

## ANNEXURE B

### GOVERNMENT AGENCY REQUIREMENTS – ADDRESSED

#### DEPARTMENT OF ENVIRONMENT & CONSERVATION

<i>Requirement</i>	<i>Section Addressed</i>	<i>Annexure Addressed</i>
<p><b>Odour Emissions and Impacts on Receivers</b></p> <p>On 2 November 2007, Shoalhaven Starches Pty Ltd provided the document <i>Shoalhaven Starches Environmental Audit Odour Sources</i> (“the Audit Report”; GHD 2007) to the Land and Environment Court and published it on the Manildra website. The Audit Report identifies significant odour emissions from the existing level of activity at the premises, while the modelling demonstrates widespread impacts on receivers across Bomaderry, Nowra and surrounding areas.</p> <p>The Audit Report also identifies practical measures that DECC considers have the capacity, if fully implemented, to significantly reduce the odour impact of Shoalhaven Starches at the current level of production. However, DECC notes that the odour modelling suggests that even full implementation of the measures identified may not be sufficient to ensure compliance with section 129 of the POEO Act. DECC emphasises that the obligation is on Shoalhaven Starches to implement all measures necessary to achieve compliance with section 129 of the POEO Act.</p> <p>The Court also ordered Shoalhaven Starches to report to it, “identifying what options identified in [the Audit Report] [Shoalhaven Starches] intends to implement and by when each such option will be implemented” (‘the Statement of Implementation’). DECC notes that this Statement of Implementation (which is appended to the Preliminary EA) does not commit to implement all actions recommended in the Audit Report.</p>	Section 7.1	M
<p><b>Odour Emissions and Impacts on Receivers – Environmental Assessment Requirements</b></p> <p>The EA for this project must include the following information:</p> <ul style="list-style-type: none"> <li>an unambiguous and secure timeframe to implement all actions recommended by the Audit Report. The EA must provide a table identifying for each individual option in the tables in Chapters 11 and 12 of the Audit Report: (i) when the action will be completed, (ii) the basis for prioritisation of actions and (iii) justification for any actions not prioritised according to greatest impact on receivers and (iv) demonstration that all actions will be completed prior to commencement of the expansion;</li> </ul>	Section 7.1	M

**Department of Environment & Conservation (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<ul style="list-style-type: none"> <li>• an unambiguous and secure process to (on an ongoing basis) identify and implement any additional actions, beyond those in the Audit Report, that may be necessary to achieve compliance with section 129 of the POEO Act;</li> <li>• an itemised description of how Shoalhaven Starches is addressing each of the operational Environmental Management actions in section 13.6 of the Audit Report;</li> <li>• identify, quantify (in terms of odour units) and characterise (ie in terms of offensiveness of hedonic tones) all current sources of odour emissions at the existing level of production;</li> <li>• identify, quantify (in terms of odour units) and characterise (ie in terms of offensiveness of hedonic tones) all predicted or potential sources associated with the proposed expansion;</li> <li>• identify the extent of impact of these odours on receivers (including by use of odour modelling and mapping of odour contours);</li> <li>• firstly at the current level of production, demonstrate how each action to be taken will prevent (or where this is not possible will mitigate) odour emissions and impacts;</li> <li>• subsequently, as an integral part of the proposed expanded level of production, demonstrate how each action to be taken will prevent (or where this is not possible will mitigate) odour emissions and impacts.</li> </ul>	Section 7.1	M
<p><b>Air emission other than odour</b></p> <ul style="list-style-type: none"> <li>• The EA must demonstrate that air emissions from all existing and proposed additional plant will comply with the POEO Act and Regulations.</li> <li>• The EA must quantify current and proposed emission rates for air pollutants and identify actions to prevent or mitigate emissions.</li> <li>• The EA must be conducted in accordance with the DEC publication “<i>Approved Methods for Modelling and Assessment of Pollutants in New South Wales.</i>”</li> <li>• The EA must assess PM10 (24-hour and annual average), total suspended particulates and deposited dust impacts; Particulate emissions are a primary air quality concern for the proposal. Details must be provided on proposed dust management strategies for all potential sources of particulates.</li> </ul>	Section 7.1	M

**Department of Environment & Conservation (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<ul style="list-style-type: none"> <li>The EA must assess the level of arsenate and other emissions from coal burning and demonstrate how these emissions will be prevented or mitigated.</li> <li>The EA must include a cumulative assessment that examines the impacts of the proposal combined with all existing and approved air-pollutant generating activities in the area.</li> </ul>	Section 7.1	M
<p><b>Wastewater treatment and fitness for purpose of treated effluent</b></p> <ul style="list-style-type: none"> <li>The EA must demonstrate that full biological wastewater treatment will be implemented prior to commencement of any expansion. The Audit Report identifies implementation of adequate wastewater treatment as a critical action. The critical performance criterion for treatment of odour sources in the wastewater, will be reduction of organic loading (ie. reduction in Biological Oxygen Demand (BOD)).</li> <li>The EA must demonstrate that the proposal will prevent pollution of waters. DECC has explicitly indicated to Shoalhaven Starches that it will not licence any discharge of wastewater (included treated wastewater) to the Shoalhaven River.</li> <li>The EA should demonstrate there is no inconsistency with any relevant Statement of Joint intent established by the Healthy Rivers Commission.</li> <li>The EA should assess the performance of wastewater treatment options in terms of (i) odour reduction; (ii) suitability for a range of recycled uses, using NSW and National guidelines (see ATTACHMENT B) and (iii) risk of impact to aquatic ecosystems by assessment using the Australian Guidelines for Fresh and Marine Water Quality (ANZECC 2000).</li> <li>It appears from the Preliminary EA Report that Shoalhaven Starches is not now proposing to install a microfiltration/reverse osmosis (MF/RO) wastewater treatment plant. Should this be reconsidered, it will be critical that the EA adequately deal with the issues associated with a brine stream. These include the increased concentration of pollutants, reduction in suitability of the brine stream for irrigation or other re-use and the absence of treatment to reduce odorous organic loading. The brine stream would also increase the risk and consequence of any unanticipated overflow. The EA would need to address all these issues in detail, should Shoalhaven Starches again propose an MF/RO treatment system for wastewater.</li> <li>The EA must take into account and complement Shoalhaven City Council's Integrated Water Cycle Management Plan which is currently being developed.</li> </ul>	<p>Section 7.3</p> <p>Proposal does not seek discharge of treated wastewater to Shoalhaven River.</p> <p>Section 7.3</p> <p>Section 7.3</p>	

**Department of Environment & Conservation (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<ul style="list-style-type: none"> <li>The EA must demonstrate that there is sufficient capacity to convey, treat and manage the sewage that is generated by this development. Evidence must be sought from Shoalhaven City Council that demonstrates capacity exists within Council's sewerage infrastructure to support this document.</li> </ul> <p>DECC notes that the Preliminary EA proposes that Shoalhaven Starches may seek to deliver treated effluent to Shoalhaven City Council's sewage treatment and recycling infrastructure (REMS scheme). Council has proposed to DECC that a meeting with all parties to discuss this proposal be held in early 2008.</p> <p>DECC's understanding is that this proposal would be contingent on Shoalhaven Starches providing treatment to a guaranteed prescribed level, prior to delivery to REMS. It is also likely to require re-assessment of environmental outcomes of REMS, because of the considerable additional volume. Such an assessment would need to consider matters including (but not limited to) any change in quality of the REMS effluent, sustainability of the REMS irrigation area and if increased discharge is proposed from Penguin Head, an assessment of the impact on Marine aquatic ecosystems, recreation and aquatic foods.</p> <p>In this regard, any impact to the REMS scheme must be included in the EA and assessment against the relevant standards.</p>	<p>Not applicable.</p> <p>Proposal does not seek to discharge to REMS.</p>	
<p><b>Sustainability of Shoalhaven Starches' Effluent Irrigation and Storage</b></p> <p>The EA must provide a full water balance that demonstrates adequate capacity to achieve compliance with section 120 of the POEO Act (being the prohibition of water pollution). This water balance should include realistic predictions of volume generated, volume treated and volume directed to each end use. The assumptions and basis for these predictions must be provided.</p> <p>The EA must provide a full irrigation management plan for the Environmental Farm demonstrating the agronomic capacity of the land, soil, crop and climate combination to sustainably assimilate the effluent, in terms of volume, nutrient load and other pollutant load. This management plan and the water balance for the farm must be consistent with relevant NSW and national guidelines (see ATTACHMENT B).</p> <p>Using the water balance for the farm, the EA must demonstrate that adequate storage for wastewater and treated effluent will be available to prevent potential for pollution of waters when prolonged wet weather conditions prevent irrigation, noting that DECC will not licence a discharge of treated or untreated effluent to the Shoalhaven River.</p>	<p>Section 7.4</p>	<p>O</p>

**Department of Environment & Conservation (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p><b>Greenhouse Emissions</b></p> <p>The <i>NSW Greenhouse Plan (2005)</i> commits the NSW Government to pursuing greenhouse gas emission reductions in NSW. The greenhouse impacts of new development are therefore a key consideration in the Environmental Assessment and development consent process.</p> <p>When considering new developments with potentially significant greenhouse implications, the DECC considers key principles to be:</p> <ul style="list-style-type: none"> <li>• The minimisation of direct greenhouse gas emissions (ie. those generated on-site). This can be achieved, for instance, by the adoption of best available technology for fuel combustion and/or greenhouse gas capture and destruction.</li> <li>• The minimisation of indirect greenhouse gas emissions (ie. those generated off-site as a result of the activity, for example through electricity use). This can be achieved, for instance, by the adoption of measures to maximise energy efficiency and/or agreement by the proponent to purchase renewable energy (Green Power).</li> <li>• The consideration of whether there are opportunities to offset residual greenhouse gas emissions that are associated with the activity, and of the cost effectiveness of these opportunities.</li> </ul> <p>The DECC requires the following in relation to greenhouse emissions:</p> <ul style="list-style-type: none"> <li>• A comprehensive assessment of and report on the project's predicted greenhouse gas emissions (tCO<sub>2</sub>e). Emissions should be reported on a: <ul style="list-style-type: none"> <li>a. Greenhouse intensity (emissions per unit of production) basis;</li> <li>b. Total annual emissions basis; and</li> <li>c. Total project lifetime basis, including construction, operation and decommissioning.</li> </ul> </li> <li>• The assessment of project emissions should include direct emissions (ie. those occurring on the project site), indirect emissions (eg. those offsite as a result of the project, such as through electricity use) and any significant upstream and/or downstream emissions associated with the project.</li> </ul>	<p>Section 7.2</p>	<p>N</p>

**Department of Environment & Conservation (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<ul style="list-style-type: none"> <li>• The emissions should be estimated using an appropriate methodology, in accordance with the Department of Planning’s Draft “<i>Guidelines: Energy and Greenhouse in EIA</i>” (2002) and the Australian Greenhouse Office’s “<i>Factors and Methods Workbook</i>” (2006).</li> <li>• Emissions should be compared in the EA against:               <ul style="list-style-type: none"> <li>a. Industry ‘best practice’ emissions intensity for the activity; and</li> <li>b. Total annual NSW emissions, so the impact of the proposal on NSW emission reduction targets can be evaluated.</li> </ul> </li> <li>• The proponent should evaluate and report on the feasibility of measures to further reduce greenhouse gas emissions associated with the project.</li> </ul>		
<p><b>Contaminated Land</b></p> <p>The EA must document the assessment and management of any land contamination to ensure that the land is not allowed to be put to a use that is inappropriate because of the presence of contamination. Under the Contaminated Land Management Act there is a responsibility to notify the DECC of sites that pose a significant risk of harm to human health or the environment.</p>	Section 7.5.4	J
<p><b>Noise</b></p> <ul style="list-style-type: none"> <li>• The EA must demonstrate that the proposal will be designed, constructed, operated and maintained so that there are no adverse impacts from noise (including traffic noise);</li> <li>• The EA must assess the requirements of the NSW Industrial Noise Policy.</li> </ul>	Section 7.6	Q
<p><b>Waste</b></p> <ul style="list-style-type: none"> <li>• The EA must provide details of all waste received at and dispatched from the site, including categorisation of the waste, using the Environmental guidelines: Assessment, classification &amp; management of liquid &amp; non-liquid wastes (EPA 1999);</li> <li>• The EA must also assess waste received against Schedule 1 of the POEO Act to determine if a waste licence is required.</li> </ul>	Section 7.11	L

**Department of Environment & Conservation (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p><b>Impacts of the project on threatened species and their habitat</b></p> <p>The EA must describe what actions will be undertaken to avoid or mitigate impacts caused by the development on all threatened species described at the site.</p>	Section 7.13	E
<p><b>Impacts of the project on Aboriginal cultural heritage values</b></p> <p>The EA should address and document the information requirements set out in the draft “Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation” involving surveys and consultation with the Aboriginal community.</p> <p>The EA must identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area.</p> <p>Should the site be found to have significant Aboriginal cultural heritage values, the EA must describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.</p> <p>The EA needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.</p>	Section 7.14.1	D
<p><b>EA to provide itemised guide to DECC requirements</b></p> <p>DECC requests that DoP require that the EA include a table clearing indicating where each itemised DECC EA requirement can be found in the EA and its appendices. This will assist DECC to provide DoP and the proponent with efficient and effective assessment and recommendations, given the overarching importance to this proposal of the legislation and issues DECC administers.</p>		B

## **ROADS & TRAFFIC AUTHORITY**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<ul style="list-style-type: none"> <li>• A traffic impact study (TIS) should be prepared in accordance with Table 2.1 of the <i>RTA Guide to Traffic Generating Developments</i>.</li> </ul>	Section 7.7	G
<ul style="list-style-type: none"> <li>• Following consultation with Shoalhaven City Council, the RTA has concerns regarding outstanding conditions of consent relating to the Manildra access points on Bolong Road, improvements to pedestrian safety and upgrade to the rail level crossing (installation of boom gates). Given this, the environmental assessment should review past consents and identify, and commit to completion, any outstanding works. Consolidation of existing access points should be considered to reduce the number of conflicting points along Bolong Road.</li> </ul>	Section 7.7.11	G
<ul style="list-style-type: none"> <li>• All access points to the site from Bolong Road should be in accordance with the RTA Road Design Guide. Any access points that are not to standard should be upgraded or closed.</li> </ul>	Section 7.7.4 & 7.7.12	G
<ul style="list-style-type: none"> <li>• The RTA strongly recommends that the developer considers the environmental impacts of any proposed roadworks as part of the Statement of Environmental Effects. If these impacts are not considered, then the RTA would require the applicant to provide a separate environmental impact assessment, a 'Review of Environmental Factors' prior to commencing any works that were conditioned as requirements of the development.</li> </ul>	Section 7.7	G
<p>Note: The RTA has a responsibility to ensure that all environmental impacts are considered to the fullest extent possible under Section 111 of the Environmental Planning and Assessment Act.</p>		



**DEPARTMENT OF WATER AND ENERGY**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p><b>Protection and Rehabilitation of the Riparian Corridors</b></p> <p>Section 5.9 of the Preliminary Environmental Assessment (PEA) indicates that the bank of the Shoalhaven River adjacent to the Shoalhaven Starches factory site has a known history of recession (page 62). If any works associated with this major project are proposed within close proximity of the river bank, the EA should include an assessment of river bank stability and provide options for any remediation/bank enhancement. The Department agrees with the PEA that the options should also allow for the removal of exotic vegetation and weeds and incorporate the re-establishment of a diversity of local native species.</p> <p>The former DIPNR has developed a stream classification system to identify minimum riparian corridor widths along watercourses. The Department's stream mapping work was initially developed for the Riparian Corridor Management Study (RCMS) in the Wollongong LGA. The RCMS process has since been widely adopted and applied to the NW and SW Growth Centres, other LGAs and land release sites. A form of the RCMS process has also been included in Landcom's Blue Book.</p> <p>The Stream classification uses three categories which reflect the environmental significance of watercourses. The minimum widths to achieve the riparian categories are as follows:</p> <p><u>Category 1 – Environmental Corridor (Red)</u></p> <ul style="list-style-type: none"> <li>• Purpose: to protect and enhance ecological connectivity between key remnant native vegetation within and between catchments and achieving all four key objectives for riparian corridors.</li> <li>• Minimum width: a Core Riparian Zone (CRZ) width of 40 metres (measured from the top of bank) along both sides of the watercourse + a 10 metre vegetated buffer.</li> </ul> <p><u>Category 2 – Terrestrial and Aquatic Habitat Green</u></p> <ul style="list-style-type: none"> <li>• Purpose: to provide for a viable and robust node or reach of riparian habitat (both aquatic and terrestrial) and would achieve key objectives 1 – 3 for riparian corridors.</li> <li>• This habitat does not necessarily provide connectivity to other key remnant native vegetation due to constraints from existing development.</li> <li>• Minimum width: a CRZ width of 20 metres (measured from the top of bank) along both sides of the watercourse + a 10 metre vegetated buffer.</li> </ul>	<p>Section 7.9</p>	<p>I</p>

**Department of Water and Energy (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>								
<p><u>Category 3 – Bank Stability and Water Quality (Blue)</u></p> <ul style="list-style-type: none"> <li>Category 3 recognises the critical role of riparian vegetation for stabilising the bed and banks of watercourses and filtering catchment run-off (ie key riparian corridor objectives 1 and 2) and the contribution this makes to overall catchment health and retention of land (eg. protection of property and assets).</li> <li>Minimum width: a CRZ width of 10 metres (measured from the top of bank) along both sides of the watercourse (generally no buffer is required).</li> </ul> <p>Category 3 objectives and outcomes are generally fundamental to all waterways. Category 2 builds upon the objectives and management principles for Category 3, and Category 1 builds upon objectives and management principles for Category 2.</p> <p>Please note, the above riparian widths are minimum widths and opportunities for achieving greater corridor widths are encouraged. Additional width may be required for geomorphological and environmental considerations (eg. protect and enhance remnant native vegetation adjacent to the riparian corridor and biodiversity). The riparian corridors should be protected and/or enhanced with native riparian vegetation.</p> <p><u>Stream Mapping at Shoalhaven Starches’ site</u></p> <p>The Department has undertaken desk top categorisation of the watercourses at the site and the stream categories are listed below:</p> <table data-bbox="197 946 827 1060"> <tr> <td>Shoalhaven River</td> <td>Category 1 watercourse</td> </tr> <tr> <td>Bomaderry Creek</td> <td>Category 1 watercourse</td> </tr> <tr> <td>Broughton Creek</td> <td>Category 1 watercourse</td> </tr> <tr> <td>Abernethy’s Creek</td> <td>Category 2 watercourse</td> </tr> </table> <p>The Environmental Assessment report needs to clearly identify on a scaled plan view the location of the proposed development in relation to:</p> <ol style="list-style-type: none"> <li>the watercourses on the site;</li> <li>top of bank along the watercourses;</li> <li>riparian corridor boundaries, including the Core Riparian Zone (CRZ), Vegetated Buffers and Asset Protection Zones. [The CRZ widths are to be consistent with the minimum widths and recommended by DWE above];</li> </ol>	Shoalhaven River	Category 1 watercourse	Bomaderry Creek	Category 1 watercourse	Broughton Creek	Category 1 watercourse	Abernethy’s Creek	Category 2 watercourse		I
Shoalhaven River	Category 1 watercourse									
Bomaderry Creek	Category 1 watercourse									
Broughton Creek	Category 1 watercourse									
Abernethy’s Creek	Category 2 watercourse									

**Department of Water and Energy (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p>d. existing riparian vegetation distinguishing between endangered ecological communities (EEC) and non-EEC areas;</p> <p>e. those parts of the CRZ and the Vegetated Buffers needing to be revegetated; and</p> <p>f. river bank stabilisation options.</p> <p><u>Wastewater Treatment</u></p> <ul style="list-style-type: none"> <li>• It would be highly beneficial for the industry to explore all feasible options to reuse the treated effluent, including adjacent industries, and discharge to Council’s sewerage system should only be considered as a last resort.</li> <li>• Technically, the proposed anaerobic and aerobic pond for treatment of the wastewater from the ethanol is OK in principle. It is assumed that the effluent standard is to be the same as the secondary effluent discharged from Council’s Bomaderry Sewage Treatment Plant (STP), and that is &lt; 20 mg/L BOD5, &lt; 30 mg/L SS and &lt; 5 mg/L ammonia nitrogen if it is to be discharged to Council’s tertiary treatment facility at Nowra STP prior to discharge to the Shoalhaven Reclaimed Water Management Scheme (REMS).</li> <li>• Council would need to obtain DWE concurrence to its trade waste approval to accept wastewater from these premises to its sewerage system. When seeking concurrence, the discharger would need to demonstrate to the Department what options have been considered and why they are not feasible.</li> <li>• Trade waste fees and charges may be an annual trade waste fee and the cost of monitoring the proposed wastewater that would be of a high quality. DWE concurrence conditions may require extensive monitoring and the development of a detailed contingency plan outlining how the discharger will manage wastewater in the event of failure to meet Council’s acceptance limits. The discharger would also be required to enter a Trade Waste agreement with the Council.</li> <li>• Furthermore, the discharger would be required to pay developer charges associated with upgrading Council’s infrastructure to cater for the significant increase in loading the proposal would involve, together with sewer access and usage charges.</li> <li>• Any proposal to link with the Shoalhaven REMS would require significant investigation into REMS management, both current and planned, and associated environmental impact assessment.</li> </ul>	<p>Section 7.3 &amp; 7.4</p> <p>Proposal does not seek to discharge to Sewer.</p>	<p>O</p>

**SHOALHAVEN CITY COUNCIL**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p><b>1. Traffic and Transport</b></p> <p>Traffic and transport comments are still being finalised by Council engineers, however the following comments made below relate to previous Part 3A applications that have been made on this site and are still applicable in this instance.</p> <p><i>General Comments</i></p> <p>Outstanding consent conditions are:</p> <ul style="list-style-type: none"> <li>• Pedestrian footbridge south side Bolong Road across Abernethy's Creek (adjacent Manildra central access).</li> </ul> <p><i>This was separate from the widening of culvert (Abernethy's Creek) on north side Bolong Road required to upgrade access to minimum Type A standard in accordance with RTA Road Design Guidelines. The intent of the pedestrian footbridge is to get Manildra staff and contractors off the road when traversing by foot between plant and office, or between plant and local businesses.</i></p> <ul style="list-style-type: none"> <li>• Widening culvert (Abernethy's Creek) north side of Bolong Road adjacent to central access to ensure minimum type BAR conditions are provided at the central access point.</li> </ul> <p><i>Required to upgrade access to minimum Type A standard in accordance with RTA Road Design Guidelines, to avoid vehicle movements at the central access point blocking Bolong Road.</i></p> <ul style="list-style-type: none"> <li>• Upgrade of western most access (construct driveway and seal road shoulder).</li> </ul> <p><i>Required to upgrade access to minimum Type B standard in accordance with RTA Road Design Guidelines. In urban area, this implies kerb, gutter and shoulder seal in conjunction with access upgrade. Manildra have undertaken the required kerb, gutter and shoulder seal works on southern side of Bolong Road at this location, however have not upgrade the access which is still currently unsealed. This requires a concrete driveway construction and shoulder seal and sealed driveway to a point that prevents material build up on Bolong Road.</i></p> <ul style="list-style-type: none"> <li>• Access improvements to Hannigans Lane (vegetation removal to improve sight distance).</li> </ul> <p><i>Required to ensure minimum sight distances are available at the approved access points in accordance with RTA standards.</i></p> <ul style="list-style-type: none"> <li>• Upgrade rail level crossing (provide boom gates and flashing light/bell assembly at rail crossing in accordance with current RTA standards).</li> </ul>	<p>Section 7.2</p>	<p>G</p>

**Shoalhaven City Council (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p><i>Other Traffic Concerns</i></p> <p>Council does not support the use of Bomaderry local roads by heavy vehicles that do not have origin/destination in the Bomaderry local area. Council maintains that heavy vehicles (particularly from industry along Bolong Road) should be using Bolong Road and Princes Highway. To that extent Council was disappointed with previous conditions of consent issued by the Department allowing increased use of Bomaderry local roads by heavy vehicles generated by Manildra site. It is understood that this was a result of reporting that failed to address this issue, despite that issue being raised by Council at that time. It is understood that the reason for the condition related to the inadequate capacity of Bolong Road/Princes Highway intersection.</p> <p>It is detailed, within the environmental assessment that “the intersection of Bolong Road and Princes Highway is designed to allow an uninterrupted flow to northbound trips; they did therefore not identify any delays, but are affected by the coordinated traffic signals downstream at Illaroo Road”.</p> <p>Council disagrees with this statement, whilst there is uninterrupted flow to northbound trips, there are considerable delays to Bolong Road and Princes Highway traffic as a result of increased heavy vehicle traffic (east to north).</p> <p>There is currently deficiency in right turn lane storage on Bolong Road approach to Princes Highway. The presence of one (1) heavy vehicle causes obstruction to the adjacent left turn lane on Bolong Road, which creates extended queuing in peak periods. Any increased heavy vehicle activity exacerbates this situation.</p> <p>Council does not support additional heavy vehicle activity on Bomaderry local roads. Council maintains that heavy vehicles (particularly from industry along Bolong Road) should be using Bolong Road and Princes Highway, and that Princes Highway / Bolong Road intersection should be upgraded to allow increased capacity for right turn heavy vehicle traffic without detriment to capacity of other intersection movements.</p> <p><i>Recommendations:</i></p> <p>a) A condition of consent be imposed that requires the “applicant to enter into negotiations with the RTA with a view to negotiating a reasonable contribution towards the upgrade of Princes Highway/Bolong Road intersections to improve the capacity for right turn movements East to North” or similar. It is considered reasonable that the extent of contribution should be proportional to the impact of heavy vehicles on the capacity of the intersection.</p> <p>b) It is our strongest recommendation that all outstanding conditions of consent be addressed prior to proceeding with any further development of the site.</p>	<p>Section 7.7.11</p>	<p>G</p>

**Shoalhaven City Council (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p>c) Pursuant to the Director General's requirements which requests additional traffic studies, surveys and analysis being undertaken, which identify existing (cumulative) impacts of the current proposal, it is requested that these studies and surveys are provided to Council for review prior to approval.</p> <p>d) Comments on the management of traffic during the construction phase of the development have not been adequately addressed as part of the application. As there are serious safety concerns with traffic along Bolong Road specific conditions of consent which ensure safe traffic movements and parking conditions during the construction phase should be imposed in any issued development consent.</p> <p><i>Train Impacts</i></p> <p>Council is concerned that there will be an increase in the frequency of train movements to and from the site. Although the final report states that no increase in train movements will occur, previous draft reports prepared for the development had stated that some change in train numbers would occur. There is concern that train movements will increase and that the issues relating to such a potential increase have not been adequately addressed.</p>	Section 7.7.9	G
<p><b>2. Flooding</b></p> <p><i>Recommendations:</i></p> <p>a) The development should comply with the 'Flood Related Development Controls' as detailed in Schedule 6 of Development Control Plan No. 106.</p> <p>b) A hydraulic assessment is to be carried out as part of any environmental assessment undertaken.</p> <p>c) Conditions of consent should require that the localised flooding impacts on other buildings within the complex and impacts on available flood storage should be assessed during the detailed design stage of the project.</p>	Section 7.10	L
<p><b>3. Noise</b></p> <p>The comments regarding noise presented within the Preliminary Environmental Report are considered satisfactory subject to an operational acoustic assessment being prepared having regard to the DECC's Industrial Noise Policy.</p> <p><i>Recommendation:</i></p> <p>a. An operational acoustic assessment is prepared as part of the environmental assessment undertaken for this development.</p>	Section 7.6	Q

**Shoalhaven City Council (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p><b>4. Acid Sulphate Soils</b></p> <p>The development site is within an area identified as having a probability of containing acid sulphate soils by NSW Department of Land and Water Conservation (Soil Conservation Service – Acid Sulfate Soil Risk Map).</p> <p>It is considered that the comments made as part of the draft Environmental Assessment Report are considered adequate. However, if acid sulphate soils are identified during the course of excavation, work is to cease until the applicant lodges and acid sulphate soil management plan prepared by a suitably qualified person for approval by Council’s Environmental Services Manager.</p> <p><i>Recommendation:</i></p> <p>a) Measures are to be taken as required to minimise adverse environmental impact due to the release of acid to the environment (whether at the excavation site or elsewhere).</p>	Section 7.5.3	J
<p><b>5. Potential Soil Contamination</b></p> <p>Assessment of the potential contamination of the site should be carried out as part of the Environmental Assessment conducted as part of the Environmental Assessment conducted as part of the project to ensure that the site is free from any potential harmful contaminants that may impact upon surrounding developments.</p> <p><i>Recommendation:</i></p> <p>a. A preliminary contamination assessment is carried out as part of the environmental assessment for this project.</p>	Section 7.5.4	J
<p><b>6. Erosion Controls</b></p> <p>Currently the Manildra access road near the administration building on the western side of the railway line is unsealed. This road is and will be used by heavy transport vehicles and should be sealed to prevent dust generation and sediment laden storm water washing into Bomaderry Creek and flowing into the Shoalhaven River.</p> <p><i>Recommendations:</i></p> <p>a) Details of the proposed sediment and erosion controls that are to be installed to the satisfaction of the Council’s Environmental Health Officer and DECC are to be provided as part of the environmental assessment report. It is expected that the erosion controls are to remain in place for the duration of construction works.</p>	Section 7.5.2	P

**Shoalhaven City Council (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<p>a) Details of the proposed sediment and erosion controls that are to be installed to the satisfaction of the Council's Environmental Health Officer and DECC are to be provided as part of the environmental assessment report. It is expected that the erosion controls are to remain in place for the duration of construction works.</p> <p>b) That the sealing of the roadway is proposed as part of the environmental assessment undertaken for this project.</p>		
<p><b>7. Cooling Towers and Legionnaire's Disease Control</b></p> <p>Any air handling systems and cooling towers shall be designed, installed and maintained in accordance with the requirement of the Public Health Act 1994 (Part 4 Microbial Control) and Regulations. The applicant is required to register details of all regulated systems with Shoalhaven Council's Environmental Services Section.</p> <p><i>Recommendation:</i></p> <p>a) Details of any air handling systems and cooling towers and the management of these systems are to be included as part of the environmental assessment for the proposed development.</p>	<p>Agree to imposition of this requirement as condition of consent.</p>	
<p><b>Water and Sewerage</b></p> <p>It is noted that the proposal includes the construction of a wastewater treatment facility on Shoalhaven Starches site. The proposal also includes the possible discharge of part of the effluent to Council's REMS and/or Council's licensed discharge to Shoalhaven River has been provided on the design.</p> <p>Limited detail of the proposed treatment facility and the quality of the influent and effluent stream has been provided. Council would require detailed reports regarding these in order to assess the full implications on its operations.</p> <p>It should be noted:</p> <ul style="list-style-type: none"> <li>• Council's REMS has been designed to cater for development in accordance with Council's DSP to year 2030 and this proposal was not included in that development. The inclusion of this proposal would greatly exceed the capacity of REMS and trigger extensive investigation and study requirements. It is also envisaged much of the existing REMS infrastructure would require augmentation.</li> </ul>	<p>Section 7.3 &amp; 7.4</p> <p>Proposal does not seek to discharge wastewater to Council's Sewerage System</p>	<p>○</p>



**Shoalhaven City Council (continued)**

<b>Requirement</b>	<b>Section Addressed</b>	<b>Annexure Addressed</b>
<ul style="list-style-type: none"> <li>• Council’s commitment to the community that 80% of REMS water would be re-used could be jeopardised by the proposal. The significant volume and flow pattern of wastewater generated by the proposal would require a directional change for REMS management.</li> <li>• Council’s REMS is licensed by DECC with strict quality requirements for irrigation and ocean discharge.</li> <li>• Council has no remaining capacity in its discharge to Shoalhaven River during extended wet weather periods in accordance with its current licence with DECC.</li> <li>• Section 64 charges in relation to the proposal would be applicable in some form.</li> <li>• The proposal would be subject to the full requirements of Council’s Trade Waste Policy.</li> <li>• Any proposed increase in water usage will be by agreement with Council in accordance with its policies and will be subject to appropriate pricing paths and infrastructure capacity.</li> </ul> <p><i>Recommendation:</i></p> <p>a) It is suggested that Shoalhaven Starches develop a strategy for total management of its liquid wastes as per current Best Practice. It should be noted that this Development will have considerable impact on Shoalhaven Water’s infrastructure and it is extremely important that full consultation is undertaken.</p>		