

STATEMENT OF COMMITMENTS PROPOSED TURF FARM TUMBULGUM

Table 1 Management Measures

SOIL AND WATER MANAGEMENT	
OBJECTIVE	ACTION
To ensure that runoff discharge into the Tweed River achieves the standards adopted by Tweed Shire Council in the Tweed River and Catchment Interim Water Quality Management Plan (adopted October 2000).	<ul style="list-style-type: none"> ♦ Install appropriate erosion and sedimentation control devices (filter fences, hay bales, catch drains, etc.) prior to commencing construction of the storage dam and any other site works. ♦ Limit the depth of the storage dam to 500mm below natural surface level. ♦ Pump runoff into the storage pond and recycle onto the turf when required. ♦ Maintain existing agricultural drainage system. ♦ Monitor surface and groundwater quality. ♦ Monitor treated effluent quality from Tumbulgum Sewerage Treatment Plant in accordance with the Environmental Protection Authority Licence No. 5622. (Currently being undertaken by Council).
CONTAMINATION	
OBJECTIVE	ACTION
Ensure that handling, storage and application of chemicals does not result in contamination of the site.	<ul style="list-style-type: none"> ♦ Store chemicals in small volumes in appropriate facilities. ♦ Comply with manufacturer's requirements regarding application rates. ♦ Report any major "spills" to Tweed Shire Council and the Environmental Protection Authority. ♦ Remediate any contaminated areas to satisfaction of Tweed Shire Council and the Environmental Protection Authority.
ACID SULPHATE SOILS	
OBJECTIVE	ACTION
<p>Avoid disturbance of Acid Sulphate Soils where possible.</p> <p>Ensure that acid runoff does not discharge to the Tweed River.</p>	<ul style="list-style-type: none"> ♦ Limit the storage dam to 500mm below natural surface level. ♦ Carry out all construction work and operational activities in accordance with the Acid Sulphate Soils Management Plan. ♦ Monitor acid levels.
AIR QUALITY	
OBJECTIVE	ACTION
<p>To limit potential for dust generation and offsite movement.</p> <p>To limit spray drift.</p>	<ul style="list-style-type: none"> ♦ Avoid significant site disturbance during high winds. ♦ Sediment and erosion control measure shall be installed. ♦ Traffic speeds on the proposed access road shall be limited to 50kph. ♦ Avoid spraying during high winds. ♦ Utilise only ground spray equipment.

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FLOODING	
OBJECTIVE	ACTION
Minimise obstruction of flood flows.	<ul style="list-style-type: none"> ♦ Limit the storage dam to 1.61 hectares in area. ♦ Limit the height of the storage dam above natural surface level to 1.5m.
NOISE	
OBJECTIVE	ACTION
Minimise noise impacts on adjacent properties.	<ul style="list-style-type: none"> ♦ Comply with the recommended Acoustic Treatment and Management Principles contained in Section 6.0 of the Noise Impact Report as follows: <ul style="list-style-type: none"> - All plant on the site be well maintained and have residential mufflers fitted; - Motors to drive water pumps be of an electrical type; - Non-impact sprinklers be used; - Should work commence before 7am, all reasonable steps should be taken to conduct this work as far from the adjacent residential premises as possible and the occupants of the adjacent residential premises be informed of such works; - Should mowing be conducted after 6pm the activity should be staged such that mowing is conducted nearest the adjoining residential premises before 6pm with the activity being moved as far from the dwelling after 6pm; - Trucks must not leave their motors running during loading; - Forklift operators should avoid impacting the truck where possible; - Fixed plant be located as far as possible from the adjoining residential premises; - All activities should be located as far as possible from the adjacent residential premises.
LAND LEVELS	
OBJECTIVE	ACTION
To ensure that natural surface levels are not permanently lowered.	<ul style="list-style-type: none"> ♦ Prepare a grid survey showing reduced levels at Australian Height Datum at 20m intervals on the site prior to the first cut. ♦ Prepare a monitoring survey every two years and submit copies to the consent authority and Tweed Shire Council. ♦ Import make up material as required to maintain site levels at predevelopment levels.
TRAFFIC	
OBJECTIVE	ACTION
To ensure that safe and efficient vehicular access is provided to the site.	<ul style="list-style-type: none"> ♦ Limit access to the existing Crown Public Road to the south of the site. ♦ Construct the road and junction with Tweed Valley Way to the following standards:

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	<ul style="list-style-type: none"> - It is proposed that the existing unsealed track remain as single lane, however, widened to seven metres at various locations so to allow two vehicles to pass. These passing bays will be provided at least every 150 metres along the road, and shall have a length of 20 metres. This widening will occur on the northern side of the road and will require the removal of some existing cane which is currently growing within the road reserve. - Whilst dedicated deceleration facilities are not warranted at the Tweed Valley Way / Crown Road intersections, some minor works will be required at the Tweed Valley Way / Crown Road intersection so to allow trucks to negotiate the intersection safely and efficiently.
FLORA AND FAUNA	
OBJECTIVE	ACTION
To protect threatened species of fauna.	<ul style="list-style-type: none"> ♦ Measures to protect fauna species (such as frogs) should be employed during site levelling and holding dam construction through the installation of sediment traps on all slopes and drains. ♦ Waste material, including vegetation, is not to be pushed into the drains within and surrounding the site.
CULTURAL HERITAGE	
OBJECTIVE	ACTION
Avoid disturbing cultural heritage items and relics.	<ul style="list-style-type: none"> ♦ It is recommended that contractors undertaking the proposed development works for the Tumbulgum turf farm site be made aware that the National Parks and Wildlife Act 1974 asserts it is an offence for any person to knowingly deface, destroy or damage, or permit the defacement, destruction or damage of, an Aboriginal place or relic without first having written consent of the Director General of the Department of Environment and Conservation. ♦ It is recommended that if any Aboriginal cultural heritage material is detected during the proposed development, the works must cease in the area, and the Tweed Byron Local Aboriginal Land Council and Regional Archaeologist Department of Environment and Conservation must be informed so that they may advise on the most appropriate course of action in this event. Works must not continue without the written consent of the Tweed Byron Local Aboriginal Land Council and the NSW Department of Environment and Conservation.
UTILITIES	
OBJECTIVE	ACTION
Protect existing utilities in and adjacent to the site.	<ul style="list-style-type: none"> ♦ Clearly mark the location of underground utilities with permanent markers. ♦ Paint telegraph poles in bright red/white colours. ♦ Notify relevant utility authorities if any damage occurs.

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Table 2 – Monitoring Protocols

Element	Indicator/Parameter	Monitoring	Reporting
Soil and Water	<ul style="list-style-type: none"> . Phosphorus . Nitrogen . Suspended Solids 	Twice yearly sampling and testing of runoff prior to discharging to Tweed River.	Tweed Shire Council and Department of Environment and Conservation.
Contamination	<ul style="list-style-type: none"> . Organo-chlorine Pesticides . Organo-phosphorus Pesticides 	Annual sampling and testing of soil.	Tweed Shire Council and Department of Environment and Conservation.
Acid Sulphate Soils	pH	Monitor soil pH at two points per hectare every two years.	Tweed Shire Council and Department of Environment and Conservation.
Air	Dust nuisance resulting in reasonable complaints.	Regular monitoring of air quality if valid complaints are received.	Tweed Shire Council and Department of Environment and Conservation.
Noise	<ul style="list-style-type: none"> . Daily average maximum or Leq (15 min) \leq 55 dB(A) . Evening average maximum or Leq (15 min) \leq 45 dB(A) . Night average maximum or Leq (15 min) \leq 38 dB(A) 	In response to valid complaints. It should be noted that these noise limits are typically applied to new activities, and that the receivers in this situation also conduct similar farming activities, and as such, expect some level of noise from their own, and adjoining farming operations.	Tweed Shire Council and Department of Environment and Conservation.
Land Levels	Ensure that land levels are not lowered by more than 50mm.	Prepare a monitoring survey every two years.	Tweed Shire Council and Department of Environment and Conservation.
Archaeology	Presence of Aboriginal cultural heritage material.	Visual inspections during planting, slashing and cutting.	Regional Archaeologist, Department of Environment and Conservation, Tweed Byron Local Aboriginal Land Council.

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