I. Working surfaces EPA Goal

To ensure storage areas, active composting surfaces, and associated access roads are constructed to prevent the pollution by leachate of subsoil, groundwater and surface water bodies and to allow all-weather vehicular access to any part of the processing site that needs to be reached by vehicles.

Mınımum Design Requirement is met as follows:

The green waste shredding area will have an impervious concrete concrete layer to prevent infiltration from the shredding surface. or asphalt

The green waste shredding area has a perimeter drain to collect and direct runoff to the green waste runoff collection pond.

Composting and storage will be undertaken in a weatherproof shed which will have a concrete floor.

Leachate barrıer system A Goal

To prevent the pollution by leachate of subsoil, groundwater water bodies over the period of time that raw organics or pi on the premises, beyond the closure of the facility, and until has ceased to pose potential environmental threats. anics or produce, and until the d surface ucts remain premises

Mınımum Design Requirement is met as follows:

The green waste shredding area has an impervious layer to infiltration from the shredding surface. The impervious layer will be or asphalt cement (AC) pad of a thickness of at least 100 mm constructed concrete is to be

e concrete or AC pavement will be designed for a traffic loading of ESA. Assuming a CBR of 5, the pavement thickness will be in the 340 mm including a minimum of 100 mm concrete of AC thickness. order

vehicles and concrete or AC layer will withstand the loads from id equipment that are required to operate the facility

Leachate collection system A Goal

To ensure that leachate is collected efficiently at the composting related processing facility for further management, thereby avoiding pollution and/or odour problems. ling water

Mınımum Design Requirement is met as follows

The composting process will occur under cover in a weat and will produce no or at worst a small volume of leachate.

The composting process shed will have a concrete polyethylene membrane in order to prevent leachate groundwater. e floor underlain lain by a into the

A primary concrete tank with a volume of 5,000 litres. The will be fitted with a watertight lid and internally sealed coating to ensure watertightness. e compost lowing: process leachate collection system will consist e concrete tank with an epoxy of the

A secondary concrete tank with a volume of 2,500 litres. The cortank will be fitted with a watertight lid and internally sealed with an coating to ensure watertightness. epoxy

secondary tank will be connected to the primary tank at re the primary tank is at 4,000 litre storage (80%) capacity. at the level

The primary collection tank will be fitted with a sensor to indicate 75% capacity (ie 3,750 litres. At this point the site manager shall arrange to have the primary tank pumped out by a liquid waste tanker and disposed of at an appropriate treatment facility.

Leachate storage system

Goal
To ensure that leachate is stored efficiently at the processing facility for further management, thereby and/or odour problems. composting and related avoiding water pollution

Minimum Design Requirement is met as follows:

The compost process leachate collection and storage system the following: will consist of

A primary concrete tank with a volume of 5,000 litres. The will be fitted with a watertight lid and internally sealed coating to ensure watertightness. e concrete tank with an epoxy

A secondary concrete tank with a volume of 2,500 litres. tank will be fitted with a watertight lid and internally sealed coating to ensure watertightness. The With

The secondary tank will be where the primary tank is at connected to the 4,000 litre storage primary tank at (80%) capacity. at the level

The primary collection tank will be fitted with a storage level sensor to indicate 75% capacity (ie 3,750 litres. At this point the site manager shall arrange to have the primary tank pumped out by a liquid waste

C D m

ADDED

17-11-2015 8 MAY 2015 22-04-2015 30-01-2015

W.M. W.M. W.M. W.M.

17 JUNE 14

Drawn by

Amendment or reason for issue

tanker and disposed of at an appropriate treatment

inspection of the |eve| ∃ the leachate storage 6

Ъе

DO NOT SCALE

EASEMENT FOR TRANSMISSION

LINE 45.72 WIDE

Six monthly testing of the storage level sensor is to be performed.

It is noted that above ground tanks are preferred, however under tanks are proposed in this case because the composting area is weather proof shed which will mean that the generation of leachate with or very small.

The composting process will be undertaken in a weatherproof shed. There will therefore be no need to make provision for rainwater inflow to the leachate storage system. It is noted that rainwater from the weatherproof shed will be harvested for use on site for dust suppression.

5. Surface water controls
Goal
To avoid the generation of excessive leachate and to prevent any or pollutants from being carried off the premises.

Minimum Design Requirementis met as follows: The surface water controls must at least meet the following requirem

AREA

× 26.00

EQUIPMENT AREA

CONTAINER

SKIP BIN STORAGE AREA

LINE

VEHICLE TURNING/BACKING

TAGE

ZONE LINE

prevention of surface water mixing with organics will achieved by unde the composting process within a weatherproof building. The buildi effectively prevent surface water mixing with the composting material. For composting and storage; prevention of surface water m rtakıng ng will

For green waste shredding; prevention of surface water mixing with organics will be

achieved by:

HIGH KERB

elevating the green waste shredding area above system in order to ensure that surface water does green waste shredding area. the internal ros not run onto road the

internal road and stormwater system is designed to collegert surface water away from the green waste shredding are rinal road has a central V drain in order to ensure that ser runs away from the shredding area.

contamination of runoff will be prevented by undertaking process and storage within a weatherproof building. Teffectively prevent surface water mixing with the composting undertaking the compost building. The building building building e composting material.

For green waste shredding handling; treatment of runoff from the shredding area will be

system i green w elevating the ing the green waste shredding area above the internal roan in order to ensure that surface water does not run ontowaste shredding area.

the internal road and stormwater system is designed to collect divert surface water away from the green waste shredding area. internal road has a central dish-drain in order to ensure that sur water runs away from the shredding area.

EASEMENT FOR GAS PIPELINE 20

LOADING AREA FOR PROCESSED AND UNPROCESSED SAND, SOIL, TIMBER AND GREEN WASTE

PROCESSING

SEPARATE GENERAL SOLID WASTE FOR FUTURE PROCESSING AND/OR PLACEMENT IN RELEVANT STOCKPILE REFER TO D.J. DESIGN PLAN 21304/SHEET 18-REV-E

STOCKPILING AND LOADING
STOCKPILING AND LOADING
AREA FOR PROCESSED AND
UNPROCESSED CONCRETE,
BRICK, RUBBLE, ROCK,
STEEL SOIL LABOREILL ETC

HARDFILL

ETC

INDOOR

AND TORAGE SHED

COMPOSTING <40mm

STOCKPILING AND

COMPOST PRODUCTION

COMPOST PRODUCTION

(BASED ON

5

MONTH,

= 2500m³/yr = 250m³/month 2 MONTH NON F

DRAIN IN BUILDING TO COLLECT SEEPAGE FROM COMPOST, DISCHARGE TO COLLECTION TANKS

TOP

Δ.

PROVIDE 5,000 LITRE
UNDERGROUND CONCRETE
TANK FOR LEACHATE

PROVIDE 2,500 LITRE
SECONDARY UNDERGROUND
CONCRETE TANK FOR
LEACHATE COLLECTION

For composting; management of surface water generated from the design of a 1-in-10 management of surface water generated from the design of a 1-in-10 24-hour-period storm event will not be required because the compoperations are within a weatherproof building. The building will effe prevent surface water mixing with the composting material.

For green waste shredding; management of surface water generated from the design of a 1-in-10 year, 24-hour-period storm event will be achieved by minimising the area of green waste exposed to rainfall and ensuring the shredding pond has sufficient volume. As runoff will not be heavily loaded with organic matter, water retained in the green waste shredding pond may be used a supplementary supply for dust suppression on site.

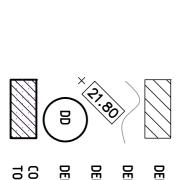
× 30.70

GREEN WASTE SHREDDING AREA

GREEN WASTE STOCKPILE TO
BE COVERED BY TARPAULIN
WHEN STOCKPILE IS TO BE IN
PLACE LONGER THAN 21 DAYS

The internal road and stormwater system is designed to collect and surface water away from the green waste shredding area. The internates a central V drain in order to ensure that surface water runs awa the shredding area. divert

LEGEND



DENOTES EXISTING CONTOURS DENOTES PROPOSED BUILDING

COMPOSTING AND STORAGE SHED, CONCRETE FLOOR, DRAIN TO UNDERGROUND LEACHATE COLLECTION TANKS DENOTES HUMECEPTOR DOWNSTREAM DEFENDER DENOTES PROPOSED SURFACE LEVELS

† DENOTES STAGE 1 LIMITS DENOTES STORMWATER PITS GREEN WASTE SHREDDING AREA, CONCRETE OR ASPHALT SURFACE, REFER TO DRAWING KF110816/C17 DETENTION POND

POND

RUNOFF

HREDDING

-RECYCLING POND____

WATER

DETENTION
-BASIN A

O

RECYCLED WATER PUMP

RESTRICTED STOCKPILING AREA

DENOTES STAGE 2 LIMITS

K.F. Williams & Associates Pty Ltd 28 Auburn Street Wollongong NSW 2500 A.C.N 008 664 417 Project Management, Surveying, Civil, Structural, Water & Sewer

Pty Ltd

p (02) 4228 7044f (02) 4226 2004e mail@kfw.net.auwww.kfw.net.au

DENNIS SMITH te of Survey

FUTURE

ROAD

PLAN SCALE 1:500

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M PROUDLOVE

MAR 2014 C.P.Eng

00 @ A1)00@ A3 PROPOSED INDUSTRIAL DEVELOPMENT WYLLIE ROAD, KEMBLA GRANGE LEACHATE CONTROL PLAN LOT 10 DP 878167 **ISSUED FOR DA APPROVAL** 16 KF110816 ç

NFRASTRUCTURE PROFESSIONALS

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PLOTTED BY: aproudlove