Queensland Government

Department of
Environment and Heritage Protection

25-MAR-2015

To: Binya Park Pty Ltd
Suite 1
6 Waterfront Place
ROBINA QLD 4226

Email: nwills@newground.com.au

Attention: Nelson Wills

Our reference: 350447

Application details

I refer to the application that was received by the administering authority on 23-MAR-2015.

Land description: 68 Thomas Road, UPPER LOCKYER QLD 4343 Lot 2 Plan RP803198.

Decision

Your application has been approved and your environmental authority (reference EPPR03049915) is attached.

Should you have any further enquiries, please contact Christine Hall on telephone 1300 130 372 (option 4).

Yours sincerely

	25-March-2015
Signature	Date

Jodie Brackenbury
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Christine Hall
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@derm.qld.gov.au
Website **www.ehp.qld.gov.au**
ABN 46 640 294 485

Enclosed

Permit - environmental authority (reference EPPR03049915)

Permit[1]

Environmental Protection Act 1994

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit[1] number: EPPR03049915

Environmental authority takes effect when development works occurs and you have given written notification to the administering authority of the occurrence.

Please send written notification to Permit and Licence Management that the above event has occurred, or is about to occur, to the following address:

Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Email:**palm@ehp.qld.gov.au**

The first annual fee is payable within 20 business days of the effective date.

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder

Name	Registered address
Binya Park Pty Ltd	Level 6, 30 Makerston Street BRISBANE CITY QLD 4000

Environmentally relevant activity and location details

Environmentally relevant activity	Location
63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR	68 Thomas Road and UPPER LOCKYER QLD 4343 - Lot 2 Plan RP803198

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

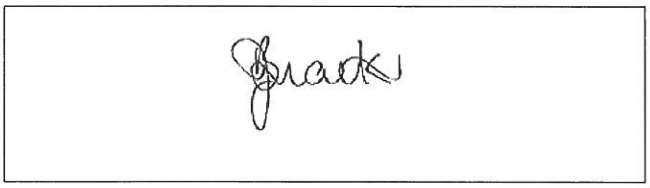
the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

25-March-2015

Date

Jodie Brackenbury
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Christine Hall
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@derm.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Schedules

Schedule A – General
Schedule B – Air
Schedule C – Water
Schedule D – Land
Schedule E – Noise
Schedule F – Waste
Appendix 1

CONDITIONS

Schedule A – General

A1 **Prevent or minimise likelihood of environmental harm**
In carrying out an Environmentally Relevant Activity (ERA) to which this approval relates, all reasonable and practicable measures must be taken to prevent and minimise the likelihood of environmental harm being caused.

A2 **Maintenance of measures, plant and equipment**
The operator of an ERA to which this approval relates must:
(a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval;
(b) maintain such measures, plant and equipment in a proper and efficient condition; and
(c) operate such measures, plant and equipment in a proper and efficient manner.

A3 **Site Based Management Plan**
From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:
(a) environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals;
(b) identification of environmental issues and potential impacts;
(c) control measures for routine operations to minimise likelihood of environmental harm;
(d) contingency plans and emergency procedures for non-routine situations;
(e) organisational structure and responsibility;
(f) effective communication;
(g) monitoring of contaminant releases;
(h) conducting environmental impact assessments;
(i) staff training;
(j) record keeping; and
(k) periodic review of environmental performance and continual improvement.

A4 The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.

A5 The contingency plans and emergency procedures required to be included in the SBMP as per condition (A3)(d) must address the following measures:
(a) the location of any overflow structures;
(b) procedures to be implemented to reduce the likelihood of any pump failure and the likelihood of any release of contaminants;
(c) response procedures to prevent any further release, or if not practical, to minimise the extent and duration of any release;
(d) the practices and procedures to be employed to address any contaminants that have been released, or if not practicable, measures that will be employed to mitigate any further environmental impacts of the release (these actions must also take into account wet and dry weather conditions);
(e) a description of the resources that will be available in the event of a release;
(f) ensuring that these resources will be available and operational in the event of a release;
(g) training of any persons that may be called upon to respond to any such incident;
(h) procedures to investigate the cause of any release;

(i) remedial procedures that will be put in place to address any environmental harm that may have occurred as the result of any release;
(j) the provision of documented procedures to staff likely to attend any release that will allow them to respond accordingly; and
(k) timely and accurate reporting of the circumstances and nature of release events to the administering authority.

A6 A copy of the most recent version of the SBMP must be kept at the approved place to which the plan relates and be available for examination by an authorised person or the administering authority on request.

A7 **Records**
Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

A8 All records required by this approval must be kept for 5 years.

A9 **Notification of environmental incidents**
Telephone the administering authority's 'Pollution Hotline' (1300 130 372) or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

A10 **Written notification of environmental incidents**
A written notice detailing the following information must be provided to the administering authority within 10 business days of any advice provided in accordance with condition (A9):
(a) the name of the operator, including their approval / registration number;
(b) the name and telephone number of a designated contact person;
(c) quantity and substance released;
(d) vehicle and registration details;
(e) person/s involved (driver and any others);
(f) the location and time of the release;
(g) the suspected cause of the release;
(h) a description of the effects of the release;
(i) the results of any sampling performed in relation to the release;
(j) actions taken to mitigate any environmental harm caused by the release; and
(k) proposed actions to prevent a recurrence of the release.

A11 **Monitoring**
A competent person(s) must conduct any monitoring required by this approval.

A11 **Equipment calibration**
All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, appropriately operated and maintained.

A12 **Trained / Experienced Operator(s)**
The daily operation of the waste water treatment system and any associated pollution control equipment must be carried out by a person(s) with appropriate experience or qualifications to ensure the effective operation of that treatment system and control equipment.

A13 **Spill Kit**
An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA.

A14 **Spill Kit Training**
Anyone operating under this approval must be trained in the use of the spill kit.

A15 Annual Monitoring Report

An annual monitoring report must be prepared each year and presented to the administering authority or an authorised person when requested. The report must include the following:

(a) a summary of the results of the preceding 12 months of any monitoring programs required by this approval, this must include a graphical representation of a comparison of the monitoring results and any relevant limits imposed by this approval;
(b) a comparison of the preceding 12 months results with the previous 12 months results of any monitoring programs required by this approval, this must include a graphical representation of a comparison of the monitoring results and any relevant limits imposed by this approval;
(c) confirmation that the required sampling was performed by a person meets the requirements of condition (A12);
(d) a summary of the records of the volume of treated effluent irrigated to land; and
(e) a summary of any records of any equipment failures or other incidents that may have occurred during the twelve month period as well as a description of what actions were taken to address the issue.

A16 Sewage treatment plant alarms, warnings and failure mode

The sewage treatment plant must be fitted with pump failure alarms and high level alarms that warn of imminent plant overflow.

A17 All alarms must be able to operate without mains power.

A18 Power outage

In the event of a power outage the plant must not release or be able to release effluent to the irrigation area or have any release of sewage to the environment.

A18 Complaint register

The person undertaking the activity to which this approval relates must record the following details for all complaints received and provide this information to the administering authority or an authorised person on request:

a) time, date, name and contact details of the complainant;
b) reasons for the complaint;
c) any investigations undertaken;
d) conclusions formed; and
e) any actions taken.

End of Schedule A

Schedule B – Air

B1 **Noxious or offensive odours**
The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

B2 **Dust**
The release of dust or particulate matter resulting from the activities must not cause an environmental nuisance at any nuisance sensitive or commercial place.

End of Schedule B

Schedule C – Water

C1 **Releases to waters**
There must be no release of any contaminants from the site to waters.

C2 **Stormwater Management**
There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

C3 **Stormwater Diversion**
Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any structures used for the treatment of contaminants or wastes as well as any areas to which treated effluent is irrigated.

End of Schedule C

Schedule D – Land

D1 Land disposal

The only contaminant permitted to be released to land is treated effluent to the areas shown in Appendix 1 – Map 1: Irrigation areas, in compliance with the limits levels stated in Table 1 - Contaminant release limits to land and the conditions of this approval.

Table 1- Contaminant release limits to land

Quality Characteristics	Units	Sample point	Minimum	Median	Maximum
Dissolved Oxygen	mg/L	A single sample from a single irrigation standpipe within each irrigation area.	2.0		
5 Day Biological Oxygen Demand	mg/L				20
pH	scale		6.0		8.5
Suspended Solids	mg/L				30
Total Dissolved Solids or Electrical Conductivity	mg/L or µs/cm				1,000 or 1,600
Total Nitrogen	mg/L				30
Total Phosphorous	mg/L				15
Free Chlorine Residual	mg/L				0.5
E. Coli	Colony forming units per 100ml			100*	150

Note: * median value requires five consecutive samples taken over 24 hours at no less than 30 minute intervals

D2 Monitoring frequency

Monitoring must be undertaken for all effluent quality characteristics mentioned in condition D1 once every period of two months for a period of 12 months from the date this approval takes place and if continuous compliance can be demonstrated thereafter once in each period of three months.

Should a non-compliance with the limits occur after this time, then monthly monitoring must be resumed until three consecutive monthly samples show compliance with the contaminant releases limits to land at which time three monthly monitoring may be resumed.

D3 Release of contaminants

Not withstanding the effluent quality characteristics limits specified in Table 1 – Contaminant release limits to land, releases of treated effluent must not have any properties, nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

D4 Monitoring Locations

Monitoring samples must, for the purposes of compliance with condition (D1), be taken from the point of discharge within the irrigation areas.

D5 Sample requirements

All effluent samples taken for the purposes of measuring or monitoring compliance with the conditions of this approval must be:

(a) taken in accordance with the methods prescribed in the latest edition of the administering authority's Water Quality Sampling Manual; and

(b) representative of the typical discharge of the sewage treatment plant.

D6 Volume of effluent released

The daily volume of treated effluent released to land must be determined by a flow meter, and records kept of any such determinations.

D7 Volume of influent flow

The daily volume of influent flow to the sewage treatment plant must be determined by a flow meter, and records kept of any such determinations.

D8 Effluent Irrigation

The irrigation of effluent must be carried out in a manner such that:

(a) vegetation is not damaged;
(b) soil erosion and soil structure damage is avoided;
(c) there is no surface ponding of effluent;
(d) percolation of effluent beyond the plant root zone is minimised;
(e) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by oxygen demand and water is not exceeded; and
(f) the quality of ground water is not adversely affected.

D9 Irrigation method

Irrigation of effluent must only be undertaken using irrigators that produce a large droplet size. Irrigation must not take place when wind speed is such that airborne irrigated effluent would reasonably be expected to travel beyond the irrigation area.

D10 Identification of irrigation areas

Visible and legible notices must be prominently displayed on areas undergoing effluent irrigation, warning the public that the area is irrigated with effluent and not to use or drink the effluent.

D11 Pipelines and fittings associated with the effluent irrigation system must be clearly identified.

D12 Lockable valves or removable handles must be fitted to all release pipes situated in public access areas.

D13 Irrigation Area

The operator of this activity must ensure that the two irrigation areas identified in Appendix 1 – Map 1 'Irrigation Areas' each have a minimum irrigation area of 1,200 m^2.

D14 Buffer distance

A minimum buffer distance of 39m must be maintained between the irrigation area and Murphy's Creek.

D15 All grass clippings or other vegetation that might otherwise be collected, must be removed from the irrigation area.

D16 Wet weather storage

When rain events prevent the irrigation of treated effluent to land (i.e. ponding is evident within the irrigation area), the contaminants must be directed to wet weather storage or alternatively measures must be taken to or lawfully dispose of the treated effluent (i.e. tanking off site to another treatment plant or sewer). A record must be kept of any treated effluent that may be removed off site, including destination, transporter, dates and volumes.

D17 Any onsite wet weather storage must be capable of containing the expected capacity for 5 days of the volume of treated effluent released by the sewage treatment plant.

D18 Irrigation Monitoring Program

Prior to the commencement of this ERA the operator must have in place an Irrigation Management Plan (IMP) which details how the effluent irrigation process will be effectively and appropriately managed so as to ensure that the release of effluent to land is carried out in an environmentally sustainable manner.

As a minimum, the IMP must include:

(a) soil and sub-soil analysis, including assessment of the soils including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR) of the contaminant release area(s), to be carried out at no less than two representative sites;

(b) ground water monitoring that determines the existence and rate of infiltration of effluent that has been irrigated to land, and the potential or actual impacts on ground water from such infiltration, to be carried out;

(c) determination of the quantity and quality of contaminants applied;

(d) periodic re-assessment, including modelling of the water, nutrient and salt balances and irrigation rate and return period should be undertaken, if necessary, to ensure sustainable use of the contaminant release area is being achieved; and

(e) reporting of monitoring results, and an assessment of the impact of the releases on the contaminant release areas.

D19 Soil Impact Monitoring

In addition to monitoring required by condition (D18), the operator of this ERA must monitor and keep records of the soil characteristics listed in Table 2 – Soil Impact Monitoring. Monitoring must include the taking of representative topsoil and subsoil samples from the irrigation areas identified in Appendix 1 – Map 1 – Irrigation areas.

Table 2 – Soil Impact Monitoring

Quality Characteristics	Units	Monitoring Frequency
pH	pH scale	Once prior to the commencement of the ERA and then not fewer than once every three years.
Specific conductance or electrical conductivity	µS/cm	
Calcium	mg/kg	
Magnesium	mg/kg	
Potassium	mg/kg	
Cation exchange capacity	meq/100g	
Exchangeable calcium	meq/100g	
Exchangeable magnesium	meq/100g	
Exchangeable sodium	meq/100g	
Exchangeable potassium	meq/100g	
Exchangeable aluminium	meq/100g	
Exchangeable sodium percentage	%	
Total nitrogen as N	mg/kg	
Phosphate (Colwell)	mg/kg	
Boron	mg/kg	
Chloride	mg/kg	

D20 Onsite containment systems

All chemicals and fuels stored onsite must be stored within a containment system.

NOTE: All chemical storages must be designed, constructed and maintained in accordance with the appropriate Australian Standard (i.e. AS 1940 - Storage and Handling of Flammable and Combustible Liquids)

End of Schedule D

Schedule E – Noise

E1 **Noise nuisance**
Noise from the ERA must not cause an environmental nuisance at beyond the boundaries of the site

E2 **Noise limits**
All noise from activities must not exceed the levels specified in Table 3 - Noise limits at any nuisance sensitive or commercial place.

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
	Noise measured at a 'Noise sensitive place'					
$L_{A10, adj, 10 mins}$	Bkg + 5	Bkg + 5	Bkg + 0	Bkg + 5	Bkg + 5	Bkg + 0
$L_{A1, adj, 10 mins}$	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5
	Noise measured at a 'Commercial place'					
$L_{A10, adj, 10 mins}$	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5
$L_{A1, adj, 10 mins}$	Bkg + 15	Bkg + 15	Bkg + 10	Bkg + 15	Bkg + 15	Bkg + 10

E3 **Noise monitoring**
When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:
- background noise level;
- $L_{A\ 10, adj, 10 mins}$;
- $L_{A\ 1, adj, 10 mins}$;
- $L_{Aeq, adj, 10mins}$;
- $L_{Amax, adj, T}$;
- the level and frequency of occurrence of impulsive or tonal noise;
- atmospheric conditions including wind speed and direction;
- effects due to extraneous factors such as traffic noise; and
- location, date and time of recording.

E4 The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.

End of Schedule E

Schedule F – Waste

F1 **Waste Management Plan**
From commencement of an ERA to which this approval relates, a waste management plan must be implemented. The waste management plan must address at least the following matters:

(a) the types and amounts of waste generated by the ERA;
(b) how the waste will be dealt with, including a description of the types and amounts of waste that will be dealt with under each of the waste management practices mentioned in the waste management hierarchy (section 10 of the *Environmental Protection (Waste Management) Policy 2000*);
(c) procedures for identifying and implementing opportunities to improve the waste management practices employed e.g. opportunities for beneficial reuse of biosolids;
(d) procedures for dealing with accidents, spills and other incidents that may impact on the waste management;
(e) details of any accredited management system employed, or planned to be employed, to deal with the waste;
(f) how often the performance of the waste management practices will be assessed (at least annually); and
(g) the indicators or other criteria on which the performance of the waste management practices will be assessed.

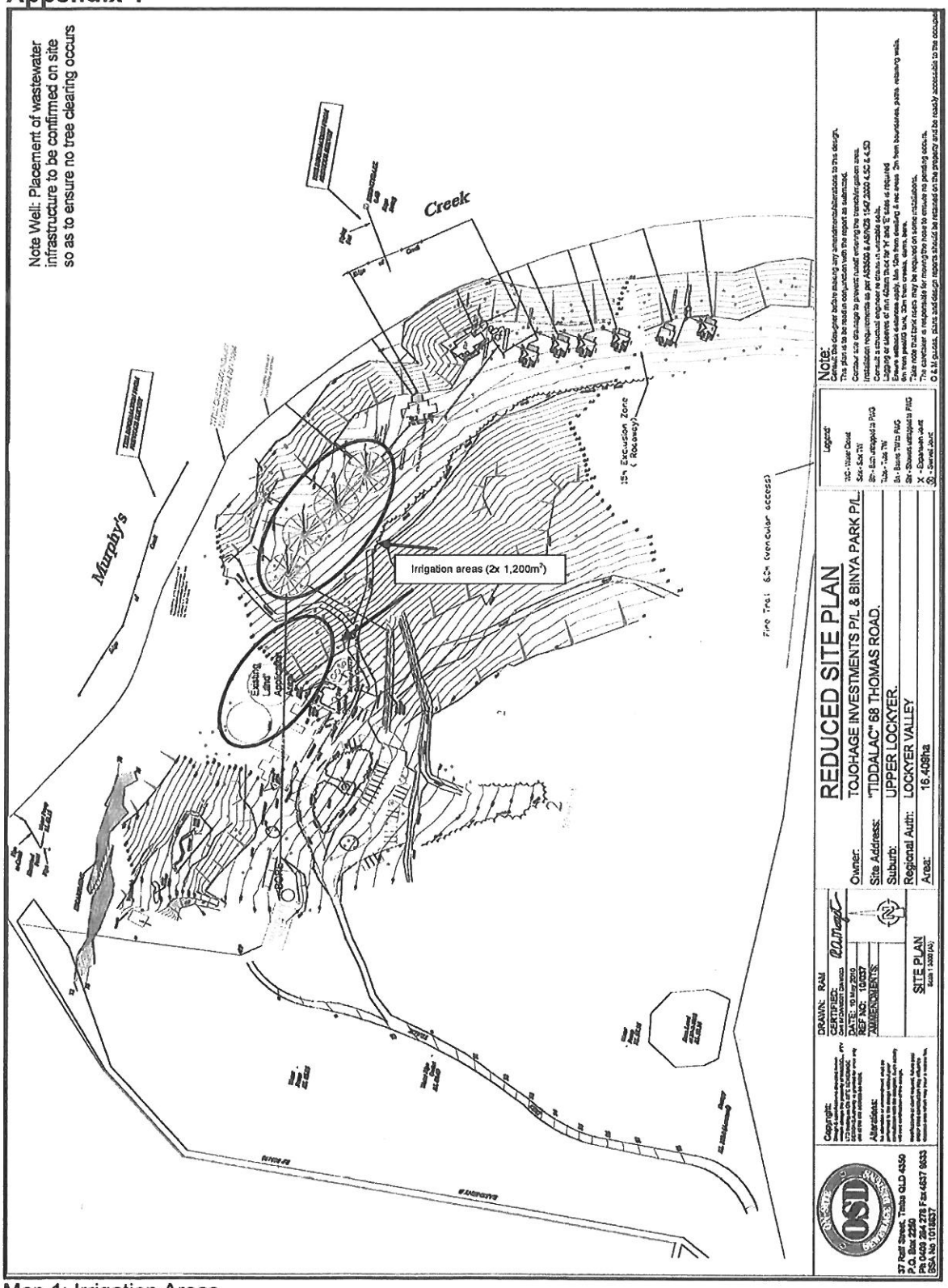
F2 Waste generated in the carrying out of this ERA must be stored, handled and transferred in a proper and efficient manner so as to not cause or have the potential to cause environmental harm.

F3 Any loss or spillages of regulated waste must be cleaned up immediately.

End of Schedule F

END OF CONDITIONS

Appendix 1



Map 1: Irrigation Areas