Submission on SSD-65595459

Hunter Indoor Sports Centre

New lambton

DASubmissions@planning.nsw.gov.au

From Carol Russell

15 Strayleaf Crescent

Gungahlin 2912

This submission is an objection to the proposed development for the reasons discussed in the body of this document.

I declare that I have made no political contributions in the last two years and that I accept the Department's disclaimer and declaration.

I submit that this EIS has clearly failed to fulfil the demands of the SEARS in the provision of

adequate baseline data

demonstrable justifiable need

consideration of alternatives (sites)

offsetting environmental loss

a health impact assessment

and

consideration of cumulative impacts

The consequence of this is that the EIS is rendered inadequate and must either be resubmitted or rejected outright. It may have many more serious shortcomings but the allowed time to read and write submission on the EIS was insufficient. I will be in hospital for the rest of the notification period while there must be others who, through personal or business reasons, are unable to deal with this in the allocated time.

If there is an extension of time granted then I may submit further comments. The general issues I would be examining are the traffic impacts on the local and wider road networks especially at times of major use and major use of the McDonald Jones stadium coinciding with the Basketball centre.

Parking is also a major issue for locals who foresee congestion in their narrow suburban streets by patrons seeking to avoid the parking fees or who find the allotted car spaces taken. Issues of emergency services being able to access homes in the area if the streets are congested with parked vehicles is also an issue especially for fire brigade engines which require large turning circles. I believe the advice given to the proponent by Emergency Services, should be included in the EIS to check what exactly they were commenting on. A significant issue for everyone in Newcastle is flooding that might occur in the area. I have not had time to look at their flood assessment. Based on other Appendices I expect it is not as thorough as it should be. I am very concerned that this is a contaminated site and am disappointed not to have had time to read any of the attached reports so have offered only a short discussion of the issue based on the EIS volume only.

JUSTIFICATION OF THE PROPOSAL AND CONSIDERATION OF ALTERNATIVES

In spite of statements to the contrary by the developers this proposal is not in the public interest. While it might be in the interests of a small group of Basketball players and supporters it excludes the general public of all ages, backgrounds who presently have the opportunity to access Blackely and Wallarah ovals. Additionally it is a serious omission that there is absolutely no justification for this development in

a busy urban location to take up public land with no proposal as to how the developer will offset the loss of the two existing playing fields and open, green public spaces; replaced with a huge 5 storey building and concrete parking lots. Expected population growth suggests a greater need for open green spaces for community use than for basketball courts specifically.

I demand that this ElS assess the DA against the NSW Offset strategy. The SEARS documents demands this when it states the EIS must include *"Measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment."* By declining this development, much used parkland would be preserved as well as the foraging trees of the vulnerable grey headed flying foxes. Decision makers are required to determine whether the proposed development will result in serious and irreversible impact. Land which is grassy open community parkland which is developed in the described way and is not replaced by offset parkland or fields elsewhere is unarguably a very serious loss. Whereas the proposal might support health and well being outcomes for some, it fails to recognise the loss of these outcomes for the existing users of the site. This must be dealt with more adequately in the eis.

I point out to the Assessment Team in this introduction that there are a number of other very serious Secretary Requirements which have also been ignored or treated superficially. There has been no baseline data to enable an evaluation of the number of people using the present open air green spaces and those who might use the Basketball stadium in the future. An adequate study requires this, with the additional baseline data to show how the needs of Basketball in Newcastle are presently being met, that is, the number of basketball courts throughout the city and its suburbs including at schools. The consideration of alternatives should also have provided more baseline data for the way basketball is presently being served in the greater Newcastle area with a count of the number of courts being used (including schools) and the degree of utilisation Such data might support the do nothing option.

Population statistics are offered in support of the proposal but the ElS lacks the essential data about the likely composition of the predicted future population in Newcastle. Population growth among Australian citizens is declining; we are not reproducing ourselves. The ABS recently reported it as 1.5 babies per woman. If the suggested population growth comes largely from migration from SE Asia, the Middle East or the subcontinent region of India, Pakistan and Sri Lanka etc, it is more likely then, that they will not be Basketball players. The SEARS requirements demand useful baseline data and demonstrable proof and so does this submission.

I reject the market analysis that the current under participation of players of basketball is directly linked to lack of adequate facilities. Comparable examples from other LGAs, other states should be offered as proof. Why was this research not provided in the EIS? I believe that only about 3% of the population plays basketball. This EIS should have considered whether the loss of open parkland space is justified for such a small percentage of the population and measure it against the number of people to be adversely affected by its development.

Population growth creates social change. Migrant growth even greater. While open spaces will be a priority for those extra people basketball courts may not be. In my opinion additional rugby league and soccer fields would be a better proposal when considering future population growth and its composition. It is inadequate merely to quote population growth statistics without analysis of where this growth will come from. Recent government projections make it clear that it will largely be from immigration, therefore I submit, it is necessary to model the probable country of origin of these migrants who would be using the centre based on their country of origin and the participation of basketball in those countries. Logically since as a nation we are not reproducing ourselves then the use of the basketball centre will decline unless the new migrants are from basketball playing countries. Logically too other basketball facilities in Newcastle will suffer a decline in participation and be able to take up any increase in demand because of decline in facilities.

The proponent seeks to justify the development by including indigenous people and culturally diverse people among others who will utilise the facility but offers no demonstrable proof of their interest in this

sport. Required would be a reputable analysis of the number of people of those backgrounds who actually play this sport.

This EIS fails to demonstrate the justification for this development by considering alternatives in an convincing and thorough manner. The above arguments therefore make it more important to consider in detail alternative to the proposal. It is important too, because of the potential adverse impacts of traffic, noise and flooding (stormwater) risks. The need for a new complex at this site must be balanced against every risk and adverse impact.

It is unacceptable that the EIS does not name any other possible site. Without any other possible sites named for comparison, it is impossible to provide adequate consideration of comparisons with Turton street for adverse effects of traffic, parking, noise, health (dust), and flooding impacts. It should have considered a centre of this kind being located outside the inner city of Newcastle and explained why there was no suitable land available in suburban LGAs. If Port Stephens players prefer to play in the city of Newcastle because if lack of facilities there, the investigation of land in that area should have been revealed as part of the consideration of alternatives. It should also have explained more clearly why leasing land was not feasible.

The statement that *"The Newcastle Basketball catchment area (LGAs of Newcastle, Lake Macquarie and Port Stephens) require more than 20 additional courts to meet demand to 2041. Neither Lake Macquarie nor Port Stephens have adequate indoor sports facilities with most players choosing to play in Newcastle. The catchment area's participation rate in basketball is around half that of other benchmark LGAs, and short of the potential 8,000 to 9,000 members if adequate facilities were available."* has no demonstrable proof. If the Port Stephens players choose to play in Newcastle then the 5-6000 players referenced earlier must include those and suggests that BANL has bigger problems than poor facilities. It might appear that public parkland was being sacrificed for a sport that is either seriously declining or being mismanaged.

A CONTAMINATED SITE IS UNSUITABLE FOR DEVELOPMENT IN A HEAVILY POPULATED AREA.

This is a contaminated site and should not have been identified for development. It is entirely understandable why it has remained open space since the C19th. Evaluation of alternative sites was more crucial than ever. The EIS acknowledges that areas of sources of contamination of potential concern were identified and a number of chemicals of concern across the site where fill has been used (although it does not explain which areas these were.) Although these were below the adopted screening criteria and bonded in the soils this does not mean that developing the site with heavy machinery and disruption means that the site will remain safe. The CoCs included heavy metals and Polyaromatic Hydrocarbons some of which are known carcinogens. Consequently I maintain that disturbance of the site will generate dust that could be potentially harmful to human health particularly if the dust generated is fine particulate dust or if the ambient air quality with busy traffic areas nearby has a high concentration of diesel fumes so that this dust could be carried on it with a synergistic effect. The fact that it is not leaching is good but there is no guarantee that when disturbed it will not begin to leach into the very high groundwater table.

Health concerns are immediately raised. *"Exposure to impacted filling material relates to direct contact only, with no vapour or inhalation risk present at the site and minimal risk of leaching of contaminants from fill soils to surface water or groundwater. As a result, the risk of current exposure is mitigated by the grass and pavement that restricts direct contact with impacted filling material. "* Two concerns arise. First that the grass and pavement will have to be removed to build the complex as planned and that this disturbance might expose workers and nearby residents to dust inhalation, Secondly it was not discussed whether in the future vapours from these contaminates might not be released and enter the Basketball building where they will be even more dangerous.

It is also important to provide meteorological data regarding the wind directions all year to determine where this dust will fall. There were no wind roses to show for example if it might not fall onto the nearby High school. Also it should consider the size of the dust . Everybody is aware these days of the dangers

from fine and superfine particles. Even so coarse dust will fall close to the site and could be ingested by mouth.

I would argue that the fact that this is a contaminated site should rule it out for development. It is not safe to disturb it in a heavily populated area. Its condition explains why it has remained undeveloped. The EIS merely assumes that risks present at the site are minimal because of the grass and pavement that restrict direct contact with it. This seems to be contradicted by the remediation strategy *"the preferred remediation strategy for the site is the containment of impacted fill material on site. The impacted soils would be capped by a layer of clean fill material to prevent direct contact. This will be carried out during development earthworks and construction activities. This is lower cost (and has lower external amenity impacts due to not requiring large numbers of truck movements to move fill) compared to offsite disposal or onsite or offsite treatments.'* What this tells me is that costs and not regard for human health is the primary motivator. Will the soil be disturbed or will it remain covered with existing grass and pavement?

Further confusion arises in *"Ongoing management of contaminated material will be governed by the Long-Term Environmental Management Plan (LTEMP) prepared for the project. It provides a framework for ongoing environmental management of the site during future disturbance of capped impacted fill soils."* Is this referring to future development of the parkland not part of this DA or does future mean when the construction work actually begins.

"The LTEMP mitigates future exposure to impacted soils, manage potential human health or ecological concerns, and protects the safety of maintenance workers accessing the subsurface and members of the public accessing the site." It is my submission that the CEMP is more important to this evaluation than a Long term plan for future capping for maintenance workers et al when for the last 75 years or so there has been no such plan or measures implemented. What is very important is what is to happen when work commences if this DA is approved. That the CEMP has not been developed for ElS exhibition is unacceptable. So too is the very sketchy outline of mitigation measures for dust Where will the monitoring take place; how many monitors, what kind, will they measure the size of the dust and what will be the triggers for ceasing work if the risks revealed are deemed hazardous. Further it is unacceptable that the the risks to human health are acknowledged in the LTEMP while the SEARS requirement for a health study has not been complied with.

The SEARS document states *"The EIS must include a health impact assessment of local and regional impacts associated with the development and its key issues."* The Responsible Authority, the Department of Planning, must demand this be done and the EIS re-exhibited for community comment. There is no mention of cumulative impacts and effects of weather such as wind and air inversions.

A revised EIS should should be demanded to include a more detailed consideration of alternatives with a noise report which considers human health through more exhaustive monitoring and analysis of health and meteorological conditions. The SEARS also states that the risk assessments must include *"Consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed)"* A revised EIS should include this, as demanded.

Where I acknowledge that Basketball Newcastle is a NGA and has limited funds, I do not believe that this should be an excuse for a cheap and incomplete assessment study in an area where so many people are potentially exposed to adverse environmental and health impacts.

THERE WILL BE ADVERSE NOISE IMPACTS

The proponent of this DA is not serious about the potential adverse noise impacts on the local residents. Appendix U is a superficial acoustics report which the disclaimer tells me was all that the proponent requested. I hope that the Planning officers will recognise it an unreliable document. *"It is the nature of environmental assessments that all variations in environmental conditions cannot be assessed and all uncertainty concerning the conditions of the ambient environment cannot be eliminated."* The RAPT report Appx. U recognises its limitations and acknowledges that Planning and the public are only

getting a report according to the proponent's brief. I suggest that the limitations were cost driven because the statement above can be challenged as I hope this submission shows,

I base this opinion on:

one monitor only

monitoring over 6 days in February/April

failure to measure wind direction and speed across the region or to supply this data

failure to take into account the topography and meteorological conditions which affects the way noise is spread

only 9 sensitive receivers selected

no explanation of why they were chosen and why so few.

all sensitive receivers located in the one street

no real understanding demonstrated of who a sensitive receiver might be

no survey of potential affected areas for the very young, old, ill, shift workers such as doctors, nurses, emergency services workers for the way noise from the facility could adversely affect their sleeping pattern

no acknowledgement in the Appendix of the relationship between noise exposure and human health and of the specific risks associated with it

failure include more widespread and continuous monitoring in the mitigation measures; all of which were ordinary measures which an ordinary person would expect to be employed by a reputable contractor in any development

failure to acknowledge cumulative impacts with traffic noise generated by the site itself at all stages, the background traffic noise and that of the McDonald Jones stadium when its extended hours of operation are activated

failure to identify the number of and exact type of machinery used with their specific noise levels

failure to detail the exact types of amenity and intrusive noise impacts on receivers

failure to produce the Construction Noise Management Plan in this EIS for evaluation.

no commitment to ongoing noise monitoring

I object to the proponent drawing the readers' attention to Appendix R which is not a noise report and to the following false statement *"Noise monitoring was undertaken around the site, the location from which this noise monitoring was completed is indicated on Figure 23"* Figure 23 shows one monitor only. If there were other noise monitors around the site as claimed, as there should have been, why were they not shown on Figure 23. I need to know where they were placed if they existed at all.

I also argue that six days from April to March is inadequate. Not only should they have monitored ambient noise more frequently the monitoring should have occurred in all four seasons to capture different weather and wind conditions. Nor was there monitoring to take into account various weather conditions which exacerbates noise and which changes the most affected receptors especially temperature inversion. The proponent should do further analyses to confirm whether the occurrence of temperature inversions at the locality is significant. This would involve determining the percentage occurrence of moderate and strong inversions during winter, based on existing meteorological data. The duration of the inversion events must be taken into account as in some areas they can last well into the day. The frequency, duration and intensity of the occurrence of air inversions and other meteorological conditions should have been considered. I expected to see some wind roses for the affected area. If noise levels were modelled under calm conditions and neutral meteorological conditions it would be

inadequate for reliable predictions for a major project such as this one is. Appendix U did not adequately determine the significance of temperature inversions. This must be addressed.

Sound is conveyed by the wind that carries the sound with it. If the wind speed increases with height, then sound "rays" at a higher altitude will travel faster than sound "rays" close to the ground. The net result is that the "rays" bend towards the ground. Those rays which would have dispersed into the air and thus would not have been audible are bent towards the ground amplifying the sound traveling along the ground. This enhances the sound level when the wind blows from the source to the receiver.

Actual inversion strength and wind speed values based on on-site measurements must be used. Temperature inversions that occur on cold, clear nights are likely to trap noise and any pollutants in the air at ground level. If substantial pollution is present, adverse health effects are likely to occur. Assessment must be applied under weather conditions characteristic of the area, it is important at the start of a noise assessment to assess the potential for such meteorological effects occurring, thus enabling better prediction of potential noise impacts.

This would involve determining the percentage occurrence of moderate and strong inversions during winter, based on existing meteorological data. The duration of the inversion events must be taken into account as in some areas they can last well into the day. Additionally, trends show that there is a substantial increase in the frequency and duration of temperature inversions (10%) for SE Australia and a decrease in the intensity of the temperature inversion for southeast Australia.

The degree to which the sound is enhanced or attenuated is affected by the vertical temperature gradient. The greater the gradient, the greater the effect. Sound travels faster in warmer air. If the temperature increases with height (ie. in a temperature inversion), then sound "rays" at a higher altitude will travel faster than sound "rays" close to the ground. The result is that the "rays" bend towards the ground. With wind conditions those rays which would have dispersed into the air and thus would not have been audible are bent towards the ground and amplify the sound traveling along the ground. This enhances the sound level when there is a temperature inversion. However, unlike the wind itself, the enhancement occurs in all directions no matter where the receiver is located relative to the source. If the temperature decreases with height (ie. in a temperature lapse), the sound "rays" are convected upwards and hence the sound is attenuated. These meteorological effects typically increase noise levels by 5 to 10 dB, and have been known to increase noise levels by as much as 20 dB in extreme conditions, thereby causing a significant noise impact on residents living in areas prone to these effects.

A Site visit should have been undertaken during a night-time period, with suitable meteorological conditions, to undertake attended background noise monitoring. As submitted monitoring for background noise should have been taken all hours of the day and night, all days of the week, in all seasons and in all weather and meteorological conditions. The night-time period for determining inversion frequency is from 1 hour before sunset to 1 hour after sunrise (taken to be 6 pm to 7 am), which is the time period during which inversions are most likely, though inversions in the Hunter are known to last till afternoon. Winter is the appropriate season in which to determine whether temperature inversions are significant, as it represents the season with the highest duration and frequency of occurrence of temperature inversions. Why wasn't monitoring done in winter?

The proponent has drawn conclusions about the predicted noise and the effectiveness of mitigation measures without providing the detailed information necessary to make those conclusions. How could he expect this to be acceptable to either the Assessment team or the wider population which expects better. In fact the mitigation measures do not include actual measures to be used but merely a commitment to finding those ways. Words like "focus on" ' ways to identify" are words for the future. The community surrounding this site deserves more than this. There is no commitment to or discussion of remediation action if noise trigger levels are exceeded. What will those trigger levels be and who will make the stop work decision. All of this is a CNMP should have been available to the public before consent is granted.

Noise during construction is difficult to ameliorate and can be a nuisance to nearby workers, visitors and residents. Equipment which generate lower noise emissions should be selected and assessed for noise

impact during the construction stage. The noise and vibration impacts should be monitored on a real time basis during peak construction when piling, excavation and compaction works would be undertaken.

In addition the EIS fails to quantify the sources and type of noise which impacts the site. The equipment list is not guaranteed to be that used on the site; nor were the exact number of the pieces of equipment specified. Appendix U should have considered in more detail the difference between intrusive and annoying noise and considered the impacts of the various types of sound on receptors. For example loud bangs or thuds; screeching noise or squealing; continuous hums or buzz and beeps and high pitched squeals or hissing can affect the amenity of the area particularly for nearby residents. It should have considered the difference between intrusive and annoying noise and considered the impacts of the various types of sound on receptors. For example loud bangs or thuds; screeching noise or squealing; continuous hums or buzz and beeps and high pitched squeals or hissing can affect the amenity of the area for nearby residents.

It is unsatisfactory that A Construction Noise Management Plan (CNMP) will be prepared prior to the commencement of works. This plan should have been included for assessment as part of the EIS exhibition. This plan proposes among others to include:

1.identification of sensitive receivers potentially impacted and nomination of noise and vibration management objectives for each. How many sensitive receivers will be identified? It would appear only 9. That is ridiculous. No definition of sensitive receiver has been applied and how they would be identified. How can you possibly do a proper EIS assessment without these having been described fully beforehand

2. Identification of the proposed significant construction activities, plant and processes and times of site operation. Surely this is known and if not then it should have been before the lodgement of the EIS.

3 Predict and assess noise and vibration impacts and recommend appropriate controls. What is the point of predictions being made after the consent has been granted.

4.Nominate compliant handling procedures and responses, community liaison principles and site management practices to be adopted. What is the point of predictions being made after the consent has been granted.

It should go without saying that Best Practice Guidelines will be adopted. But it appears that the proponent intends to apply them to intrusive noise only. The identification of possible receivers and the adverse impact on their amenity has had unsatisfactory attention. Without details of the best Practice measures to mitigate construction noise it is impossible to verify the "low impact" claim.

I also object to the statements that "*No machine work will occur outside approved working hours unless approval has been given by the consent authority. "* and *"Use Noise Management Levels (NML's) to identify demolition, excavation and construction noise sources or scenarios that require engineering controls or administrative management; "* This implies that they expect to be applying for consent for noise exceedences on some occasions after the DA has been granted. What is the point of assessing noise impacts if the assessment later can be ignored. Surely the EIS has claimed that the noise sources eg types of machinery are not yet known so it is a baseless claim lacking in foundation.

" Focus on applying all feasible and reasonable work practices to minimize construction noise impacts;" Feasible and reasonable do not always coincide. What might be feasible to a construction engineer might be completely intolerable to a shift worker nearby trying to sleep. "*Construction/ demolition work is to be undertaken within approved standard hours where reasonably practicable. Approval is required for works undertaken outside standard hours;"* This implies again that there will be noise beyond those approved hours. Only a guarantee of full compliance with the Guidelines is acceptable

"The use of noise reduction techniques including, but not limited to, barriers, enclosures and silencers shall be employed to ensure compliance with construction and demolition noise criteria." Noise

abatement measures are fairly well known; it is therefore strange that they cannot be detailed for this EIS in the manner they are specifically to be applied e.g.height, the materials used and the location placed. A quality EIS would include those specific measures with a description of them, providing performance details and placement around the site. The noise study for this proposal must be rejected as superficial and inadequate. Details of far too many material requirements are missing.

S. 6.17. HEALTH IMPACT ASSESSMENT

What follows this heading is an insult to the people of Newlambton. It is useless and irrelevant referencing physical activity, passive recreational activities, opportunity for social engagement and glazing etc. Note for example the findings; *"The site can be made suitable to accommodate the proposed development through implementation of recommendations of the DSI (Appendix U), RAP (Appendix W) and LTEMP (Appendix X). Adoption of these measures will reduce the risk of harm of site development and occupation to human health. "* It is amazing that they 'found' this when there had actually been no actual HRA (Health Risk Assessment).

I have read many HRAs as I am sure the Assessment Team has also, and expected to find the identification of the following

the number of sensitive receptors including all schools, day care centres and preschools, hospitals, nursing homes, hospitals, retirement villages, residents, construction workers and permanent employees

the classification of sensitive receptors by age - young and old, health conditions especially respiratory illnesses etc

identification of hazards in this case of noise and of the chemicals of concern

their toxicity

Exposure pathways inhalation, digestion ingestion

the health risks associated with exposure especially for the identified sensitive receptors.

specifically the risks associated with noise pollution.

baseline data about wind, topography and meteorological conditions as they can affect the dissipation or exposure to the health hazards.

The above point should specifically include air inversion data for its frequency (number of days a year) and duration (evening only or the number of hours per day), The BoM some years back reported that the incidences of air inversions in SE Australia was increasing and would continue to increase.

There was no ambient Air Quality data provided . Relevant to this DA are background measures of PAHs, benzene, and fine particulate matter.

PAHs at the site are harmful to human health with known carcinogenic effects especially benzene and benzopyrene. Benzene is carcinogenic to humans with no safe level of exposure. The cumulative cancer risk of all chemicals at the site must be assessed taking into account the ambient air quality. The baseline air quality measurements must include benzes specifically and fine particulate matter which can carry the PAHs straight into the bottom of the people's lungs and directly into the bloodstream. Cumulative health risk for all chemicals at a site plus exposure to chemical particulates in the air must be considered.

The overall potential adverse health effects posed by simultaneous exposure to a number of chemicals from all nearby traffic and other sources must be assessed. That is why it was essential to survey the areas of concern for sensitive receptors, the young the aged, the infirm and sickly, particularly people suffering already from respiratory disease and cancers. The failure to do this in my opinion is non compliant with the SEARS and renders the EIS invalid.

In Appendix U no assessment was done on the relationship between adverse noise impacts and human health. This should have been addressed in the ElS either in a proper NIA or Health Impact Assessment. Potential sleep disturbance at both night and during the daytime hours must be evaluated. Daytime noise has the potential to adversely impact on babies and shift workers such as nurses, doctors and police. Outdoor sound can be the most intrusive. During the construction phase truck activities (braking, horns and door slamming, reversing alarms). Trucks queuing to enter the site will contribute to outdoor noise experienced by locals if they rev their engines. Idling and revving of engines of the cars seeking to enter the site during operation should also have been considered.

The relationship between noise and sleep deprivation, tinnitus, and effects on mental health and cognitive impairment in children is well known. Excessive noise levels can affect hearing loss. Recent research indicates that cumulative noise exposure was a significant predictor of diastolic blood pressure in high-noise conditions. Noise impacts will have a cumulative impact with general road traffic and the increased traffic from McDonald Jones stadium especially during concerts when according to Appx. U it could reach 110 dBA. This has not been adequately addressed.

As far as mitigation measures go, it is unsatisfactory that the proponent has not given a commitment to real time monitoring of the development through the construction stages for noise and dust and during operation for cumulative noise impacts. This should also be addressed with monitors at location sites chosen by a qualified acoustics engineer and results supervised by the NSW EPA.

CUMULATIVE IMPACT ASSESSMENT FOR THE DEVELOPMENT

Identified impacts and requirements to be addressed in the EIS were *"potential cumulative impacts due to other developments in the vicinity"*. In particular I submit there must be an assessment of air pollutants or of the cumulative impacts of the proposal on air quality in relation to toxic diesel emissions from heavy vehicles and general traffic. The cumulative impact for its adverse health impacts of all source diesel emissions, ambient particulate air quality and vapour emissions from the hydrocarbon pollution in the soil should have been assessed. This is a serious omission.

The National Environment Protection (Diesel Vehicle Emissions) Measure 2001 identifies that "*Diesel vehicles make a disproportionately high contribution to NOx and particle air pollution from the transport sector. The diesel vehicle proportion of the transport fleet is increasing and this trend is expected to continue. Emissions from diesel vehicles have the potential to cause adverse health effects and detract from urban amenity*." (National Environment Protection (Diesel Vehicle Emissions) Measure 2001).Whether these emissions are a constituent of the air quality in the proposed area must be assessed in the EIS.

The SEARS requirements state that the EIS must include *"Consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed);"* This has not been done. Instead we are offered a reference Table 6, to approved and likely future development at MacDonald Jones Stadium, an issue of real concern to residents. However the ElS author thinks is is satisfactory merely to mention it. No analysis of the impacts has been provided. Consideration of the potential adverse impact of two large sporting venues close by has been pushed to the future *"The cumulative impacts arising from the operation of the HISC and major events at McDonald Jones Stadium will be managed operationally and in consultation between BANL and Venues NSW as detailed as* ***Section 3.2.4*** *of this EIS. "*

This is deliberately misleading as a reading of s.3.2.4 reveals a discussion of the operation of the facility, staffing, hours and related matters. It is not a cumulative impact study, indeed it does not use the word 'cumulative.' Appendix OO is referenced but it also does not mention 'cumulative'. It would appear that either the proponent does not understand the meaning of cumulative other than the simplest definition of 'add on" or that he does and is unwilling to pay for the comprehensive study that would be entailed. In this DA cumulative impacts should have been analysed for noise, traffic, air quality (dust) and health impacts.

The Assessment team cannot accept the claims that cumulative impacts will be managed operationally when there has been absolutely no discussion of what those impacts will be, how they will be identified and how measured, for the residents living in the vicinity of the HISC. I am sure that the noise from McDonald Jones stadium,15 times a year, with the extra traffic noise from the basketball venue will for many be intolerable no matter what the guidelines say is acceptable. It is my submission that this development is neither socially acceptable on this site nor likely to meet goals for noise and traffic emissions when considered cumulatively. By the scant identification of sensitive receptors to noise and dust, it is more and more apparent as one reads this EIS that the people living around this development do not matter.

Multiple sub threshold exposures to several chemicals could result in an adverse health effect assuming only that the target organs were the same. But even if they were not there would be some form of cumulative effect if say the kidneys and liver and/or lungs were impacted at the same time. A more detailed and critical evaluation of the hazards should be required or appropriate risk management measures at the site may need to be implemented.

The results of the cumulative impact assessment must demonstrate that noise, air quality, health and traffic impacts, key issues of concern for community members, would be within acceptable and tolerable levels as a result of the introduction of another major sporting complex into their suburbs.