

29<sup>th</sup> September 2010

Project No: 07142

Manager City Planning  
Wollongong City Council  
Locked Bag 8821  
South Coast Mail Centre NSW 2521

Attention: Mrs Rachel Harrison

Dear Rachel,

**RE: DA2009/1636 - PROPOSED RESOURCE RECOVERY CENTRE AT  
Part LOT 2 DP 217590 JARVIE ROAD, CRINGILA  
WOLLONGONG LOCAL GOVERNMENT AREA**

I refer to your letter of 14 September 2010 requesting additional information for Council to complete its assessment of the above Development Application. This additional information request is in the form of a list of questions from the attendees of the Community Briefing held on the 10 August 2010. The following is our response to each of the questions raised by the community. Also accompanying this letter is a response from the air consultants PAE Holmes and noise consultants Day Design.

**Question 1: How will truck movements be phased? The application documents state that one truck every 15 minutes will access the site. Will there be periods of much more intense movement? Who will monitor the number of movements?**

**Response:**

This issue has already been addressed in Section 6.10 and Appendix K Traffic Impact Assessment (TIA) of the original Environmental Impact Statement (EIS) dated December 2009 accompanying the Development Application (DA) and again in the Supplementary Report dated April 2010.

As stated in those documents and clarified with the current operators of the subject land (Wollongong Council) and the proponent, truck movements to and from the subject land are cyclic depending on what demolition and construction projects are occurring at any given time in the Wollongong area. At some periods there may be several truck movements a day for several days and then nothing for a few days. The TIA dated 9 September 2009 highlights that the proposal is likely to generate a maximum of eight trucks entering and eight trucks leaving the site during a typical peak hour. This represents a truck movement every 7.5 minutes. Truck movements will cease after 3.30/4.00pm. The proposed development does not increase the number of truck movements from the current situation on the site but averages them out over the work day.





The truck movements will be recorded at the weigh bridge at the entrance to the site and upon leaving the site. The trucks will also be recorded and monitored as part of the QA/QC program in the Operational Environmental Management Plan (OEMP) implemented on the site to comply with the license requirements from the Department of Environment, Climate Change and Water (DECCW).

**Question 2: Will there also be car movements in excess of the truck movements from staff etc?**

**Response:**

Yes there will be car movements generated by the employees working on the site. They will be minimal, approximately 5 per day around 6.45am and 5.15pm Monday to Friday and 6.45am and 1.15pm on Saturdays. All orders of reprocessed materials are carried out by phone and therefore no customers visit the site.

**Question 3: Background noise levels used for acoustic testing are likely to be high because of existing industrial uses in the locality. To use these will increase the acceptable sound threshold resulting in incremental increases in sound level in the area (eg: If another use was proposed and used the current proposal as its background noise base). Are there any studies on overall noise impacts from all uses in the area?**

**Response:**

We are not aware of any studies on the overall noise impacts from all uses in the area.

However, as explained in Section 4.3 of the Environmental Noise Impact Report 3295-3, dated 19 April 2010, if successive developments occur near a residential area, each one allowing a criterion of background noise level plus 5 dBA, the ambient noise level will gradually creep higher. Compliance with the Noise Amenity levels in Table 2.1 of the Industrial Noise Policy will limit the ambient noise creep. The noise emission from the proposed development was assessed against this criteria.

**Question 4: Has the acoustic report taken into account the grade of the access road and impact on noise of trucks?**

**Response:**

The noise emission from a truck travelling at low speed, which we understand would be the case for a truck travelling on the proposed access road, is dominated by the truck engine, cooling fan and the exhaust. These have been assessed in the Report 3295-3.

**Question 5: Does the acoustic report consider the noise from “reversing horns”?**

**Response:**

The noise emission from trucks was assessed based on the measured levels of noise which included reversing alarms fitted to the trucks and loaders and tail gates banging during unloading.



**Question 6: How will the wall around the crusher limit noise?****Response:**

The sound barrier wall around the crusher will reduce the noise emission at the nearest residences located to the South and South-East of the development site by approximately 20dB.

**Question 7: How can avoidance of health issues, particularly respiratory health, be avoided?****Response:**

The Air Quality Impact Assessment by PAE Holmes dated 15 April 2010 in the Supplementary Report to Council states that the proposal will comply with the DECCW air quality assessment criteria and it is unlikely that there would be any adverse health issues arising from the proposed operations. In addition to the project meeting all the assessment criteria a suite of environmental management procedures will be implemented on the site to ensure there will be no dust issues from the processing of materials on the site. These will include:

- The mobile crusher has a full dust suppression system installed as a factory fitted requirement.
- Additional water sprays will be in operation when the crusher is in operation.
- The road areas will be kept damp or sprayed with a dust suppressant at all times.
- All stockpiles will be kept damp to stop dust generation.
- Runoff from the stockpiles and processing areas will be collected in the catchment pond for reuse through the water sprays on the site.
- All material storage areas will be appropriately bunded to reduce potential dust generation from wind erosion.

In terms of potential health problems from the potential presence of asbestos on the site, there are Work Cover requirements and Wollongong City Council requirements that all structures to be demolished must be decontaminated first before removing the material to the Resource Recovery Centre (RRC). In addition, the RRC will not be licensed from the DECCW to handle asbestos or other contaminated materials.

Finally, the site will be secured with a fence, locked gate and security system to further control all activities on the site. (This does not occur at present). Any potential impacts on health from individuals entering the site, climbing over materials and disturbing the processing area will be a direct result of trespassing on the site.

Additional advice below from PAE Holmes, as per attached letter dated 29<sup>th</sup> September 2010.

Air quality is known to be a factor that can have a measurable influence on health if air pollution levels are too high. Air quality assessment criteria and standards are designed to keep these influences to acceptable levels, that is at levels where there are minimal effects. The predicted results comply with DECCW air quality assessment criteria and therefore it is unlikely that there would be any adverse health issues arising from the proposed operations.



**Question 8: How can it be guaranteed that asbestos won't be present in waste?****Response:**

As stated in Question 7 there are a myriad of requirements from Work Cover, Wollongong City Council and the DECCW to ensure that all structures to be demolished on a construction site must be decontaminated first (eg: all asbestos must be removed before any dismantling or demolition takes place) before being transported to the RRC. A second line of defence is that all incoming materials will be inspected on arrival at the RRC gatehouse before being allowed to proceed onto the site. If contamination is sighted the loads will be turned away and records kept of the truck, operator and origin of the material etc. If by a slim chance a small piece of contaminated material is not detected at the gatehouse and enters the site it will be detected at the tipping pad, and then it will be reloaded on the waiting truck it came in and removed from the site.

Finally, to reiterate the RRC will not be licensed by the DECCW to accept or handle contaminated materials and the OEMP will ensure that this does not occur as it would jeopardise the continued operation of the facility.

**Question 9: How will asbestos currently on the site be removed safely?****Response:**

At the community briefing it was raised by a Mr Steven Jones from the community that asbestos was present on the site. An inspection was carried out by Council (the current operator) and the proponent for the RRC and it was found that a piece of fibro bonded asbestos in a steel pipe had been placed on the site. This was removed from the site in accordance with the Work Cover approved methods for handling contaminated materials. There is no asbestos currently on the site.

It should be noted that once the RRC is operating and there is a permanent presence on the site with all the associated QA/QC procedures and site security measures, outlined in Section 4.7 of the original EIS and DA and Section 9.0 of the Supplementary Report, the opportunities for unauthorised or illegal dumping of materials on the site will be substantially reduced, hopefully removed.

**Question 10: Will the proposed crusher affect gas operations at BOC gases?****Response:**

There will be no affect on the operations at the BOC Gases plant from the operation of the mobile crusher in the quarry site. The location of the mobile crusher will not cause vibration problems beyond the walls of the quarry site and impact on gas lines at BOC Gases. In addition, the Air Quality Assessment showed no exceedences of the DECCW air criteria predicted at this location so it is considered there will be no dust particle impacts from the operation of the mobile crusher that may get into gas lines at the BOC Gases plant and potentially cause problems.

Additional advice below from Day Design, as per attached letter dated 28<sup>th</sup> September 2010.

The predicted  $L_{eq}$  level of noise at the BOC site is approximately 45 dBA. This level is well within the noise Amenity criterion of 70 dBA in Table 2.1 of the Industrial Noise Policy for industrial premises and is therefore acceptable.



Due to the distance between the proposed site and the BOC site, the vibration from the proposed activities is unlikely to exceed the criteria in Table 5.2 of the Report 3295-3 and in our opinion the vibration levels will be acceptable.

Additional advice below from PAE Holmes, as per attached letter dated 29<sup>th</sup> September 2010.

No exceedences of DECCW air criteria were predicted at this location. Therefore it is unlikely the operation would have any affect.

**Question 11: How will complaints be dealt with ie: will there be a formal mechanism?**

**Response:**

The OEMP for the site will include a community consultation protocol for the recording, handling and monitoring of complaints. The Site Manager will be the main contact person with regard to complaints and follow up to complaints. All complaints will be logged in a day diary of the site, the appropriate response implemented and recorded and any follow action implemented and recorded on the site. The objective will be to action all complaints within a 24 to 48 hour period.

**Question 12: Is the access road structurally capable of accommodating heavy vehicles?**

**Response:**

The access road was constructed to be a heavy vehicle haulage road for the latite quarry. It has been used by heavy vehicles for the past 30 years. Apart for some minor repairs of a few potholes etc it is still structurally sound for that use.

**Question 13: How many local jobs will be created?**

**Response:**

The RRC will generate up to 10 local jobs on the site after the initial start up period. The project will have a flow on affect in the industry by generating and maintaining employment for truck drivers, plant operators, fuel operators, labourers, administration at head office and sub contractors and machine repairers.

**Question 14: Where will waste materials be coming from? Where are materials pre-sorted?**

**Response:**

As stated in the EIS all waste materials will be coming from the Wollongong area. All materials are pre-sorted on the site of origin and will not be accepted on the RRC site if this has not occurred at the site of origin. This is standard practice at other resource recovery centres around Australia.

**Question 15: How will dust be contained whilst crushing occurs? If it is to be done by water, where will water run to and how will it be treated to avoid environmental harm?**

**Response:**

As stated in Section 6.4 of the EIS and in Section 3.0 and Appendix B of the Supplementary Report dated April 2010 the mobile crusher will be partially enclosed to reduce dust emissions and it has its own built in water spray system for dust suppression. In addition,



during times of operation additional water sprays will be used from the water tanker to ensure there are no dust issues when the crusher is in operation.

Water is used to increase the moisture content of the surface of the raw materials in order to minimise dust particle lift during the crushing operations. The amount of water used is relatively small, and the moisture content of the materials would be kept below the saturation level, meaning there would be negligible runoff water.

However, any runoff from the dust suppression system will be directed back to the water collection ponds on the site and pumped to a water tank on the site to be reused for further dust suppression. The water held in the water quality ponds will be treated by a combination of gross pollutant traps and a sediment control basin prior to any discharge from the site.

However, discharge from the site will occur very infrequently, as nearly all the water will be reused in dust suppression and only in a large storm event would water be discharged from the site.

Additional advice below from PAE Holmes, as per attached letter dated 29<sup>th</sup> September 2010.

Water will be used to increase the moisture content of the surface of raw materials in order to minimise dust lift – off during crushing operations. The amount of water used is relatively small, and the moisture content of the materials would be kept below the saturation level, meaning there would be nil or negligible run – off water.

#### **Question 16: Will the facility be extended in the future?**

##### **Response:**

This development application is for a RRC with a maximum processing capacity of 70,000 tonnes per annum. It is estimated that up to 30,000 tonnes per annum of recycled materials will be capable of being processed in the first 1 to 2 years rising to the upper limit of 70,000 tonnes per annum within 5 to 10 years.

If the project is successful and there is an increasing demand in the construction and demolition industry for such a facility the RRC could be extended in the future. However, because this would be over 70,000 tonnes per annum it would require the preparation of a Major Project Application under Part 3A of the Environmental Planning and Assessment Act 1979 and the Minister for Planning would be the consent authority. It would also require a rigorous Environmental Assessment report.

#### **Question 17: Why has this site been chosen?**

##### **Response:**

The subject land has been chosen for the RRC because it is a unique site for this type of operation for the following reasons:

- The subject land has been specifically zoned to allow the RRC with development consent .
- The site is close to the industrial area of Port Kembla and operated as a hard rock quarry site for many years before being acquired by Council for a builders waste facility. For the past 10years Council has used the site to stockpile and reprocess materials from its construction and engineering activities. These uses are similar to the proposed RRC.



- Being a former quarry site the steep quarry walls provide the ideal place to operate a recycling operation as potential impacts of noise, vibration and dust emission can be effectively contained within the natural amphitheatre of the old quarry.
- The site has good access to the major road network, without impacting on residential streets etc.
- The location of the site in an old quarry results in no visual impact on the surrounding area.
- The site is centrally located in the Wollongong area to provide a service to the construction and demolition industry both north and south of the City.
- Currently the site is unsecured and has no permanent workforce present and illegal dumping of materials is causing a problem for council and local residents. The establishment of the RRC on the site would secure the site by establishing a permanent presence on the site and provide a well managed and environmentally controlled facility on the site.

**Question 18: How will impacts on soccer spectators be mitigated in terms of noise and dust?**

**Response:**

Most soccer games occur on Saturdays and Sundays. Training normally occurs after 4.00pm on weekdays. There will be no impacts on soccer spectators as very little activity will occur on the RRC site on Saturdays mornings or after 4.00pm on weekdays. No activity occurs on the RRC site on Saturday afternoons or Sundays or Public Holidays.

The RRC is accessed from Five Islands Road and not Merret Avenue. So there will be no conflict with cars and trucks. Also, the noise generated by the trucks using the access road is negligible and no noisier than the general industrial traffic using Five Islands Road.

The crusher will not operate on Saturday mornings so potential issues of noise and dust from the crusher will not be an issue.

The Noise Assessment Report undertaken by Day Design shows that the truck movements and excavators and frontend loaders will not generate noise problems off the site and the quarry walls will provide additional natural attenuation benefits.

All roadways, stockpile areas and processing areas will be water sprayed to suppress potential dust emissions. Together with the distance from the soccer field and the natural attenuation of the quarry walls it is unlikely that there would be impacts from dust particles on the players or spectators at the soccer field.

Additional Advice below from Day Design, also see attached letter dated 28<sup>th</sup> September 2010.

The predicted  $L_{eq}$  level of noise at the spectator stand of the soccer field located approximately 330 metres to the east of the development site is 48 dBA in Table 2.1 of the Industrial Noise Policy for active recreation areas and is therefore acceptable.

Additional advice below from PAE Holmes, as per attached letter dated 29<sup>th</sup> September 2010.

Predicted results comply with DECCW air quality criteria at the soccer fields. Therefore it is unlikely there would be adverse impacts on soccer spectators due to the proposed operation.

**Question 19: Have the potential economic impacts on the community been considered?**

**Response:**

The economic impacts of the proposed RRC are positive ones. The RRC will provide a range of economic benefits to the construction and landscaping industry and the Illawarra Region. In terms of employment, the operation of the RRC will create 6 to 10 permanent jobs and have flow on effects in the development industry.

The project will provide usable and needed waste disposal options to the demolition and construction industry in the area and will result in cost savings to the industry which will be passed on to the customer. The project will also assist in extending the life of the existing waste facilities (ie: Whytes Gully) by reducing the amount of materials going to landfill and thus reducing the burden on the community in funding new landfill sites.

I hope that this addresses all the information that Council requires to formulate the development assessment report to be considered by the Joint Regional Planning Panel and to finalise the development application. If however, Council identifies other areas of concern we would be happy to attend a meeting to resolve any outstanding issues with regard the proposal.

If you wish to discuss this matter further please contact me on 02 4227 4233 or 0418 616 443 or email [wendy@siteplus.com.au](mailto:wendy@siteplus.com.au).

Yours faithfully



Wendy Todd  
Senior Planner  
Site Plus Pty Ltd





29 September 2010

Ms Wendy Todd  
Site Plus Pty Ltd  
PO Box 5104  
WOLLONGONG NSW 2500

Re: Resource Recovery Centre: Jarvie Road , Cringila

Dear Wendy,

Following are responses to air quality issues raised in Council letter following the public meeting held by the JRPP on the Project at Cringila on 10 August 2010.

*Question 7: How can avoidance of health issues, particularly respiratory health be avoided?*

Response: Air quality is known to be a factor that can have a measurable influence on health if air pollution levels are too high. Air quality assessment criteria and standards are designed to keep these influences to acceptable levels, that is at levels where there are minimal effects. The predicted results comply with DECCW air quality assessment criteria and therefore it is unlikely that there would be any adverse health issues arising from the proposed operations.

*Question 10: Will the proposed crusher affect gas operations at BOC gases?*

Response: No exceedences of DECCW air criteria were predicted at this location. Therefore it is unlikely the operation would have any affect.

*Question 15: How will dust be contained whilst crushing occurs? If it is to be done by water, where will water run to and how will it be treated to avoid environmental harm?*

Response: Water will be used to increase the moisture content of the surface of raw materials in order to minimise dust lift - off during crushing operations. The amount of water used is relatively small, and the moisture content of the materials would be kept below the saturation level, meaning there would be nil or negligible run - off water.

*Question 18: How will impacts on soccer spectators be mitigated in terms of noise and dust?*

Response: Predicted results comply with DECCW air quality criteria at the soccer fields. Therefore it is unlikely there would be adverse impacts on soccer spectators due to the proposed operation.

Should you have any further questions please do not hesitate to contact us.

Yours faithfully,

Aleks Todoroski  
Sydney Manager - Air

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Site Plus Pty Ltd  
PO Box 5104  
Wollongong NSW 2520

Refer: R \ 3295-L3.Doc

Attention: Ms Wendy Todd  
Telephone: 02 4227 7033 (2 sheets)

28 September, 2010

Dear Madam,

## PROPOSED RESOURCE RECOVERY CENTRE

### ENVIRONMENTAL NOISE IMPACT - ADDITIONAL INFORMATION

We provide the following additional information as requested by Wollongong City Council in their letter dated 14 September 2010 for the questions related to the environmental noise impact.

#### Question 3: Background noise levels

We are not aware of any studies on the overall noise impacts from all uses in the area.

However, as explained in Section 4.3 of the Environmental Noise Impact Report 3295-3, dated 19 April 2010, if successive developments occur near a residential area, each one allowing a criterion of background noise level plus 5 dBA, the ambient noise level will gradually creep higher. Compliance with the Noise Amenity levels in Table 2.1 of the Industrial Noise Policy will limit the ambient noise creep. The noise emission from the proposed development was assessed against this criteria.

#### Question 4: Grade of access road and impact on noise of trucks

The noise emission from a truck travelling at low speed, which we understand would be the case for a truck travelling on the proposed access road, is dominated by the truck engine, cooling fan and the exhaust. These have been assessed in the Report 3295-3.

#### Question 5: Reversing horns

The noise emission from trucks was assessed based on the measured levels of noise which included reversing alarms fitted to the trucks and loaders and tail gates banging during unloading.



**Question 6: Wall around the crusher**

The sound barrier wall around the crusher will reduce the noise emission at the nearest residences located to the South and South-East of the development site by approximately 20 dB.

**Question 10: Crusher affecting gas operations at BOC gases**

The predicted  $L_{eq}$  level of noise at the BOC site is approximately 45 dBA. This level is well within the noise Amenity criterion of 70 dBA in Table 2.1 of the Industrial Noise Policy for industrial premises and is therefore acceptable.

Due to the distance between the proposed site and the BOC site, the vibration from the proposed activities is unlikely to exceed the criteria in Table 5.2 of the Report 3295-3 and in our opinion the vibration levels will be acceptable.

**Question 18: Impact on soccer spectators**

The predicted  $L_{eq}$  level of noise at the spectator stand of the soccer field located approximately 330 metres to the east of the development site is 48 dBA. This level is well within the noise Amenity criterion of 55 dBA in Table 2.1 of the Industrial Noise Policy for active recreation areas and is therefore acceptable.



**Danny Kastak**, BE (Aero), MEngSc., MIEAust., MAAS

Senior Acoustical Engineer

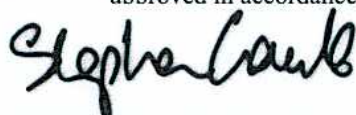
for and on behalf of Day Design Pty Ltd.

**AAAC MEMBERSHIP**

Day Design Pty Ltd is a member company of the Association of Australian Acoustical Consultants, and the work herein reported has been performed in accordance with the terms of membership.



The undersigned hereby certifies that this Report has been checked and approved in accordance with our Quality Management System.



date: 28 September 2010

