Allied Mills Kingsgrove Site

REQUEST FOR MODIFICATION TO THE APPROVED PROJECT

- Final
- 14 November 2011

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Executive Summary

Goodman Fielder Limited gained development approval from the then Department of Urban Affairs and Planning on 4th October 2001 to upgrade and expand their existing Kingsgrove dry mix facility (S01/00876). The approved works included a dry food mixing plant and associated silos and storage tanks, a new car park and altered storage arrangements in the existing warehouse. In 2003, the facility was acquired by Allied Mills.

Allied Mills seeks to modify two conditions from the 2001 project approval, including removal of ongoing noise monitoring obligations and variation of internal roadways from one-way to two-way traffic, to better fit within the design of the site.

Allied Mills has assessed the potential noise and traffic impacts of these modifications to determine whether these works would be largely consistent with the nature and scale of operations considered in the Project Approval.

A noise assessment of the site and the surrounding area was conducted. The surrounding area is used for a range of light industrial purposes. The site is separated from residential receivers by the M5 East Motorway and associated noise mitigation measures. Adjacent light industrial facilities to the west and south of the site shield receivers from noise impacts. No noise complaints have been received by Allied Mills from the community in regard to operational impacts of the site. In light of the above information and to reflect the changing landuse in the vicinity of the site, ongoing noise monitoring has been deemed unnecessary.

A traffic assessment of on-site conditions and off-site impacts has been carried out in relation to one-way and two-way vehicular traffic movements. A one-way system would not provide any benefit to site operation and removes access to the heavy vehicles waiting area. The internal road at the bulk tanker bay would require significant upgrade and increased traffic in this area may increase the possibility of vehicle/pedestrian conflict due to an increase in the number of vehicles across the main pedestrian route between the car park and main work areas. In addition, the access and existing geometry of The Crescent at Gate B are not suited to higher traffic flows which could result in road operational and safety issues.

The modifications are not likely to impact on other environmental aspects. Based on this assessment, Allied Mills does not anticipate that the proposed modifications would result in any additional adverse impacts on sensitive receivers or the surrounding environment, and that the impacts would be consistent with those presented in the original Statement of Environmental Effects, prepared by Dick Benbow and Associates Pty Ltd in 2001.

1. Introduction

Allied Mills manufactures and distributes a wide range of food ingredients, in particular grain based baking supplies. The Kingsgrove site receives bulk deliveries of flour, oil and other ingredients and processes these into such products as flours for bread, pastry, cake and biscuits, pre-mixes for bread and other specialty flours and grain products.

Project approval for expansion of the Kingsgrove facilities was received in October 2001 (file no S01/00876), including construction and operational conditions. At the time, Goodman Fielder Limited operated the site, however Allied Mills acquired the site in 2003.

Allied Mills is proposing the following amendments to the conditions of approval:

1. Condition 4.24 – One-way internal road

A one-way internal road for the site was stipulated in the 2001 conditions of approval, based on the recommendations within the Traffic Impact Assessment, prepared by Rhodes Thompson Associates in 2001. However, constraints with the operation of an one-way internal road have been identified, as a one-way traffic system provides limited width of access adjacent to the bulk tanker loading/unloading area. As such Allied Mills seeks to modify this condition to allow a two way internal road for ease of traffic flow. The Traffic Assessment for this two-way internal road is provided in **Section 6.1** and **Appendix A.**

2. Condition 6.3 No operational noise monitoring

Ongoing operational noise monitoring was stipulated in the conditions of approval. However, noise monitoring is no longer considered to be necessary as the operations of the site do not produce significant noise levels, and since the conditions were prepared, surrounding amenity has changed, including the construction of the M5 motorway adjacent to the site, making the existing noise goals obsolete. The noise assessment is provided in **Section 6.2** and **Appendix B.**

1.1. Overview of project

The Kingsgrove site is located within the Hurstville City Council Local Government Area (LGA), 12 kilometres to the south of the Sydney Central Business District (CBD). The site is adjacent to the M5 East Motorway, Crescent Road, Vanessa Street and existing light industrial facilities. The site occupies an area of 24,490 m^2. The site is currently used to receive bulk grain based products and process and blend these ingredients to produce a finished product, such as flours and pre-mixes. The site produces approximately 80,000 tonnes per year of product and employs approximately 100 people.

1.2. Legislative context

In 2001, Goodman Fielder Limited received planning approval from the then NSW Department of Urban Affairs and Planning under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the upgrade of the Kingsgrove site, namely the installation of a further dry mix facility. Conditions were placed on the approval to minimise any adverse environmental effects of the development, to provide for on-going environmental management of the development and to provide for regular environmental monitoring and reporting on the future performance of the development.

The Minister's Conditions of Approval (MCoA) that are relevant to this modification are presented in **Table 1-1** below.

Table 1-1 Relevant Conditions of Approval

<table>
<tr><th>Relevant Condition</th><th>Requirements of Condition</th></tr>
<tr><td>4.24</td><td>Before the plant is commissioned, the one-way internal roadway must be commissioned.</td></tr>
<tr><td>4.5</td><td>Noise emissions from the operations at the facility must not exceed the following criteria:
Project-Specific Residential Noise Limits
<table>
<tr><th rowspan="2">Receiver</th><th colspan="3">Noise Limits (LAeq) dBA</th></tr>
<tr><th>Day (7am–6pm)</th><th>Evening (6pm–10pm)</th><th>Night (10pm–7am)</th></tr>
<tr><td>Residents to the North-West (Baranbali Street and South Tallawarra Street)</td><td>48</td><td>42</td><td>41</td></tr>
<tr><td>Resident to the North (Armitree Street)</td><td>44</td><td>42</td><td>37</td></tr>
<tr><td>Residents to the West (North Tallawarra Street)</td><td>47</td><td>44</td><td>37</td></tr>
</table></td></tr>
<tr><td>6.3</td><td>The Applicant must conduction noise monitoring during the operation phase to assess compliance with noise limits set out in Condition 4.5. The frequency of monitoring must be as follows:
(a) within 3 months of commissioning the mixing plant, and
(b) annually thereafter.</td></tr>
</table>

2. Project description

2.1. Location and context

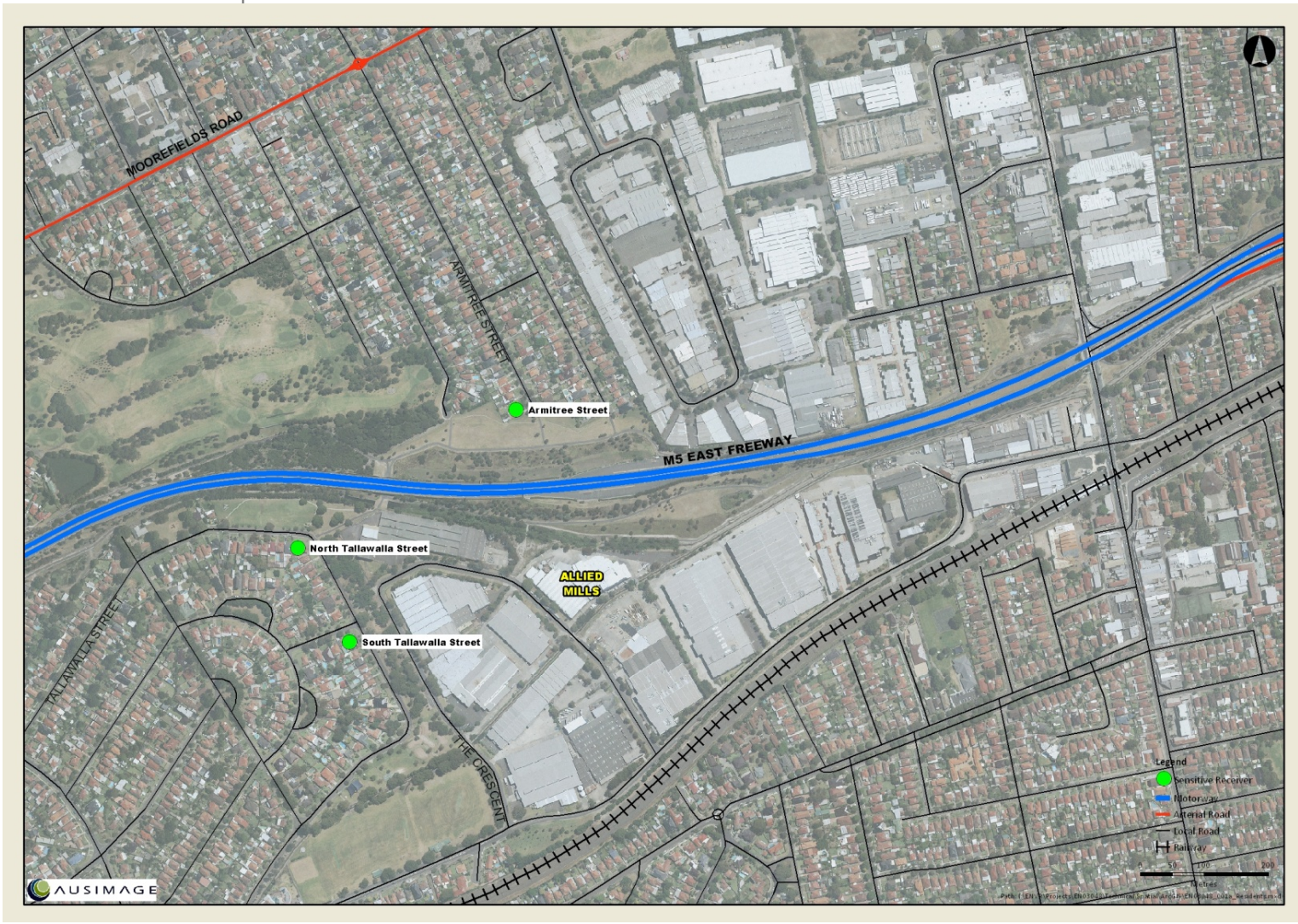
The site is located at 4 The Crescent, Kingsgrove at Lot 1, DP 200215 within the Kingsgrove industrial area The location is shown in **Figure 2-1** below. The site is approximately 24,490 m^2 and zoned Industrial General 4 under the Hurstville Local Environment Plan (LEP) 1994. The site is irregular in shape with a frontage onto The Crescent. The surrounding land is used for industrial purposes.

2.2. Surrounding uses

The adjoining lots to the north, west and south of the site contain industrial developments with similar characteristics to the Allied Mills facility. This is in accordance with the industrial zoning of the facility. The site is also bounded by the M5 East motorway to the north, a stormwater culvert to the south east and Beverly Grove Park to the north west. The M5 East Freeway separates the site from residential areas to the north. The closest sensitive receivers are 350 metres to the north and south west of the site.

2.3. Past uses

The site has been used for similar uses since the 1960s when it was operated by White Wings as a Dry Mix Plant. The site has been used for dry mixing and ancillary office and amenity areas since 1992, initially operated by Goodman Fielder and now by Allied Mills.



- **Figure 2-1 Locality and nearest sensitive receivers**

2.4. Existing conditions

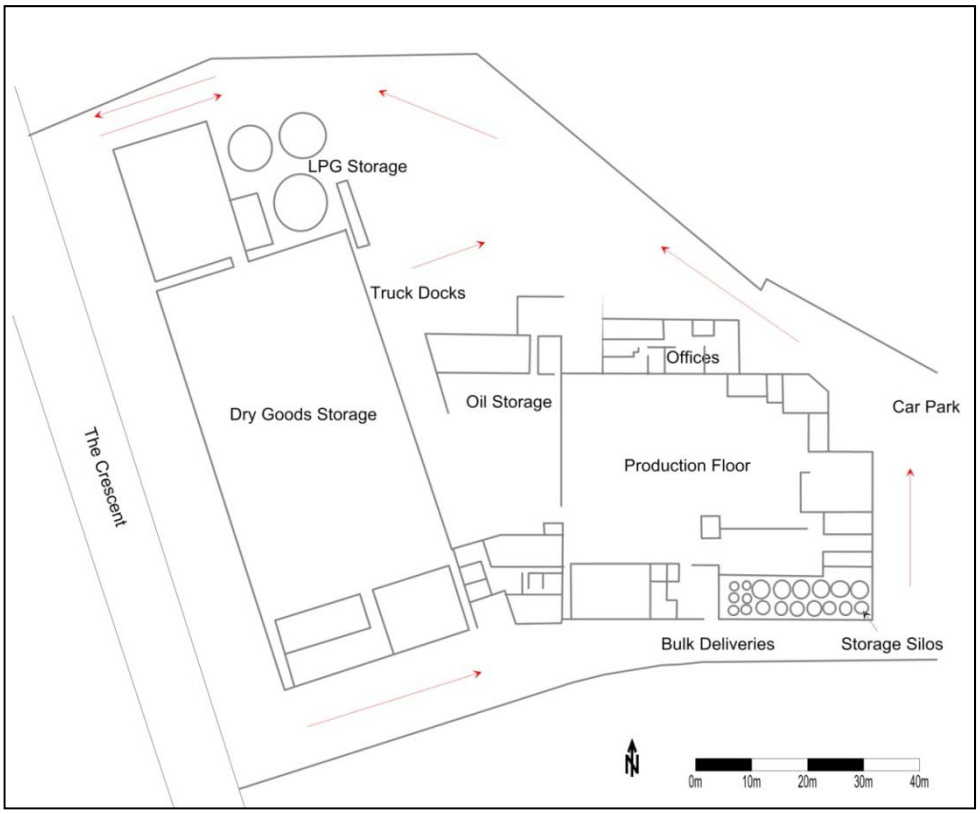
The Allied Mills site at Kingsgrove involves the preparation of food ingredients from bulk grain based product. The site is a pre-mix plant utilising ingredients from both external and internal suppliers and blending those ingredients to produce a finished product. Products produced at the site are distributed in a powdered form to be mixed and baked off-site by the retail division.

The processes at Kingsgrove involve blending mainly dry products into pre-mixes and cake mixes. Vegetable oil is used as an additive in pre-mixes for the fast food industry, and liquid carbon dioxide is used to cool products that contain vegetable oil.

The processing equipment and storage of ingredients is totally housed within existing buildings. By fully enclosing the production area, opportunities for loss of product to the external environment are significantly reduced with uncontrolled emissions of noise and dust being captured. Activities outside the buildings are limited to solid waste recycling and storage and unloading of bulk deliveries.

In 2001, project approval was received to expand the Kingsgrove operations through installation of a further dry mix facility, including extension of an existing building and internal building changes. The expansion of the site in 2001 approximately doubled the production per annum, by increasing the dry mixing capacity of the site.

The main areas of the plant are described further below, and a site map is provided in **Figure 2-2.**.



- **Figure 2-2 Allied Mills Kingsgrove site layout plan**

Bulk Deliveries

Flour products are delivered in bulk and are received adjacent to the flour silos on the southern boundary of the site. Deliveries are typically made by a dry goods tanker, after which the flour is piped directly into the flour silos using a truck mounted blower. The onsite road at this point is one way, as bulk delivery trucks are required to enter through the southern gate and exit through the northern gate.

Truck Docks/Driveway

The loading and unloading dock has space for two trucks at any one time, as well as an additional waiting bay which is located adjacent to the LPG storage tanks to the north of the site. Oil deliveries are made on the northern wall of the building, adjacent to the oil storage area. Trucks are required to enter through the northern access gate and reverse into the docks and load and unload. After loading or unloading, the trucks exit through the same northern gate.

Offices / Kitchens/Laboratory Building

The ground floor of this building houses office space and a laboratory. The second floor contains additional office areas and a test kitchen.

Production Floor

The production area is a large and open space located in the eastern section of the site. This space contains the dry mix machinery, blowers, conveyors and packing equipment as well as other machinery.

Silos

The 28 dry goods bulk silos on the site are approximately 15 metres tall and housed internally in the south-eastern areas of the main building. The area is negatively pressurised and both the silos and building contain vents for the controlled released of potential explosive energy.

Oil Storage

The oil storage area is bunded and housed internally, holding five edible oil tanks with a total capacity of approximately 38 ML.

2.5. Plant and equipment size

- 5 oil tanks
- 28 dry goods bulk silos
- Dry mix machinery
- Blowers
- Conveyors
- Packing equipment

2.6. Operating hours

The site operates seven days a week and 24 hours per day.

3. Strategic context

3.1. Commonwealth

3.1.1. Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage matters of national environmental significance (NES) including:

- World heritage areas
- Ramsar wetlands
- Listed threatened species and ecological communities
- Migratory species listed under international agreements
- Nuclear actions
- Commonwealth marine environment

The modification to the approval would not affect any matters of NES and as such, a referral to the Commonwealth Department of Environment, Water, Population and Communities is not required.

3.2. State Government

3.2.1. Environmental Planning and Assessment Act 1979

Goodman Fielder Limited received planning approval to expand operations at the Kingsgrove site from the then Department of Urban Affairs and Planning in 2001.

Modification consent can be granted by a consent authority if the conditions listed under Section 96(1A) of the *EP&A Act* are met, including if the modification is of minimal environmental impact and if the consent authority is satisfied that the development is substantially the same development as the development for which the consent was originally granted.

3.2.2. Protection of the Environment and Operations Act 1997

The *Protection of the Environment and Operations Act 1997* (POEO Act) establishes a system of environmental protection licensing for activities that are likely to have a significant impact on the environment, listed as scheduled activities under Schedule 1 of the Act. The activities undertaken at the Kingsgrove site do not fall within Schedule 1 of the POEO Act and as such an Environmental Protection Licence is not required. However, Allied Mills must manage any air, noise and water impacts and waste on site to ensure no pollution as defined under the Act occurs.

4. Project justification

4.1. Two way internal road

An one-way internal road system causes a significant constraint on site as when bulk tankers are unloading/loading in the designated area there is insufficient space for other heavy vehicles to pass the parked tankers.

During these periods, any inbound movement through Gate B would be prevented unless the access road is widened in the area adjacent to this loading station to allow other vehicles to pass. Refer to **Section 6.1** and **Appendix A** for more details.

4.2. Removal of obligation for annual noise monitoring

Since the time of project approval in 2001, the M5 motorway has been constructed between the site and residential receivers to the north. The high background noise associated with vehicles travelling on the M5 make compliance with noise levels outlined in condition 4.5 impossible. Additionally, operation of the site produces very little noise emissions, make ongoing noise monitoring of operational noise unnecessary. Refer to **Section 6.2** and **Appendix B** for more details.

4.3. Justification

Table 4-1 below outlines the consistency of the modification with Section 96 of the EP&A Act.

Table 4-1 Consistency of modification to Section 96 of the EP&A Act

Condition	Justification
a) Minimal environmental impact.	A two-way internal road would have positive impacts by improving the safety of traffic flow on site. Discontinuation of noise monitoring would have no negative environmental impacts.
b) Modification is substantially the same development as the development for which the consent was originally granted	Discontinuation of operational noise monitoring and a two-way internal road will have no impact on the approved operation of the Kingsford site.
c) Application is in accordance with the regulations or a development control plan	The modifications are consistent with Hurstville Development Control Plan 1 Section 5.3 Light Industrial Areas.
d) Submissions made concerning the modification have been considered.	N/A

4.4. Consideration of Alternatives

4.4.1. Two Way Internal Road

Given the existing site layout, the alternatives for the use of a two way internal road would include:

- Relocation of tanker unloading areas – Where this option is adopted, insufficient pressure is able to be generated by truck mounted blowers to effectively move flour into the flour silos;
- Expansion of site boundary – impractical due to adjacent storm water drain;
- Relocation of south eastern building facade to allow widening of road to facilitate truck unloading area – given the expense and loss of internal building floor space, this option is not considered reasonable or feasible.

Given that site traffic has been shown to be able to move safely through the site and local roads using the existing two way internal road shown (refer **Section 6.1**), this is Allied Mills' preferred option.

4.4.2. Removal of Obligation for Ongoing Noise Monitoring

Under a 'Do Nothing' scenario, monitoring of noise would be undertaken at three monthly intervals for the duration of site operations. The noise assessment contained in **Section 6.2** has shown that operational noise is expected to be inaudible at all nearby sensitive receiver locations, and as such this ongoing requirement would constitute an unnecessary expense.

5. Environmental assessment

5.1. Traffic

See **Appendix A** for full traffic assessment. A summary is provided below.

5.1.1. Note – Use of B Doubles

Certain very large, very heavy vehicles are classified "restricted access" vehicles and such vehicles can only travel along designated routes or in accordance with a special permit. Hurstville Council, as the local roads authority, had previously approved a restricted access vehicle route from the M5 to the Crescent but has just recently repealed this route. This means that long and heavy B-Doubles, which are restricted access vehicles, can no longer access the site.

*However, a B-Double that is only 19 metres in length and weighs less than 50 tonnes when fully loaded is **not** classified as a restricted access vehicle, and may travel on any road (subject to specific road signage that may limit permissible weights). It should be noted that B-Double type heavy vehicles used for current and future deliveries to the Allied Mills site are less than 19m in length and weigh less than 50 tonnes, and as such are not restricted access vehicles.*

Any discussion of heavy vehicles in the following pages, the attached traffic report or the original traffic statement for the project has considered the use of these lighter, unrestricted B-Double type trucks. In addition it is noted that the original traffic statement for the site contained a statement that no B-Doubles are to be used on the site; this should be read as referring only to heavy B-Doubles that are restricted access vehicles.

5.1.2. Existing environment

As part of approved upgrade works it was recommended on-site vehicles movements be restricted to one-way only, to provide for *"increased safety and efficiency for both vehicular and pedestrian movements within the site"*. Following the expansion, this system has not been adopted and anecdotal evidence suggests that its implementation will not increase safety or efficiency.

Access to the site is currently provided via a two-way all vehicle access at Gate A and a one-way entry only access at Gate B for bulk tankers. An effective Traffic Management Plan is in place to control and monitor traffic movements at the site providing designated loading, walking and parking areas.

5.1.3. Justification for modification

Whilst it is proposed to operate a two-way vehicle operation through the site, the layout is such that two-way vehicles movements will effectively only occur to the west of the car park entry point. Two-way traffic movements cannot be accommodated in all parts of the site as described below.

The primary constraint to the operation of an entirely one-way traffic system throughout the site (whereby all vehicles would enter via Gate B and exit via Gate A), is the limited width of the access adjacent to the bulk tanker loading/unloading area. This is illustrated in **Figure 5-1**. The width at this location is such that when a vehicle is loading or unloading access is effectively blocked for the duration of the loading/unloading operation. During these periods any inbound movement through Gate B would be prevented unless the access road is widened in the area adjacent to this loading station to allow other vehicles to pass.

- **5-1 Layout of loading station for bulk tankers**

Due to the proximity of the Allied Mills main building to the north and the property boundary (and the adjacent storm water drain) located to the south of the bulk tanker loading/unloading area the widening of the Gate B driveway is not considered practical.

The current Traffic Management Plan is effective in controlling and monitoring on-site traffic and pedestrian movements, and when considered in combination with the existing line markings provides a safe environment for pedestrians and vehicles alike. A change in operation to a one-way system would not increase the safety of the existing environment and would require delivery vehicles to manoeuvre in an area closer to the main pedestrian building entrance than that which is currently used.

An assessment of on-site conditions and off-site impacts has been carried out in relation one-way and two-way vehicular traffic movements, and overall the assessment concludes that the existing traffic arrangements on the site be maintained.

The introduction of a one-way system would not provide any benefit to site operation, and removes access to the heavy vehicle waiting area. The internal road at the bulk tanker bay would require significant upgrade and increased traffic in this area may increase the possibility of vehicle/pedestrian conflict resultant of an increase in the number of vehicles across the main pedestrian desire line. In addition, the access and existing geometry of The Crescent at Gate B are not suited to higher traffic flow which could result in road operational and safety issues.

5.2. Noise

See **Appendix B** for full noise assessment. A summary is provided below.

5.2.1. Existing environment

The Allied Mills site is located in a light industrial area adjacent to the M5 motorway in Kingsgrove, NSW. In excess of twenty industrial facilities are located in the vicinity of the site, in addition to numerous residential properties. Generally speaking, the nearest residential properties are located approximately 350m to the north and west of the facility.

5.2.2. Noise sensitive receivers

The locations of these nearest noise sensitive receivers have been presented in noise assessment in **Figure 2-1**. These locations are receivers that are expected to potentially be most impacted by operational noise generated by activities at the Allied Mills site.

In addition to the numerous industrial facilities located in close proximity to the Allied Mills plant, the M5 motorway is located directly to the north of the site, and the East Hills rail line is located 300m to the south and south east.

The noise environment in the vicinity of the plant is primarily influenced by noise from the M5 and East Hills rail line, in addition to traffic on local roads and occasional noise from industrial facilities located on the western side of The Crescent.

5.2.3. Noise monitoring

The results of annual noise monitoring during 2010 and 2011 indicate that Allied Mills is not audible at any of the nearest receiver locations, and that criteria are generally well below monitored L_{A90} noise levels at most locations.

Anecdotal evidence from residents on Armitree Street has indicated that noise from the site is not audible at any stage of the day, evening or night. These residents have indicated that industrial noise is rarely audible above noise generated by traffic on the M5; however reversing beepers are occasionally noticed from the direction of the industrial estate. It is noted however that reversing beepers are not used on the Allied Mills site.

The only industrial noise that was identified at monitoring locations on Tallawalla Street was generated from activities at industrial sites in the western areas of The Circuit.

5.2.4. Justification for modification

Since the expansion works undertaken at the Allied Mills site, the M5 has been constructed adjacent to the northern boundary of the property. This motorway runs directly between the site and the Armitree St receivers, and is located adjacent to the North Tallawalla St receivers. Light and heavy vehicular traffic on the M5 motorway was noted as the principle source of noise at all sensitive receivers during day, evening and night time periods. Noise mitigation in the form of noise bunds and walls has been constructed as part of works associated with the M5 motorway. In the vicinity of the Allied Mills site, these bunds and walls are over 6m in height and are located on both the north and south boundaries of the road corridor. In addition to reducing noise from the M5, these barriers effectively reduce the transmission of any potential noise between the site and receivers on Armitree St.

The Allied Mills site is surrounded by numerous light industrial facilities to the west and south of the site. In addition the Allied Mills building itself shields northern areas from noise impacts located on the southern side of the site (for example truck mounted blowers and the gas compressor).

No complaints have been received by Allied Mills from the community in regard to any operational impact associated with the site, including noise impacts.

In light of the above information and to reflect the changing landuse in the vicinity of the Allied Mills site, Allied Mills is seeking to modify the conditions of consent to remove the requirement for ongoing noise monitoring. Full details of the noise assessment at the site are located in **Appendix B.**

5.3. Other environmental factors

As shown in **Table 5-1** below, the proposed modification to the conditions of approval would have no impacts on other environmental factors.

Table 5-1 Environmental assessment for additional environmental factors

Environmental factor	Impact
Land use and visual amenity	The proposed modification would not result in any change to the existing use and visual impact of the site.
Social impacts	The proposed modification would have no impact on the wider community as it would not result in any change in operation of the facility,
Non-indigenous and indigenous heritage	The proposed modification does not require additional construction or disturbance and as such there would be no damage to heritage items or places.
Water quality	The proposed modifications would have no impact on water quality, hydrology and flooding. Existing soil and water management measures would be implemented.
Air quality	The proposed modification would not result in a net increase in vehicles movements and as such there would be no additional emissions. There would be no associated dust generation as a result of the modification. Existing air quality measures would be implemented.
Soils and geology	The proposed modification would have no impact on soils and geology as no additional construction is required. Existing soil and water mitigation measures would be implemented.
Waste	The proposed modification would not result in the generation of waste as there is no change in the operation of the facility and no additional construction is required. Existing waste management measures would be implemented.

6. Conclusion

It is concluded that the proposed modification would not result in any substantial change to the approved project and would have no negative environmental impacts. Given the industrial nature of the surrounding area, the lack of operational noise at the site and the proximity of the site to the M5 East Motorway, ongoing operational noise monitoring is not considered necessary. The site layout does not support the implementation of an one-way internal road system, as there are constraints associated with one lane of traffic, which does not provide enough width for access in certain areas on site.

Consequently, the proposed modifications are considered to be consistent with the approved project and would not result in any new of additional impacts.

Appendix A Traffic Assessment

Technical Note

To	Ross Herron, Allied Mills	**Date**	7th November 2011
From	Mark Fowler	**Project No**	EN02842
Copy			
Subject	**Allied Mills, Kingsgrove – Traffic Operations Assessment**		

1. Context

Allied Mills is an existing facility located in an industrial estate in Kingsgrove, NSW. The site is approximately 2.5ha in size and is effectively bounded to the north by the M5, with the eastern and western boundaries formed by adjacent properties and the southern boundary by the industrial estate access road, The Crescent.

In recent years the site has undergone an expansion and as part of this work it was recommended on-site vehicles movements were restricted to one-way only, to provide for *"increased safety and efficiency for both vehicular and pedestrian movements within the site"*. Following the expansion, this system has not been adopted and anecdotal evidence suggests that its implementation will not increase safety or efficiency.

This Technical Note therefore discusses the long term adoption of the current two-way operation of vehicular movements within the site, and any impacts or constraints in terms of traffic.

2. Site Overview

The existing site layout is provided in **Figure 1** which demonstrates the existing access points, traffic arrangements, parking locations and designated pedestrian routes.

Internal Traffic Movements

The site is provided with frontage to The Crescent, which forms a loop road through the industrial estate providing access to each of the lots. The Crescent provides access to Vanessa Street, which in turn provides access to the local road network and the M5. Vehicles can gain access the M5 from both east and west of the site but to the east, access is limited to/from the city only.

Two gated access points are provided at the site. Gate A (northernmost access) operates with two-way traffic movements for general access by staff and for deliveries by semi, rigid and light vehicles. Gate B (southernmost) is used for access by bulk tankers only and allows only entry to the site, with these vehicles leaving via Gate A. Vehicle movements within the site can be summarised as follows:

- Delivery trucks and other vehicles access the site via Gate A. Delivery vehicles turn around by using the designated area at the loading bays whilst staff will park turn around using parking spaces. Both types of vehicle will and exit via Gate A;
- Bulk tankers access the property via Gate B and exit via Gate A, no turning is required.

This strategy results in very little traffic in the eastern corner of the yard.

Parking

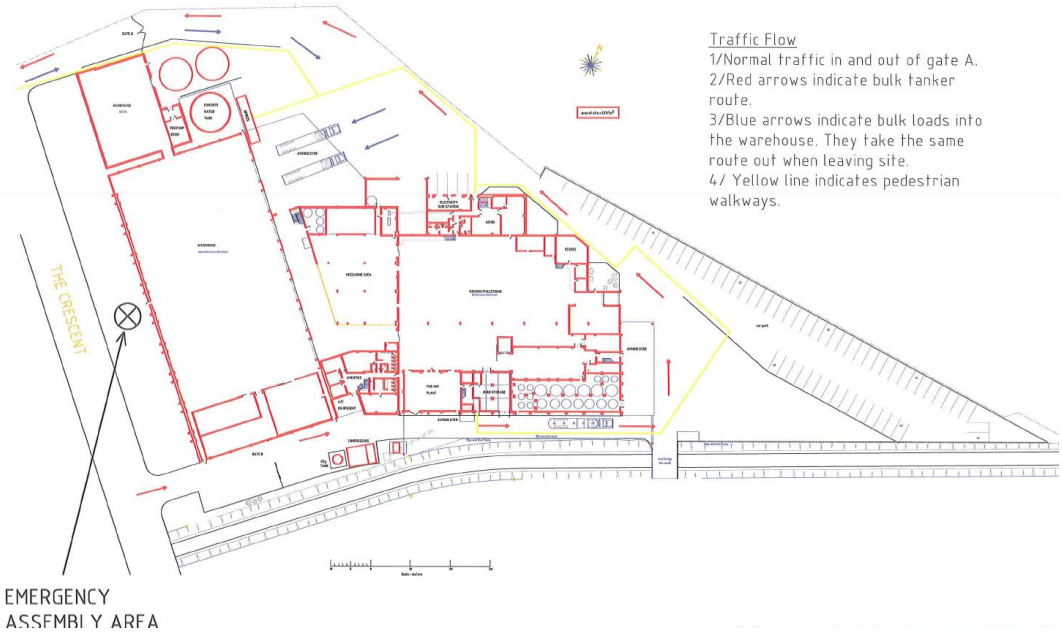
Parking is provided on site for staff and visitors only and is located along the northern boundary. On site a total of 71 spaces are provided, accessed via the two-way internal road from Gate A. Along this route vehicles travel along the boundary of the site and are therefore out with the areas in which delivery vehicles manoeuvre. On occasion these vehicles may need to share the roadway with bulk tankers for a very short section before entering the car parking area, this section of road is between 5 and 6 metres wide. Once parked, drivers use designated pedestrian routes to access the buildings.

Pedestrian Routes

Designated pedestrian routes are provided within the site to allow their safe movement between different areas. These routes are highlighted with yellow line markings making them conspicuous to drivers of vehicles who may be unfamiliar with the site. To serve the main pedestrian nodes within the site, the routes cross vehicular paths in 3 different locations. This is not strictly an issue as routes are designated and vehicular speeds are low, pedestrian traffic peaks at specific times of the day relative to shifts which means there is not a constant high flow of pedestrians on these routes.

When travelling to/from the car park, the route follows the building line which provides poor visibility to pedestrians for drivers of bulk tankers leaving the site.

- **Figure 1: Site Overview Allied Mills**



3. Traffic Management

Allied Mills have adopted a site Traffic Management Plan which seeks to regulate vehicular traffic and increase safety. This plan was adopted in 2010 and sets out guidelines to which all vehicles and pedestrians entering the site must adhere.

The plan states that all deliveries must take place between the hours of 6.30am and 8.00pm, and provides a formal reference point for the access arrangements set out previously.

Vehicles entering the site are controlled by the Traffic Management Plan through which access can only be gained via swipe cards or an intercom at the access, only site employees are provided with a swipe card. The number of delivery vehicles allowed on the site at any one time is limited to three, allowing one vehicles to sit in a waiting area while another two are in the dock. A traffic light system is in place to notify approaching vehicles if the site is at capacity, deterring them from trying to enter.

4. Traffic

Delivery vehicle traffic information has been provided for the site for a 7 week period during September and October of 2009.

Over this period the average weekday number of delivery vehicles was 19. The minimum observed on any one day was 11 vehicles whilst the maximum was 31, observed on a Wednesday and Thursday respectively. The maximum number of delivery vehicles observed in any one week was 104, the lowest was 82.

No information was provided regarding the time or scheduling of these deliveries. Given the delivery time period of 6.30am to 8.00pm, it is not expected that the level of vehicular traffic recorded during this period will cause any safety or capacity issues at the site or on the local road network.

5. Assessment of On-Site Conditions

Whilst it is proposed to operate a two-way vehicle operation through the site, the layout is such that two-way vehicles movements will effectively only occur to the west of the car park entry point. Two-way traffic movements cannot be accommodated in all parts of the site as described below.

The primary constraint to the operation of an entirely one-way traffic system throughout the site (whereby all vehicles would enter via Gate B and exit via Gate A), is the limited width of the access adjacent to the bulk tanker loading/unloading area. This is illustrated in **Figure 2**. The width at this location is such that when a vehicle is loading or unloading access is effectively blocked for the duration of the loading/unloading operation. During these periods any inbound movement through Gate B would be prevented unless the access road is widened in the area adjacent to this loading station to allow other vehicles to pass.

Due to the proximity of the Allied Mills main building to the north and the property boundary (and the adjacent storm water drain) located to the south of the bulk tanker loading/unloading area (refer **Figure 2**) the widening of the Gate B driveway is not considered practical.

- **Figure 2: Layout of Loading Station for Bulk Tankers (Location 2)**

The current adopted Traffic Management Plan is effective in controlling and monitoring on-site traffic and pedestrian movements, when considered in combination with the existing line markings it provides a safe environment for pedestrians and vehicles alike. A change in operation to a one-way system would not particularly increase the safety of the existing environment and would require delivery vehicles to manoeuvre in an area closer to the main pedestrian building entrance than that which is currently used.

Allowing all traffic to enter the site via Gate B would also increase the number of vehicles crossing the main pedestrian desire line within the site between the car park and building entrance.

As previously discussed there are three locations at which the pedestrian routes cross vehicular routes, through re-alignment of the existing routes this could be reduced to two crossing points and would bring about no real detriment to their directness but would increase safety. This is not affected by the direction of vehicular traffic within the site and would also increase the existing poor visibility to pedestrians walking along the building line.

6. Assessment of Off-Site Impacts

Gate A

With two-way traffic movement on-site traffic will enter and exit via Gate A, as per the current arrangements. The dimensions of the access are such that this can be accommodated and the current Traffic Management Plan effectively controls this arrangement, reducing any negative effects on the external road network. Notwithstanding this, there are some changes which could be made in order to improve the operation and safety of this access under two-way movements.

As discussed there is a traffic light system in place to limit the number of delivery vehicles allowed on-site, in practice drivers can only see the lights once in the immediate vicinity of the gate. If the light is red it is therefore likely drivers will need to perform a reverse manoeuvre to park kerbside until the opportunity to enter the site arises. This scheme could be improved

through the introduction of a secondary light which is angled for visibility of drivers approaching from Vanessa Street, this would allow drivers requiring to park kerbside to do so in a more efficient and safe manner.

Visibility to and from vehicles entering the site at Gate A is good and the position of the secure entry gate is such that vehicles will not protrude onto The Crescent when awaiting authorisation to access the site.

If a one-way system is adopted, none of the above is required to be considered.

Under both one-way and two-way operation vehicles exit the site via Gate A. The alignment of this access in relation to The Crescent is such that vehicles emerging from the site and turning left are often required to track across the opposite carriageway as a result of parked vehicles obstructing their path. It is recommended that parking restrictions are put in place in the vicinity of the access to prohibit parking during the delivery hours specified in the Traffic Management Plan, i.e. 6.30am to 8.00pm. This would remove any obstructions and allow vehicles to turn more sharply when exiting the site. Furthermore, centre line markings could be introduced to ensure vehicles travelling northbound on The Crescent do not cross into the opposite carriageway and occupy the space required for vehicles exiting the site.

Upon exit, visibility for vehicles is good. The introduction of the parking restrictions will ensure no obstructions are in the vicinity of the site which may reduce this.

Gate B

Restricting all entries to the site via Gate B would rationalise traffic movement at the site, although intensifies the use of Gate B. This access is currently used by large vehicles and is therefore suitable for this purpose. Space is provided within the site to accommodate a similar level of queuing vehicles as at Gate A.

The introduction of one-way system of vehicular operation of the western driveway at the site would seriously impede traffic movements through the site and require extensive construction and mitigation measures for efficient operation.

Limiting the access to Gate B would mean that direct access is not available to the waiting area designated within the site, reducing its overall capacity and resulting in more vehicles waiting on-street.

On approach to Gate B the road narrows to cross a railway line and in advance of which there exists accesses to other industrial units, therefore there are no safe and/or suitable locations for vehicles to wait on street to access the site. This creates a hazard for all vehicles using the route.

Furthermore, if a large vehicle is required cannot immediately access the site due to other waiting vehicles it may obstruct vehicles travelling in the other direct over the reduced width rail bridge.

7. Summary and Recommendations

Access to the site is currently provided via a two-way all vehicle access at Gate A and a one-way entry only access at Gate B for bulk tankers. An effective Traffic Management Plan is in place to control and monitor traffic movements at the site providing designated loading, walking and parking areas.

An assessment of on-site conditions and off-site impacts has been carried out in relation one-way and two-way vehicular traffic movements, and overall our recommendation would be for Allied Mills to maintain the existing traffic arrangements on the site.

The introduction of a one-way system would not provide any benefit to site operation, and removes access to the heavy vehicle waiting area. The internal road at the bulk tanker bay would require significant upgrade and increased traffic in this may increase the possibility of vehicle/pedestrian conflict resultant of an increase in the number of vehicles across the main pedestrian desire line. In addition, the access and existing geometry of The Crescent at Gate B are not suited to higher traffic flow which could result in road operational and safety issues.

We would also offer the following specific recommendations:

- Maintain the operation of a Traffic Management Plan. This recommendation is relative to both one and two-way traffic movements;
- Re-align the existing pedestrian route along the northern edge of the site, resulting in one less crossing of the vehicular route and greater visibility for drivers to pedestrians. This recommendation is relative to both one and two-way traffic movements;
- Introduce parking restrictions in the vicinity of Gate A which prohibits vehicles parking between 6.30am and 8.00pm, when delivery vehicles enter the site. In addition consideration should also be given to the introduction of a carriageway centre line at this locations. These measures are relative to both one and two-way traffic movements;
- Under two- way operation it is recommended that the traffic light system in operation at Gate A is improved to allow better visibility and forewarning of the site already operating at capacity. This could be achieved through the introduction of advance signage or the installation of a secondary traffic light head directed more towards approaching traffic;

Yours sincerely

David Lowe
Traffic and Transport Planning Manager
Buildings and Infrastructure NSW

Appendix B Noise Assessment

Modification to Project Approval

NOISE ASSESSMENT

- Final Draft
- 11 November 2011

Modification to Project Approval

NOISE ASSESSMENT

- Final Draft
- 11 November 2011

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1. Introduction

1.1. Background

Allied Mills manufactures and distributes a wide range of food ingredients; in particular grain based baking supplies. The Kingsgrove site receives bulk deliveries of flour, oil and other ingredients and processes these into products such as pre mixes for bread, pastry, cake and biscuits and other specialty flours and grain products.

In 2001 the then owner of the site, Goodman Fielder Limited, received planning approval from the then NSW Department of Urban Affairs and Planning under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the upgrade of the Kingsgrove site, namely the installation of a further dry mix facility. Conditions were placed on the approval to minimise any adverse environmental effects associated with the development, and to provide for on-going environmental management of the site. In 2003 the facility was acquired by Allied Mills.

Within the Conditions of Approval (CoA) was a requirement to conduct ongoing operational noise monitoring. Since the conditions were prepared, operational changes on site and changes in the noise environment in the vicinity of the site make this requirement obsolete, and as such Allied Mills is requesting its removal from the CoA.

1.2. Purpose of this report

This report has been prepared to provide current, updated information on the existing noise environment in the vicinity of the site and to provide details of likely operational noise impacts associated with operations on the site. These have been provided to modify the project approval condition for ongoing noise monitoring.

2. Noise criteria

Criteria for the assessment of potential noise impacts were determined during the initial environmental assessment for the project and are based on methodology contained in the NSW Industrial Noise Policy (INP). Project specific noise levels contained in this assessment were based on the results of a previous noise monitoring study, included in the inital project Environmental Impact Statement (EIS) and have been reflected in the Ministerial Conditions of Approval for the project. The MCoA relevant to the management of noise for this project are presented in **Table 1** below.

- **Table 1 Relevant conditions of approval**

<table>
<tr><th>Relevant Condition</th><th>Requirements of Condition</th></tr>
<tr><td>4.5</td><td>Noise emissions from the operations at the facility must not exceed the following criteria:
Project-Specific Residential Noise Limits
<table>
<tr><th rowspan="2">Receiver</th><th colspan="3">Noise limits (l_{aeq}) dba</th></tr>
<tr><th>Day
(7am–6pm)</th><th>Evening
(6pm–10pm)</th><th>Night
(10pm–7am)</th></tr>
<tr><td>Residents to the North-West (Baranbali Street and South Tallawalla Street)</td><td>48</td><td>42</td><td>41</td></tr>
<tr><td>Resident to the North (Armitree Street)</td><td>44</td><td>42</td><td>37</td></tr>
<tr><td>Residents to the West (North Tallawalla Street)</td><td>47</td><td>44</td><td>37</td></tr>
</table></td></tr>
<tr><td>6.3</td><td>The Applicant must conduction noise monitoring during the operation phase to assess compliance with noise limits set out in Condition 4.5. The frequency of monitoring must be as follows:
(a) within 3 months of commissioning the mixing plant, and
(b) annually thereafter.</td></tr>
</table>

3. Impact assessment

3.1. Noise sensitive receivers

The Allied Mills site is located in a light industrial area adjacent to the M5 motorway in Kingsgrove, NSW. In excess of twenty industrial facilities are located in the vicinity of the site, in addition to numerous residential properties. Generally speaking, the nearest residential properties are located approximately 250m to the north and west of the facility.

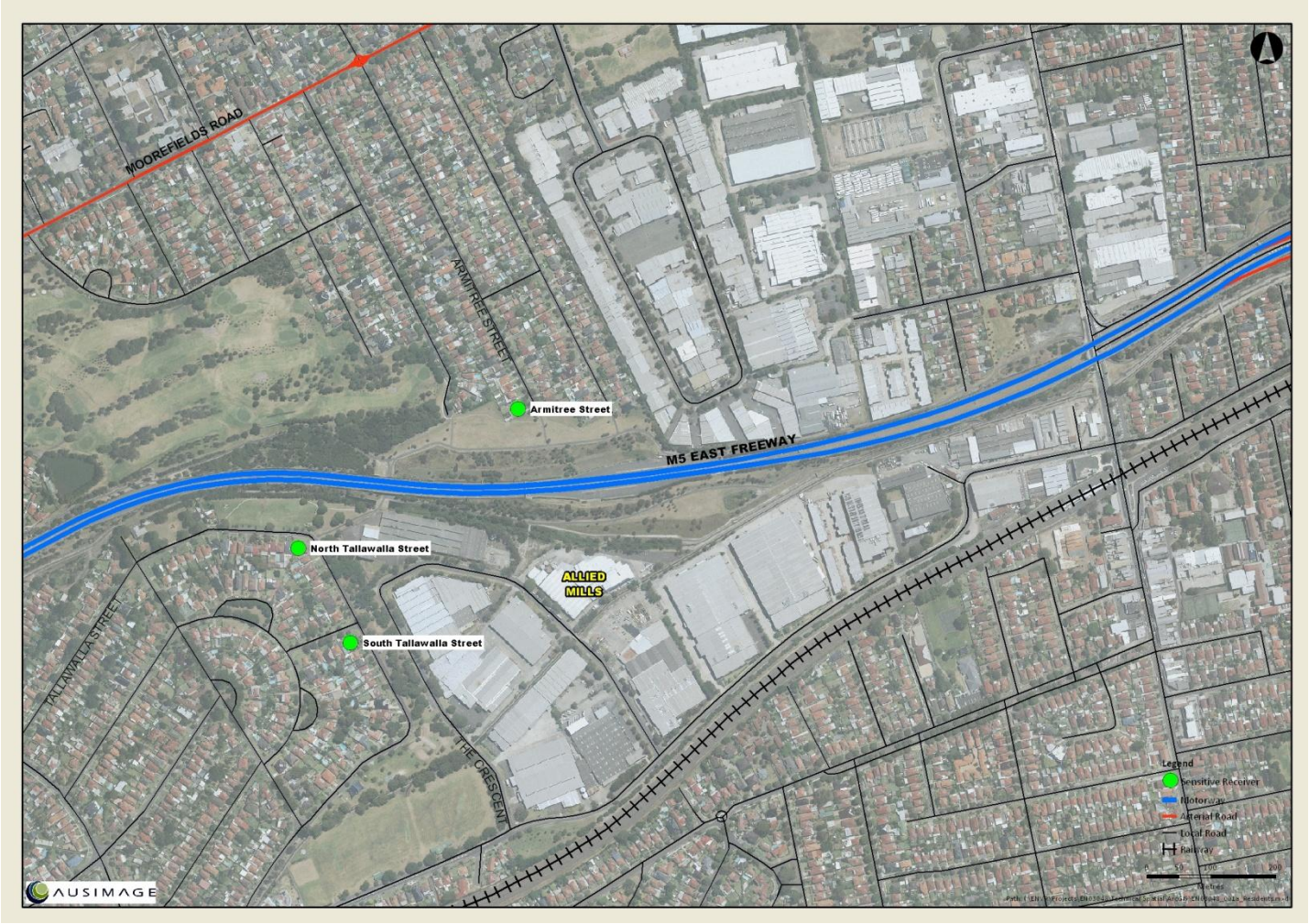
The locations of these nearest noise sensitive receivers have been presented in

Figure 1. These locations indicate receivers that are expected to be most potentially impacted by operational noise generated by activities at the Allied Mills site.

In addition to the numerous industrial facilities located in close proximity to the Allied Mills plant, the M5 motorway is located directly to the north of the site, and the East Hills rail line is located 300m to the south and south east.

The noise environment in the vicinity of the plant is primarily influenced by noise from the M5 and East Hills rail line, in addition to traffic on local roads and occasional noise from industrial facilities located on the western side of The Crescent.

- **Figure 1 site layout and nearest residential receivers**



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3.2. Noise Monitoring

3.2.1. Compliance Noise Monitoring

As indicated in **Table 1** noise monitoring is currently required to be undertaken during the day, evening and night time periods on an annual basis. The results of the previous two years monitoring are presented below.

Monitoring has been carried out in accordance with methodology prescribed in *AS 1055.1 Acoustics – Description and measurement of environmental noise, Part 1: General procedures* and the NSW INP.

- **Table 2 results of annual noise monitoring (2010 & 2011)**

Location	Period	L_{Aeq}	L_{A10}	L_{A90}	Criteria	Comments
2010						
Armitree St	Day	53	53	49	44	Site inaudible. Traffic on M5 and Moorefields Rd, planes and local residents.
	Evening	55	56	54	42	Site inaudible. Traffic on M5, Moorefields Rd and Armitree St, planes.
	Night	57	58	55	37	Site inaudible. Traffic on M5 and planes.
North Tallawalla St	Day	59	60	55	48	Site inaudible. Traffic on M5, Tallawalla St and The Circuit, light industrial noise from nearest premises (forklift beepers, bangs).
	Evening	58	59	56	42	Site inaudible. Traffic on M5 and Tallawalla St.
	Night	57	58	55	41	Site inaudible. Traffic on M5 and Tallawalla St.
South Tallawalla St	Day	55	59	49	48	Site inaudible. Traffic on M5, light industrial noise (Air Grills site), planes
	Evening	52	53	51	44	Site inaudible. Traffic on M5, Tallawalla St and Vanessa St.
	Night	54	54	49	37	Site inaudible. Traffic on M5 and East Hills rail line.
2011						
Armitree St	Day	49	50	47	44	Site inaudible. Traffic on M5 (46-55dB) and Armitree St (55dB), birds, planes and residents.
	Evening	52	54	49	42	Site inaudible. Traffic on M5 (53-55dB), planes, birds and residents.
	Night	50	52	44	37	Site inaudible. Traffic on M5 (45-50dB), crickets, dogs and residents.
North Tallawalla St	Day	52	54	50	48	Site inaudible. Traffic on M5 (52-55dB) and birds.
	Evening	54	55	51	42	Site inaudible. Traffic on M5 (52-55dB), local (55dB) residential noise and nearby renovations (up to 60dB – infrequent).
	Night	52	54	49	41	Site inaudible. Traffic on M5 (45-55dB) and residential noise.
South Tallawalla St	Day	48	49	42	48	Site inaudible. Traffic on M5 (40-50), Kingsgrove Rd (40dB), crickets, birds, breeze.
	Evening	50	52	44	44	Site inaudible. Traffic on M5 (45dB), Train (50dB), lorikeets, planes.
	Night	54	42	40	37	Site inaudible. Traffic on M5 (40-45dB), train (42dB), crickets.

The results of annual noise monitoring during 2010 and 2011 indicate that Allied Mills is not audible at any of the nearest receiver locations, and that criteria are generally well below monitored L_{A90} noise levels at most locations.

Anecdotal evidence from residents on Armitree Street has indicated that noise from the site is not audible at any stage of the day, evening or night. These residents have indicated that industrial noise is rarely audible above noise generated by traffic on the M5; however reversing beepers are occasionally noticed from the direction of the industrial estate. It is noted however that reversing beepers are not used on the Allied Mills site.

The only industrial noise that was identified at monitoring locations on Tallawalla Street was generated from activities at industrial sites in the western areas of The Circuit.

3.2.2. Operational Noise

During attended noise monitoring, noise testing was conducted along The Circuit to determine actual, existing operational noise levels associated with the Allied Mills site. At the time of monitoring, operational noise was only audible outside the site boundary at the southern site entrance. At this location, a compressor associated with the BOC gas cylinder was audible at 53 dB(A), at a distance of 30 meters. No other sources of operational noise were observed.

Using basic distance attenuation calculations, and ignoring all benefits obtained from screening by surrounding buildings and noise barriers, this noise source would be expected to be audible at 35dB(A) at the nearest receiver locations. This noise levels is below site operational criteria during day, evening and night time periods.

It is noted that during unloading of flour tankers, truck mounted blowers would be used. This noise source was not able to be observed during monitoring, however would be temporary in nature, and would not be conducted during night time hours.

3.3. Justification for Modification

Although operational noise from the Allied Mills site has not been audible during environmental noise monitoring undertaken in 2010 or 2011, the following information is provided to further support the request to remove the noise monitoring requirement.

3.3.1. M5 Motorway Traffic Noise

Since the expansion works undertaken at the Allied Mills site, the M5 has been constructed adjacent to the northern boundary of the property. This motorway runs directly between the site and the Armitree St receivers, and is located adjacent to the North Tallawalla St receivers. Light and

heavy vehicular traffic on the M5 motorway was noted as the principle source of noise at all sensitive receivers during day, evening and night time periods.

3.3.2. M5 Motorway Noise Mitigation Works

Noise mitigation in the form of noise bunds and walls has been constructed as part of works associated with the M5 motorway. In the vicinity of the Allied Mills site, these bunds and walls are over 6m in height and are located on both the north and south boundaries of the road corridor. In addition to reducing noise from the M5, these barriers effectively reduce the transmission of any potential noise between the site and receivers on Armitree St.

3.3.3. Screening Benefits from Adjacent Facilities

The Allied Mills site is surrounded by numerous light industrial facilities to the west and south of the site. In addition the Allied Mills building itself shields northern areas from noise impacts located on the southern side of the site (for example truck mounted blowers and the gas compressor).

These buildings are constructed from a combination of brick, concrete and steel construction, and provide an effective noise screen to reduce the transmission of noise between the site and receivers located on Tallawalla Street.

No direct line of sight exists between the Allied Mills site and any residential receiver.

3.3.4. Noise complaints

No complaints have been received by Allied Mills from the community in regard to any operational impact associated with the site, including noise impacts.

Where complaints are received regarding operational noise from the site, they will be handled in accordance with the site complaints handling procedure. Each complaint will be taken seriously and fully investigated. Where the noise in question is in excess of allowable limits, appropriate noise amelioration measures will be put in place to mitigate future occurrences.

3.4. Annual monitoring

In light of the above information and to reflect the changing landuse in the vicinity of the Allied Mills site, the proponent would seek to modify the conditions of consent by removing the requirement for ongoing noise monitoring, and to adjust the operation licence conditions accordingly.

It is proposed that should noise complaints be received from any surrounding receivers, Allied Mills will commission noise monitoring to determine their contribution to the noise environment,

and to determine noise mitigation measures as appropriate. This conditions has been included in accordance with the Draft Environmental Management Plan for the site . It is noted that this document is currently in a draft state, awaiting the outcome of this modification request.

4. Conclusion

In 2001 planning approval was granted for the expansion of the Allied Mills site at Kingsgrove, NSW. Conditions were placed on the approval to minimise any adverse environmental effects associated with the development, and to provide for on-going environmental management of the site. In 2003 the facility was acquired by Allied Mills.

Within the CoA was a requirement to conduct ongoing operational noise monitoring to determine noise impacts at nearby receivers. Since the conditions were prepared, development in the vicinity of Allied Mills has reduced the impact of operational noise, and monitoring carried out over the past two years has shown that operational noise is inaudible at all nearby sensitive receivers.

Recent developments such as nearby light industrial facilities and the adjacent M5 motorway generate noise impacts in the surrounding area, and noise mitigation provided by noise bunds, wall and the nearby factories screen any operational noise created by Allied Mills.

In light of the above information and to reflect the changing landuse in the vicinity of the Allied Mills site, the proponent would seek to modify the conditions of consent by removing the requirement for ongoing noise monitoring, and to adjust the operation licence conditions accordingly.