



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 1017/1

File Number: 22354 and SC1556

Duration of Permit: From 6 May 2006 to 31 January 2018

PERMIT HOLDER

City of Albany

LAND ON WHICH CLEARING IS TO BE DONE

LOT 314 ON PLAN 48576 (RESERVE 34370)

AUTHORISED ACTIVITY

1. Clearing of up to 4.5 hectares of native vegetation within the area hatched yellow on attached Plan 1017/1.

CONDITIONS

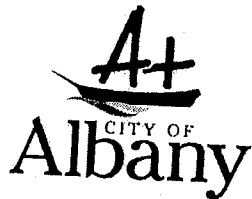
1. The Permit Holder shall retain the vegetative material and topsoil removed by clearing in accordance with this Permit.
2. The Permit Holder shall take the following measures prior to revegetation of the area hatched yellow on attached Plan 1017/1:
 - a) deep rip the soil to a depth of between 50mm and 500mm at 2m intervals along the contour; and
 - b) lay the vegetative material and topsoil retained under condition 1 of this permit to an even depth on exposed soil.
3. After completing the works required under condition 2, the Permit Holder shall sow the area hatched yellow on attached Plan 1017/1 with seed. The seed mixture shall consist of *Sphenatoma parviflorum* and other local native species found within a 5km radius of the site. The seed mixture shall be spread at a minimum rate of 0.5 kilograms per hectare.
4. The Permit Holder shall complete the works required under condition 2 and 3 by 1 December 2013.
5. During the month of April, May or June of each year between 2015 to 2017 inclusive, sowing of the seed mixture of the kind referred to in condition 3 shall be repeated on those parts of the area hatched yellow on attached Plan 1017/1 where the plant survival rate (measured at September of the previous year) is below 20000 stems per hectare. *Sphenatoma parviflorum* seed need only be included in the seed mixture if required under condition 6 of this Permit.
6. If no living specimens of the *Sphenatoma parviflorum* are identified within the area hatched yellow on attached Plan 1017/1 during the month of September each year between 2014 and 2016 inclusive, the Permit Holder shall sow *Sphenatoma parviflorum* seeds during the month of April, May or June of the following year as part of condition 5 of this Permit.
7. The Permit Holder shall record the native plant density and species in the area hatched yellow on attached Plan 1017/1 during the month of September each year between 2014 and 2017 inclusive. The Permit Holder shall record the species sown and quantity of seed applied each year under conditions 3 and 5 of this Permit.
8. The Permit Holder shall provide a report to the Chief Executive Officer by 1 December for the year 2017, setting out the records required under condition 7 of this Permit in relation to the works carried out during the period covered by this Permit.


Paul Rosair

Director, Regional Operations, Department of Environment.

Officer delegated under Section 20 of the Environmental Protection Act 1986

6 April 2006



ESTABLISHMENT & REHABILITATION OF CITY OF ALBANY LIME PIT ON LOT 314 OF RESERVE 34370

1.0 PIT ESTABLISHMENT

- 1.1 Survey required area.
- 1.2 Conduct Native Title search on area with the Department of Indigenous Affairs.
- 1.3 Carry out comprehensive flora survey detailing:-
 - (a) Vegetation types and major species in each assemblage.
 - (b) The significance of vegetation in context of local and regional biodiversity and representation.
 - (c) Locations of **RARE** and **PRIORITY** flora using documentation and maps.
 - (d) All species that are growing in the area for comparison during the rehabilitation process.
- 1.4 Draw up pit management, operation and rehabilitation plans comprising:-
 - (a) Aerial photograph of pit area showing planned stages of pit operation.
 - (b) Documentation and timeframe detailing how each stage of the pit is to be developed and managed.
 - (c) Documentation of pit operation conditions, e.g. noise and dust control, hours of work, pollution and any other conditions that may impact on the area.
 - (d) A pit rehabilitation plan including site preparation, plant species and density desired, seed collecting and storage, weed control, monitoring plant growth and follow up re-seed programme details.
- 1.5 Provide the Department of Environment with the following information to obtain a clearing permit:-
 - (a) Pit management plans as described in Pit Establishment - Section 4.
 - (b) Pit operating conditions as described in Pit Establishment - Section 4.
 - (c) Flora survey as described in Pit Establishment - Section 3.
 - (d) Pit rehabilitation plans as described in Pit Establishment - Section 4.
 - (e) Native title clearance from the Department of Indigenous Affairs as described in Pit Establishment - Section 2.
- 1.6 Organise seed collection including **RARE** and **PRIORITY** species from the site by suitably qualified persons.
- 1.7 Spray and/or remove any weed infestation prior to clearing or disturbing the area.

2.0 METHODOLOGY

- 2.1 The area will be cleared of all vegetation and topsoil and stockpiled ready for rehabilitation at a later date. The clearing of vegetation and topsoil removal can be done as one operation as the vegetation in the area is mainly coastal scrub.
- 2.2 This process will be conducted in stages, as the limestone is required. This could take from 8 - 10 years, depending on volumes of limestone required.

2.0 METHODOLOGY (cont'd)

- 2.3 When stockpiled limestone is removed and pit floor is not required for further limestone production, the area can then be fully rehabilitated.
- 2.4 Before removal of all the vegetation, seed including any **RARE** and **PRIORITY** species will be collected from the area by suitably qualified persons and stored for rehabilitation at a later date (at the rate of 0.75 kilograms per hectare depending on the shelf life of the seed being collected). 10 years is considered maximum shelf life for seed collected if kept in a cool room. Seed with a shelf life less than the required time will have to be collected from a suitable site within a 5km radius of the pit site, determined by a suitably qualified person.

3.0 PIT REHABILITATION

- 3.1 This process is best carried out during the autumn months.
- 3.2 The pit floor will be contoured in a way as to control water run off and erosion.
- 3.3 The pit floor will be ripped on the contour at 2m intervals and .5m deep.
- 3.4 The stockpiled topsoil will be spread evenly over the ripped floor only using stockpiled topsoil for that particular area.
- 3.5 Spreading of collected seed for the area can be performed now. The seed mixture will be spread at a minimum rate of 0.75 kilograms per hectare. Any **RARE** or **PRIORITY** species found in the area **must** be included in the seed mixture.
- 3.6 A follow up survey of the rehabilitated sites will be carried out by suitably qualified persons every 12 months, in the spring, to determine if more seeding is required and to control any weed infestation. A survival rate of 20,000 plus stems per hectare, being a mixture of at least 5 species from the area rehabilitated is required in the first 12 months.

4.0 FOLLOW UP PROGRAM

- 4.1 A walk through survey of the rehabilitated areas will be carried out by suitably qualified persons during the first spring and every spring thereafter for 5 years to monitor the establishment of the natural vegetation and any weed infestations. The survey team will have a copy of the documented species for that area to compare plant species with. This team will identify any species not growing and organise collecting where possible, seed from adjacent bush or use seed from previous collection in the area to re-seed with. They will also control weed infestations during the survey and notify Council of any outbreaks they cannot handle.
- 4.2 A written report will be supplied to Council and the Department of Environment at the end of each survey to indicate the progress of the revegetation and weed control programme.
- 4.3 This yearly survey needs to be done until a satisfactory cover of between 150,000 to 200,000 stems per hectare being a mixture of all required species is obtained and all weed infestations eradicated.

LIME PIT MANAGEMENT PLAN

FOR RESERVE 34370

P 1 WATER CATCHMENT AREA

It is acknowledged that groundwater under Reserve 34370 is an important resource currently used to supply the Albany community with quality drinking water. In preparing this management plan, the City of Albany recognises the need to ensure that limestone quarrying operations on Reserve 34370 do not represent an unnecessary risk to groundwater in the area.

INITIAL ESTABLISHMENT

1. Licensed surveyor to establish boundary extremities of new reserve.
2. Clear a fence line to join up the new boundary points.
3. Erect security fence around the boundary of newly created reserve within reserve 34370. The fence will be a minimum of 1.8m high and each section of fence with a DANGER EXCAVATIONS KEEP OUT sign attached.
4. Entrance to the pit will be through a gate situated at the South Eastern corner of the new fence line, also a gate will be situated at the South Western corner for Water Corporation access through the pit area to their bore fields.

METHODOLOGY

1. The pit floor levels will be established at 17.99 A.H.D. This is 14.49m above the high water rest level of approximately 3.5 A.H.D. This level was supplied to the COA. by the Water Corporation at Albany. The Department of Environment recommends a minimum 3m buffer between the highest point of the underlying water table and the pit floor where quarrying is to be undertaken in an area where water is abstracted for drinking purposes.
2. Strip the vegetation and top soil off the Northern bank to expose the lime stone down to the required level of 17.99 A.H.D and stockpiled to the side ready for rehabilitation of the pit floor as the pit progresses through its stages.
3. The newly exposed bank and existing higher floor of the pit will be ripped and crushed through a mobile crushing plant. This process may take several years depending on requirements at the time.
4. During stage 3 the water main on top of the Southern bank will need to be relocated as the Eastern bank of the pit will be left in place to act as a buffer between the pit and bore 64. This will have to be organized with the Water

Corporation. Some batter works will have to be carried out on the Western side of the Eastern bank to make the bank safe. This will be done as the pit progresses towards the Eastern bank

5. In addition to this the Bench Mark S.S.M. M92A will have to be relocated. By the Lands & Surveys Department.
6. Once stages 3,4, and 5 have been completed, work will commence on the excavation of the wide face on the Southern side. This will eventually lead into the MRD pit area which the City of Albany has permission to enter. This permission may need to be confirmed as some time will have passed by this stage.
7. Rehabilitation of the pit floor will commence when work on the Southern face starts if not before. The floor of the pit will be levelled out so as no erosion can occur then the top soil and scrub push over it . All effort is to be made to ensure topsoil is stockpiled for rehab. Some planting of native vegetation of the area may need to be done if natural seed germination dose not occur.

PIT OPERATION CONDITIONS

1. No buildings to be erected on site.
2. No fuels, oils, water, or imported materials to be stored on site.
3. All machinery to be free of fuel, oil, and water leaks before entering the site. When leaks of a minor nature do occur on stationary machines the use of drip trays must be employed. These trays to be inspected daily to ensure no contamination escapes. The contents of these trays to be disposed of in the correct Environmental way off site.
4. All machinery to be free of noxious weed seeds before entering the site.
5. Control of weeds or vegetation onsite will only be undertaken after consultation with the Water Corporation Catchment Management Coordinator.
6. No spillages when filling fuel, oil, and water.
7. All major repairs to be done off site where possible.
8. If any spillages occur all other works must stop and the Catchment Management Coordinator of the Water Corporation notified. The Water Corporation will advise when the contaminated material can be removed off site to a site suitable for such contaminated material. The hole left will be back filled with clean limestone from the site.
9. Hours of work are to be from -7.00am – 6.00pm Monday to Friday- 7.00am – 5.00pm Saturday. No work on Sundays or public holidays.

10. Water Corporation to be notified of any activity lasting 2 or more consecutive days.
11. Gates to pit area to be locked at the end of each day, or if pit is going to be left unattended for along period of time during the day.
12. All Contractors and Council staff to be made aware of these conditions before entering the site.
13. All earthworks and crushing in the pit to be done during the summer months where possible to minimize contamination filtering through to the water table during rainy periods. If water has to be used for dust control check with the Water Corporation first for water quality to use.
14. All rubbish of any kind to be removed from the site each day.