed. 2. Agreed. <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"> 1. Groundwater seeps between 230m and 240m contours across most of the Park. Upper areas of the park may meet this criterion, but it would be subject to a more detailed assessment. (ToN, A46, A50, STAR, A94 - based on GHD report). 2. Request that a “credible assessor” investigates whether the site meets this criterion. (A90) 3. Groundwater is recorded within 2 metres from the surface (DoE) 4. Depth to saline water table is likely to be variable within local groundwater system. (DA) 5. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85). 	<ol style="list-style-type: none"> 1-2. GHD comment was based on incised draining lines (e.g. gullies) at this contour level. A review of site contours indicates that the 230-240m contours only occur in on a small portion of the site. There is sufficient land within the site that is above the 230-240m contours. Detailed site investigations would need to be undertaken as part of any formal environmental approvals processes. 3-4. Agreed. 5. Refer to response 2 to criterion 1, above. <p><u>3C Conclusion:</u> The site does not meet this desirable criterion.</p>
5	Groundwater (Hydraulic conductivity)	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.	<ol style="list-style-type: none"> 1. GHD report states it is unlikely that this criterion can be met without management as the land clearly drains, seeps and discharges quite quickly. (ToN, SON, A46, A50, STAR, A94 – Based on GHD report) 2. Soil permeability may be higher than standard specified (transport time to groundwater of 2 years). (DoE) 3. Simple sands and gravels at the site mean any seepage will flow through in a matter of hours. Considerable cost may be involved in engineering the soil. (STAR) 4. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85). 5. Request that a “credible assessor” investigates whether site meets this criterion. (A90) 	<ol style="list-style-type: none"> 1-3. It is acknowledged that the inherent capacity of the site to limit transport time of potential contaminants to groundwater is low. However, impervious barriers can be put in place to prevent potential contaminants from contacting the groundwater. Companies that operate in the site will need to demonstrate that their facilities are designed to ensure transport time of any potential contaminants to groundwater is at least 2 years. 4. Refer to response 2 to criterion 1, above. 5. Detailed site investigations would need to be undertaken as part of any formal environmental approvals process. <p><u>3C Conclusion:</u> The site does not meet this criterion in its natural condition however the criterion can be achieved through the use of engineered soils. The site meets this criterion.</p>

No.	Specific Factor	Criteria	Submissions	Response
6	Constructed drainage systems e.g. stormwater or road drainage	Not within 100m of an entry point of a constructed drain.	<ol style="list-style-type: none"> 1. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85) 2. This is a site-specific criterion. The exact 'footprint' of the facility would have to be determined as well as its specific location before this criterion could be evaluated. (ToN, A46, A50, STAR, A94, SON - based on GHD report) 3. Request that a "credible assessor" investigates whether site meets this criterion. (A90) 	<ol style="list-style-type: none"> 1. Refer to response 2 to criterion 1, above. 2. Agreed. However, there is sufficient land within the park that meets this criterion. 3. Detailed site investigations would need to be undertaken as part of any formal environmental approvals process. <p><u>3C Conclusion:</u> The 3C believe there is sufficient land within the park that meets this criterion.</p>
7	Hydrogeology	Should be located in an area where the hydrogeology can be readily monitored and managed with confidence.	<ol style="list-style-type: none"> 1. The hydrogeology of this site should be further investigated prior to any development of the proposed precinct. (DA, PAN) 2. Leakage from evaporation ponds could end up in the Swan River via local creeks flowing into the Avon. (A85). 3. This depends on the presence or otherwise of dolerite dykes. A detailed hydrogeological investigation of specific sites would be required before this criterion could be evaluated. (ToN, A46, A50, STAR, A94, SON – based on GHD report). 4. The hydrogeology of this area is not so simple that it can readily be monitored or managed due to the presence of Dolerite dykes and possible variable weathering zones below the surface. (STAR) 	<ol style="list-style-type: none"> 1. Agreed. Once a general site has been selected the 3C understands that more detailed studies will be undertaken as part of any formal environmental approvals processes. However, the 3C believes that it has sufficient information to indicate that there is enough land within the site that can meet this criterion. 2. Refer to response 2 to criterion 1, above. 3-4 Agree that more investigation would be required. While the geological setting may be somewhat complex in places (intrusive and fractured igneous rocks), it should not prove an impediment to management of groundwater at the site. The 3C's environmental Technical Advisory Panel (TAP) member has advised that a detailed site assessment of preferential ground water flow directions will allow the correct placement of monitoring bores which would provide a secure system of ground water management. These detailed site investigations would need to be undertaken as part of any formal environmental approvals processes. <p><u>3C Conclusion:</u> The 3C believe that the groundwater can be readily monitored and managed at the site, provided detailed studies are undertaken to identify the correct placement of monitoring bores based on an improved understanding of preferential groundwater flow directions. The site meets this criterion.</p>
8	Geological Stability	Located on stable ground e.g. not in a seismically active area, areas susceptible to soil sinking,	<ol style="list-style-type: none"> 1. The Town of Northam has a requirement for buildings to be reinforced to cater for any seismic event. (ToN) 2. The area is seismically active requiring 	<ol style="list-style-type: none"> 1-3. Noted. It is understood that any construction in the Avon area would need to meet the requirements of Australian Standard 2121-1979. This is true of any building in the region, and does not in itself preclude the construction of

No.	Specific Factor	Criteria	Submissions	Response
		<p>landslides or swelling, karst or sinkhole terrain.</p>	<p>construction of Australian Standards 2121-1979 to meet the requirements of a Zone 2 Seismic Area. (ToN)</p> <p>3. Criterion cannot be met. The area is seismically active requiring construction to Australian Standard 2121-1979 to meet the requirements of a Zone 2 Seismic Area. It is likely that sumps would require secondary containment. (A46, A50, STAR, A94, – based on GHD report)</p> <p>4. There is an active seismic zone with a fault line 18 km to the East. (ToN, A46, A50, STAR, A94, SON– based on GHD report)</p> <p>5. There is a clearly identified (signposted) fault line from the 1968 Meckering Earthquake which is still visible 16km (to the East) of the AIP. (ToN)</p> <p>6. In an area of seismic instability (Meckering fault line). (DoE, DA)</p> <p>7. Concern for impact of seismic activity on bunds and lining of evaporation ponds. (A83, A19, A90, A93, A96-104, A107, A108, A110-117)</p> <p>8. Area subject to regular minor earth-tremors. (STAR, A85, A90, A117, A118)</p> <p>9. Within 5km of most active seismic zone in Australia. (A92)</p> <p>10. Within 12km of Meckering fault line and smaller marked faults that are less than 2km from AIP. (A93, A96-104, A83, A107, A108, A110-A116)</p> <p>11. It is reported that the Meckering Earthquake is listed as the second strongest earthquake in Australia by GeoScience Australia. (STAR)</p> <p>12. Proper engineering of precinct should make issues connected to seismic activity a moot point. (ACE, CSA)</p> <p>13. Further investigation needed about seismic risk of AIP.(PAN)</p> <p>14. Northam in a critical 0.40> Bedrock Hazard: (return period 475 years) as defined by GeoScience Australia (C Sinadinovski, M.</p>	<p>either residential or industrial premises. It is agreed that sumps should have secondary containment.</p> <p>4-13. The 3C have liaised with GeoScience Australia to determine the potential seismicity of the AIP. The AIP 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.</p> <p>14. The measure of seismicity used in the GeoScience Australia report by Sinadinovski, Edwards, and Corby, et al is different to that used by Global Seismic Hazard Assessment Program. As noted in the preceding response, the 3C has liaised with GeoScience Australia in this matter.</p>

No.	Specific Factor	Criteria	Submissions	Response
			Edwards, Neil Corby, et al), which meets the 3C's definition of very high hazard for seismicity in accordance with the Global Seismic Hazards Assessment Program (GSHAP). (STAR)	<u>3C Conclusion:</u> The site meets this criterion.
9	Acid Sulfate Soils	Not located on soils with high acid sulfate generating potential.	<ol style="list-style-type: none"> 1. According to the map <i>Shire of Northam Subsurface Acidification Risk</i> by the Department of Agriculture (2003) the AIP has moderate-high soil sub surface acidification risk. Preliminary site investigation should be undertaken to determine the presence, extent and severity of acid sulfate soils. (DoE) 2. The site meets this criterion. The soils appear to fully drain during summer indicating that Acid Sulphate Soils are unlikely to be present. (ToN, A46, A50, STAR, A94 - based on GHD report) 	<ol style="list-style-type: none"> 1. The AIP is high in the landscape, marine or estuarine sediments don't appear to be present and the soils appear to fully drain during summer which indicates that acid sulphate soils are unlikely to be present. However further assessment for potential acid sulfate soils should be taken into account as part of assessments required for any regulatory approvals processes, the environmental impact assessment, of any recommended site. 2. Agreed. <u>3C Conclusion:</u> The site meets this criterion.
10	Topography	Not located in an area with a slope >4 %.	<ol style="list-style-type: none"> 1. Slopes of >4% are likely to be encountered on the site. (DA) 2. Most of the site does not meet this criterion. (ToN, SON, A46, A50, STAR, A94 – based on GHD report). 3. Kaolin project may take up existing flat land and result in slopes being engineered to accommodate precinct. This may provide an additional constraint. (NTN, CSA) 	<ol style="list-style-type: none"> 1-2 The 3C believes that there is sufficient land that meets this criterion. GHD report states that the average gradient is greater than 5%. It is understood that whilst it may be difficult to remove this constraint on the steeper portions of the site, it is technically feasible. This is also a desirable criterion, and as such the site could not be removed from consideration on the basis of slope alone. 3. Noted. <u>3C Conclusion:</u> There is sufficient land that meets this criterion.
11	<i>Threatened flora fauna and ecological communities</i>	<i>Not within 500m of known habitats of threatened species of flora fauna or threatened ecological communities except where the maintenance of threatened species or threatened ecological community values can be clearly demonstrated.</i>	<ol style="list-style-type: none"> 1. Priority 1 flora species <i>Gastrolobium rotundifolium</i> occurs adjacent to the proposed Avon site. (DCLM) 2. There are no known threatened species of flora or fauna within 500m of the AIP, and although the area does not contain any threatened ecological communities, it is a remnant vegetation complex that is poorly represented as a result of Wheatbelt clearing and parkland grazing. (DCLM) 3. The site meets this criterion. (ToN, A46, A50, STAR, A94 - based on GHD report) 	<ol style="list-style-type: none"> 1-2 Agreed. 3. Agreed. <u>3C Conclusion:</u> The site meets this criterion.

No.	Specific Factor	Criteria	Submissions	Response
12	Conservation Value	No negative impact on national parks, nature reserves, or areas under conservation covenants.	<ol style="list-style-type: none"> 1. The closest CALM-managed public conservation reserve is Meenaar Nature Reserve (RES 29977) approximately 2.6 km away and no conservation covenants exist in the immediate vicinity to our knowledge. (DCLM) 2. The site contains a number of areas that have been set aside under conservation covenants. There is no reason for impacts to occur in these areas. (ToN, A46, A50, STAR, A94 - based on GHD report) 3. Concerned about impact. (A82) 4. Throssel Reserve and Meenaar Reserve are close to the AIP. (A85, A93) 5. Declared rare flora <i>Thomasia glabripetalai</i> at Meenaar Nature Reserve. (A85, A89) 	<ol style="list-style-type: none"> 1. Noted. 2. Agreed. 3-5 Any facilities establishing at this site would need to operate in accordance with the technology suitability criteria, which requires that emissions be eliminated or minimized. Accordingly, there should be no impact on the Throssel Reserve and Meenaar Reserves, which are located approximately 1.9km north and 2.6km east from the site respectively (refer to nature reserves of the Shires of York and Northam, Management Plan 1987-1997. Management Plan No 4, DCLM) <p><u>3C Conclusion:</u> The site meets this criterion.</p>
13	“Bush Forever” sites	Not within areas designated or proposed as ‘Bush Forever’ sites.	<ol style="list-style-type: none"> 1. Bush Forever sites only exist in the Metropolitan area. This criterion is not applicable as the AIP is outside the metropolitan area. (ToN, A46, A50, STAR, A94 – based on GHD report) 	<ol style="list-style-type: none"> 1. Agreed. <p><u>3C Conclusion:</u> The site meets this criterion.</p>
14	Public Acceptability	<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"> 1. The criterion cannot be met. There are 68 individual titles within 3km of the Park boundary. Some parts of the park are within 3km of Grass Valley – the entire Park is within 6km of Grass Valley. Ministerial conditions identify the nearest resident as a sensitive receptor as well as the AIP boundary. (ToN) 2. The criterion cannot be met. There are 68 individual titles within 3km of the Park boundary. Some parts of the park are within 3km of Grass Valley – the entire Park is within 6km of Grass Valley. (A46, A50, STAR, A94 – based on GHD report). 3. Buffer area inadequate and presents health risks to families and food production within buffer. (STAR, A78, A82, A89, A90, A91, A117) 4. 50 people living within 3km buffer. (A83, A19, A90, A93, A96-104, A106-116) 5. 11 families in 3km. (A85, A90) 6. Family property 900 metres from AIP 	<ol style="list-style-type: none"> 1-14 It is acknowledged that there are people living within 3km of the AIP. 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. <p>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.</p>

No.	Specific Factor	Criteria	Submissions	Response
			boundary. (A91, A93) 7. Home within 3km. (A117) 8. Home within 1.5km of possible precinct. (A39) 9. Precinct is a low risk facility and can be accommodated closer to sensitive land uses than 3kms. (CCI) 10. Buffer zone does not provide assurance that hazardous wastes would be kept within the boundaries of the AIP. (A91) 11. Will have to put up with it 24/7. (A19, A91, A96-100, A102-104, A106-116) 12. Adverse impacts on private freehold landholders e.g. noise, emissions, contamination, industrial accidents. (A83, A19, A96-104, A106-117) 13. Expect buffer zone issue to be resolved before any decisions made. (A92) 14. It is noted that the Grass Valley Town site is just on 3km from the AIP. (ACE, CSA)	<p><u>3C Conclusion:</u> The site meets this criterion.</p>
15	Heritage Value	No negative impact on sites of recognized cultural or historical significance.	1. The site meets this criterion. (ToN, A46, A50, STAR, A94 – based on GHD report) 2. A search of the DIA sites register revealed two sites have been recorded in the AIP. These sites are apparently highly disturbed, sparse artefact scatters near an ephemeral watercourse. (Ind) 3. Sixteen other sites listed on the DIA register as occurring in the area immediately around the AIP. All are artefact scatters with the exception of a scarred tree and an engraving site. This indicates there is a relatively high possibility of locating other sites within the AIP, through a comprehensive survey. (Ind)	1. Agreed. 2. Noted. 3. Noted. It is understood by the 3C that once a site has been selected 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 heritage studies would be undertaken. <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.	1. The site meets this criterion. (ToN, A46, A50, STAR, A94 – based on GHD report). 2. Emissions could contaminate uncovered produce transported by rail e.g. salt. (A84) 3. Tourists and travellers could be adversely affected by emissions. (A84)	1. Agreed 2-3 Refer to response 1-14 in criteria 14, above. <p><u>3C Conclusion:</u> The site meets this criterion.</p>
17	Transport Routes	Any traffic on local roads	1. This site is preferred to the Bencubbin site,	1. Noted.

No.	Specific Factor	Criteria	Submissions	Response
		<p>must be within acceptable congestion and safety limits.</p>	<p>although would still involve issues to be addressed. These issues are increased traffic, increased road maintenance and emergency response to accidents involving waste transport vehicles. (MR)</p> <ol style="list-style-type: none"> 2. The site meets this criterion. (ToN, A46, A50, STAR, A94 – based on GHD report). 3. Already heavy traffic on Great Eastern Highway. (A85) 4. Increased truck movements may result in spillage en route. (A82) 5. Increased traffic could cause disruption to property access. (A117) 	<ol style="list-style-type: none"> 2. Agreed. 3-4 It is agreed that increasing the movement of materials can increase the risk of spillage. 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. 5. It is unlikely that a precinct would result in disruption to property access. 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. <p><u>3C Conclusion:</u> The site meets this criterion.</p>

No.	Specific Factor	Criteria	Submissions	Response
18	Emergency Services	Within approximately 25 minutes of adequate off-site emergency services including medical and fire fighting facilities.	<ol style="list-style-type: none"> 1. Criterion cannot be met because career fire-fighters have been withdrawn from Northam and volunteers are not expected to attend events involving toxic substances. (ToN) 2. FESA is unable to support any of the exhibited sites in the south-west because of: <ul style="list-style-type: none"> • increased risks to the community associated with the transport distances • the expectations placed on local volunteers where no permanent career services are located (except Kemerton). • the expectations placed on volunteers placed along transport routes. • The additional cost burden that may be placed on FESA in the Provision of emergency services in isolated regions; and • in finding local community members to volunteer for hazardous materials response. (FESA) 3. No full time Fire & Emergency Services Authority unit in Northam. (STAR, A82, A83, A85, A19, A90, A91, A96-104, A106-117) 4. Closest career FESA station is Midland (approximately 1.5 hours away). (A82, A117) 5. Night shift ambulance officers comprise 1 career and 1 volunteer. (A82) 6. Closest medical facility is Northam Regional Hospital. (A85) 7. Northam Regional Hospital does not have a resident doctor. (A117) 8. Serious and critical medical patients are flown to Perth by RFDS or transported by ambulance. (A117) 9. No clarity about standing procedures or policy to prevent disasters. (A90) 10. Grassland around AIP poses fire risk. (A82) 	<p>1-8 It is acknowledged that the site is not within 25 minutes of a career fire fighting service, but it is within 20 kilometres of a volunteer Fire and Rescue Service. Northam has an ambulance service and the hospital emergency department is staffed around the clock, with a doctor on call, so the criterion is considered to be met. This was set as a desirable criterion rather than an essential criterion in acknowledgement that on-site emergency services could be provided if required. The need for this can be better ascertained during formal assessment processes once specific treatment proposals have been put forward.</p> <p>9. Any standing procedures or policy to prevent incidents would be identified once specific proposals have been put forward for a precinct and cannot be ascertained at this point.</p> <p>10. Noted.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>

No.	Specific Factor	Criteria	Submissions	Response
19	Proximity to waste generating areas	Within 150km from where 80% of the waste it treats is generated.	<ol style="list-style-type: none"> This criterion is not able to be assessed since the origin of waste not stated. However, the AIP is within 150km of the Metropolitan area. (ToN, A46, A50, STAR, A94 – based on GHD report) Site is closer to waste generating areas than other exhibited sites but less than preferable when considering that most waste is generated in the Kwinana Industrial Area. (CCI) 	<p>1-2 The majority of the waste is generated in the industrial zones surrounding the metropolitan area.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
20	Land Ownership	Located on State Government owned land.		
21	Legislative Jurisdiction	Within the jurisdiction of Western Australian legislation, policies or regulations; i.e., not on Commonwealth land.	<ol style="list-style-type: none"> The site meets this criterion. (ToN, A46, A50, STAR, A94 – based on GHD report) 	<p>1. Agreed.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
22	Equity and Employment	Within a reasonable commuting distance of a centre providing adequate facilities for a skilled workforce and their families	<ol style="list-style-type: none"> The site meets this criterion. (ToN, A46, A50, STAR, A94 – based on GHD report) 	<p>1. Agreed.</p> <p><u>3C Conclusion:</u> The site meets this criterion.</p>
23	Services	Ability to provide adequate access to water, telephone and electricity.	<ol style="list-style-type: none"> Has a reasonable potable supply of water (100mm main) in the vicinity of the site. (WC) The site meets this criterion. (ToN ,A46, A50, STAR, A94 – based on GHD report) The site is well supplied with infrastructure including rail. (ACE) Site is less than preferable with regard to cost of establishing site. (CCI) Based on current electricity supply, back up generators would be required to service precinct, as there are frequent black outs. (A117) 	<p>1. Noted. 2-3 Agreed. 4-5 The criterion requires that there be the 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.</p> <p><u>3C Conclusion:</u> The site meets this criterion</p>

No.	Specific Factor	Criteria	Submissions	Response
24	Climate/ landform	Not in an area prone to frequent temperature inversions.	<ol style="list-style-type: none"> 1. GHD report advises this criterion cannot be met because the Avon Valley and particularly the area around Northam is internationally acclaimed as a venue for hot air ballooning. This activity relies on temperature inversions. Other activities that rely on temperature inversions are gliding and hand gliding. (ToN) 2. Atmospheric ground inversions are likely to occur during autumn and winter. It is unlikely that the operation of a waste treatment precinct will be of concern to agriculture if there are zero emissions from the site. (DA) 3. This criterion cannot be met. (ToN, A46, A50, STAR, A94 – based on GHD report) 4. Northam “renowned” for temperature inversions. (STAR, A85) 5. Precinct poses threat to viability of hot air ballooning industry. (A85, A91) 	<ol style="list-style-type: none"> 1. Factors that predispose a site to temperature inversions include hilly terrain, clear skies, large diurnal temperature variations and rapid ground cooling at night. The 3C agrees with submissions indicating that there are temperature inversions in the region. However, as this is a desirable criterion, the site cannot be removed from consideration on the basis of this criterion alone. 2. Agreed. 3-4 The 3C agrees with submissions indicating that there are regular temperature inversions. However, as this is a desirable criterion, the site cannot be removed from consideration on the basis of this criterion alone. 5 The technology suitability criteria require that emissions are eliminated or minimised to ensure the protection of the community and the environment. With conformance with these criteria, there is no reason for the viability of hot air ballooning to be threatened. <p><u>3C Conclusion:</u> The site does not appear to meet this criterion.</p>

NON SITING CRITERIA MATTERS – AVON INDUSTRIAL PARK

Table 2: Avon Industrial Park - Socio-Economic Issues

Issue	Raised By
Northam as a clean green tourism and lifestyle destination will be destroyed.	ToN
Swan Kaolin is considering a potential \$100m investment with approx 100 jobs to be created which will be of enormous benefit to the surrounding communities.	A6
Why sacrifice many potential jobs in AIP for a dozen jobs in a Hazwaste Precinct.	STAR A85
Risk to Northam is not compensated by the number of jobs offered by precinct.	A85, A89, STAR
Public perception of a facility would be harmful to future development of the AIP.	A6, STAR, ToN, SON
EPA Report (Bulletin 645, August 1992) ignored. Bulletin requires industry to meet all environmental criteria at the AIP boundary.	STAR
Ministerial Conditions of 1992 (the Covenant”) ignored: Covenant endorses development in line with “community goals and objectives”.	STAR
There is public opposition to use of the site on the basis that prior assurances have been given by government that only industry agreed by the local community can establish in the AIP. As such the use of the site is not supported.	ACE, CSA
While Avon 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
<p>3C Response:</p> <ul style="list-style-type: none"> The 3C notes the concerns raised by stakeholders. 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. 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 scale of a treatment precinct and any companies that operate there is likely to be quite small and should have no impact on future development in the area. 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 farmhouses from possible effects and emissions. The 3C notes the pre-existing Ministerial Conditions relating to the AIP. 	

Table 3: Avon Industrial Park - Environmental Issues

Issue	Raised By
AIP is in the catchment area for the Mortlock River and other waterways that flow into the Avon and Swan Rivers - any spills will have an impact on land adjacent to the river.	A6, A82, A89, A92, A93, A96, A97, A99-102, A106-116
If there is a failure in engineering, the site will be unable to contain any contamination.	A19, STAR, A82
Great Eastern Highway (if used) passes through large areas of water supply catchment.	A6
Local wildlife corridors could be affected.	A84
In the long term the park is expected to employ 1,000 workers – concern about exposure to hazardous wastes.	A50

Issue	Raised By
Grass Valley is downwind of the Park for more than 20% of the year.	ToN, A46, A50, STAR, A94 – based on GHD report
Prevailing winds will carry chemicals into Northam if plant malfunctions or a chemical fire occurs.	A82
Prevailing winds carried odours from Binary Chemicals when operating.	A89
3C Response: <ul style="list-style-type: none"> The 3C notes these concerns. 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 to waterways are managed. Further to this a spill would only be detrimental if it escaped from the site boundary. A site should be designed to avert these risks. These criteria are also designed to remove impacts on people both working in precincts and in other adjacent industries. 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 4: Avon Industrial Park - Buffer Zone

Issue	Raised By
Messrs Fullwood, O’Driscoll, Sage, Meiklem, Gentle, Dempster and Cooke are of the opinion that if AIP is approved, the Buffer Zone (2800-3200ha) should be resumed and become responsibility of the AIP.	A92, A93
If more than 40 percent of a landowners land is resumed, that land should be replaced to allow for continuing farm viability.	A93
Mr Angus Cooke and John and Anne Cooke have provided copies of documentation relating to the absence of a Buffer Zone around the (then) Meenaar Industrial Estate.	(A93, A104)
Ministerial conditions identify the nearest residence as a sensitive receptor.	ToN, A46, A50, STAR, A94 – based on GHD report
3C Response: <ul style="list-style-type: none"> Concerns about potential impacts on adjoining land-users are noted. 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 different to “nearest sensitive receptor” and 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. 	

Table 5: Avon Industrial Park – Miscellaneous

Issue	Raised By
The concept of the park was never intended for this purpose: types of industry proposed for the park were to be based around agriculture and value adding to resources already produced in the region.	A46, STAR, A94
Opposed to precinct at the short listed site in the area.	ToN, AIPB, STAR A9, A17, , A19, A39, A46 A50, A78, A82, A84-85, A90-94, A96-104, A106-118, Ind, BR14
AIP established on pretext that community has a say in what goes into the Park.	A92, A93
The establishment of a hazardous waste treatment precinct does not meet the criteria set down by the AIP Advisory Board or the EPA Bulletin (645).	A117
Public perception of precinct would be harmful to future development of the area.	ToN
The current government body who is the industry protector has been shown to be incapable of enforcing its own regulations in the past and the people do not have any confidence in their capabilities of monitoring such a site in this area.	A39
Government assured landowners that AIP would be a “people park”.	A85
Avon Industrial Park appears to meet the essential criteria and perform well against the desirable criteria, notwithstanding the concerns raised amongst stakeholders about seismology and local agreements on the use of the Park.	CCI
AIP site is not supported on basis of public opposition.	ACE, PAN
Strong opposition from the local community to the nomination and from the AIP.	DoE
<p>3C Response:</p> <ul style="list-style-type: none"> • The 3C has noted the strong opposition from segments of the local community • The 3C understands the concerns of the Avon community on this matter. The scale of a treatment precinct and any companies that operate there is likely to be quite small and should have no impact on future development in the area. • The 3C notes the pre-existing Ministerial Conditions relating to the AIP. 	

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

Code	Received from
HC	Heritage Council
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

Code	Received from
SoN	Shire of Northam
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