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| ORDER ISSUED TO: | Notice Number: C0003877 |
| | Case Reference Number: 14619-2016 |
| | Date: 03 May 2019 |
| | |
| BY: Registered post | |
| CC: | |

ORDER TO CARRY OUT REMEDIATION WORK UNDER SECTION 11.15 OF THE BIODIVERSITY CONSERVATION ACT 2016 (NSW)

BACKGROUND

- A. The Office of Environment and Heritage (**OEH**) has responsibility for the enforcement of the now repealed *Native Vegetation Act 2003* (**NV Act**).
- B. The NV Act was repealed on 25 August 2017. However, pursuant to clause 58 of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* (**BC (S&T) Regulation**), the repeal of the NV Act does not affect any offence against that Act, or the regulations under that Act, that was committed before the repeal. The provisions of the NV Act relating to proceedings for an offence, issuing of penalty notices for an offence, and the making of a court order in relation to an offence continue to apply.
- C. Pursuant to clause 54 of the BC (S&T) Regulation, remediation orders under Division 4 of Part 11 of the *Biodiversity Conservation Act 2016* (**BC Act**) may be issued in relation to damage in or as a result of the commission of an offence under the NV Act committed before 25 August 2017.
- D. Pursuant to section 11.15 of the BC Act, if the Chief Executive of OEH is satisfied that damage has occurred in or as a result of the commission of an offence against the NV Act, the Chief Executive may order a person to carry out specified remediation work in a specified manner and within a specified time.
- E. West, Conservation and Regional Delivery within OEH.
- F. Senior Team Leader, Compliance and Regulation North West holds delegated authority on behalf of the Chief Executive of OEH for the purposes of section 11.15 of the BC Act.
- G. Government Area (the Properties). The properties are defined according to the land parcels listed in **Table 1**.

Table 1: Land parcels which comprise the properties

| | Lots |
|------|------|
| Lots | Lots |



H. The purchase of settled on the 26 March 2015; clearing was identified on the property prior to, and following, this date. This remediation order concerns clearing of native vegetation that occurred following 26 March 2015.

BASIS FOR ISSUING REMEDIATION ORDER

- I. OEH has investigated a report of the clearing of native vegetation on the Properties between January 2014 and January 2017.
- J. At that time, it was an offence to clear native vegetation contrary to section 12 of the NV Act.
- K. Information and evidence obtained to date, including an assessment of aerial and satellite imagery and a site inspection indicates that damage, caused by clearing native vegetation including threatened ecological communities, occurred on the Properties between January 2014 and January 2017.
- L. The information and evidence obtained to date also indicates that:
 - i) The clearing occurred in the Cleared Areas marked on the maps at Attachment A;
 - ii) The native vegetation communities cleared included the following Plant Community Types (PCT):
 - a. PCT 40: Coolabah open woodland wetland with chenopod/grassy ground cover on grey and brown clay floodplains (an Endangered ecological community)
 - b. PCT 39: Coolibah River Coobah Lignum woodland wetland of frequently flooded floodplains mainly in the Darling Riverine Plains Bioregion (an Endangered ecological community)
 - c. PCT 37: Black Box woodland wetland on NSW central and northern floodplains including the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion (an Endangered ecological community).
 - iii) The clearing involved the mechanical removal of native vegetation; and
 - iv) After the clearing was carried out, the Cleared Areas were cropped.
- M. The work required by this order provides for the remediation and restoration of native vegetation removed from the Cleared Area.

OPINION

N. I, service , Senior Team Leader, Compliance and Regulation - North West, am satisfied that remnant native vegetation has been damaged because of the commission of an offence against section 12 of the NV Act.



ORDER TO CARRY OUT REMEDIATION WORK

O. I, Senior Team Leader, Compliance and Regulation - North West, order (the Remediator) to carry out the following remediation work within the time specified.

1) REMEDIATION AREA

- a) In this Remediation Order (**Order**), **Remediation Areas** means the area as defined in the attached map marked **Attachment B**.
- b) This Order requires the Remediator to inform the Environment Agency Head of any change in the ownership or occupancy of the land concerned; more than 21 days prior to any such change occurring.

2) DURATION

a) This remediation order will be in force for 20 years; unless amended or revoked.

3) REMEDIATION WORK

Cultivation

- a) The Remediation Areas are to be excluded from cultivation practices; except as required by this Order.
- b) If a crop has already been sown into the Remediation Areas at the time of this Order, the sown area must be ploughed in.

Soil disturbance

c) Soil disturbance in the Remediation Areas is prohibited, except as a requirement of this Order. Consent may be sought from OEH to carry out remediation work involving soil disturbance.

Native vegetation remediation

- d) Sow the Remediation Areas that have been subjected to cultivation with native grasses as prescribed in **Attachment C**.
- e) Native vegetation is to be allowed to regenerate in the Remediation Areas as a priority method of remediation. Unless otherwise specified under this Order.
- f) If after a period of 4 years, over-storey species regeneration is occurring at a rate lower than 10 stems per hectare, then, plant over-storey species in accordance with the directions given in **Attachment C**.
- g) The Remediator must ensure that planted native vegetation within the Remediation Areas is maintained in accordance with the plant density requirements for the duration of this Order.
- h) All planted trees must be inspected and monitored quarterly and all dead plantings must be replaced by the time of the annual report submission to ensure required growth is sustained by the time of the 5-year OEH inspection.
- i) To protect rehabilitating vegetation communities and developing fauna habitat elements, the following activities are not permitted within the Remediation Areas:
 - Soil disturbance except as a requirement of this Order
 - Disturbance of vegetation except as a requirement of this Order.



Exotic flora

- j) If any non-native plant species or weeds defined as 'Priority Weeds' are identified within the Remediation Areas; these exotic species must be managed to occupy less than 5% of total ground cover, as soon as practicable. Control measures permitted include:
 - Spot application of herbicide.
 - Manual removal.
 - Biological control.

Pest animals

k) The Remediator must take all reasonable steps to control pest animals within the remediation area, by any approved means.

Stock

- All stock must be excluded from the Remediation Areas within seven days from the issue of this Order.
- m) If stock is found within the Remediation Areas, the stock should be removed as soon as practicable.
- n) Existing fences are to be maintained to ensure the exclusion of stock from the Remediation Areas.
- o) If the Remediator wishes to continue grazing rights within the land outside the Remediation Areas, the boundaries of the defined Remediation Areas must be fenced to a standard that excludes stock.
- p) If, at any time, the Remediator becomes aware that any fencing does not continue to exclude stock, the Remediator must replace or repair the fence as soon as practicable.
- q) After 5 years of compliance with this Order, the Remediator may apply to OEH for consent to undertake strategic grazing. Any such application will only be considered if OEH is satisfied that there are more than 15 stems per hectare of native tree species at least 3 metres high in the Remediation Areas.
- r) If any such application is approved by OEH, this Remediation Order may be varied to permit a sustainable grazing regime.

Fire

s) The Remediator must take all reasonable steps to prevent wild fire occurring within the Remediation Areas.

Hazards, chemicals and waste

- t) The use of chemicals; fertilisers, insecticides, herbicides, and soil ameliorants (e.g. gypsum, lime) is not permitted on the Remediation Areas except as required by this Order.
- u) Waste is not to be placed, stored or kept in the Remediation Areas.



4) INSPECTIONS AND RECORDS

- a) The Remediator must inspect the Remediation Areas four times each year, with a minimum of 80 days between each inspection for the purposes of determining:
 - The percentage of ground cover that is comprised of exotic plants and Priority Weeds.
 - If fencing continues to meet the requirements of this Order.
 - If any stock has impacted the Remediation Areas.
 - The presence of pest animals in the Remediation Areas.
 - If there is an increased risk of wild fire within the Remediation Areas.
- b) The fourth (annual) inspection each reporting period will include an inspection of regeneration within the Remediation Areas utilising the methodology outlined in **Attachment D**.
- c) The following records must be kept by the Remediator for all inspections:
 - The date(s) on which the inspection was undertaken.
 - The name of the person who undertook the inspection.
 - Observations made during the inspection.
 - Details of any required work within the Remediation Areas.
 - The date(s) of that work.
- d) All records required to be kept by this Order must be:
 - Accurate.
 - In a legible form.
 - Kept for the duration of the Remediation Order.

5) REPORTING

- a) The Remediator must prepare and submit an **Initial Works Report** to OEH by six weeks after issue of this Order. This report must contain:
 - Confirmation of the exclusion of stock and dates of any actions taken to remove stock.
 - The percentage of ground cover that is comprised of exotic plants and priority weeds.
 - An assessment of pest animal presence within the Remediation Areas.
 - Advice of any completed, required, or proposed work within the Remediation Areas.
- b) The Remediator must prepare and submit a **Monitoring Report** to OEH by 12 months after issue of this Remediation Order and annually thereafter in accordance with the methodology provided in **Attachment D**.



- c) Reports may be submitted to OEH using any of the following methods:
 - By registered post to:

Senior Team Leader Compliance and Regulation North West - OEH P.O. Box 2111 Dubbo NSW 2830

OR

By courier or by hand to:

Senior Team Leader Compliance and Regulation North West – OEH Level 1 52 Wingewarra Street, Dubbo NSW 2830

OR

By email to:

ROG.North@environment.nsw.gov.au

Marked to the attention of the Senior Team Leader Compliance and Regulation



6) **DEFINITIONS**

In this Order, the following definitions apply:

| Term | Definition | |
|------------------------------------|--|--|
| BC (S&T) Regulation | Biodiversity Conservation (Savings and Transitional) Regulation 2017 | |
| BC Act | Biodiversity Conservation Act 2016 | |
| Cleared Areas | Areas where native vegetation was cleared in contravention of section 12 of the Native Vegetation Act 2003 | |
| Clearing | Has the same meaning as defined in the Native Vegetation Act 2003 | |
| Endangered Ecological Community | Has the same meaning as defined in the Biodiversity Conservation Act 2016 | |
| Exotic species | Plant species that are not "native vegetation" | |
| Native vegetation | Has the same meaning as defined in the Native Vegetation Act 2003 | |
| NV Act | Native Vegetation Act 2003 | |
| OEH | The NSW Government Office of Environment and Heritage | |
| Order | This document; a Remediation Order issued under section 11.15 of the Biodiversity Conservation Act 2016 | |
| PCT | Plant Community Type | |
| Pest animals | Hares, rabbits, feral pigs, feral goats, and camels but does not include stock or native wildlife | |
| Priority Weed | Means a plant that is a pest as defined by section 15 of the <i>Biosecurity Act</i> 2015 - list available at: http://weeds.dpi.nsw.gov.au/ | |
| Remediation Areas | Means the areas located on the Properties shown schematically on the map in Attachment B outlined in green and marked "Remediation Areas" | |
| Remediator | Means | |
| Reporting period | Means each annual period from the commencement of this Order | |
| Stock | Means all livestock (including, but not limited to, cattle, horses, sheep, alpacas, domesticated pigs and domesticated goats); it does not include native wildlife | |
| Strategic grazing | Means the introduction into the Remediation Areas of no more than a specified number of stock (head of cattle and or sheep per hectare for the purposes of grazing). Strategic Grazing is permitted only during specified times/periods as stipulated in the Remediation Order | |
| The Properties | As defined in Table 1 of this Order | |
| Waste | Has the same meaning as defined in the <i>Protection of the Environment Operations Act 1997</i> | |



WARNING AND INFORMATION ABOUT THIS ORDER

- It is an offence against section 11.22 of the BC Act to contravene this Order without reasonable excuse or to intentionally obstruct anyone carrying our remediation work under this Order. The maximum penalty that a court may impose for this offence is:
 - o for a corporation, \$660,000 plus \$66,000 for each day the offence continues, and
 - o for an individual, \$132,000 plus \$13,200 for each day the offence continues.
- If you fail to comply with this Order the Chief Executive of OEH or his delegate may authorise any other person to enter the Properties and carry out all of part of the work and may then recover the cost from you (section 11.18 of the BC Act).
- This Order is issued under section 11.15 of the BC Act.
- Under section 11.15(4) of the BC Act this Order may be varied or revoked by a further order.
- Under section 11.23(1) of the BC Act, if you are aggrieved by the decision to make this Order you may appeal to the Land and Environment Court within 30 days of this Order being served on you. However, even if an appeal is lodged, you must comply with this Order, unless the Court orders otherwise.
- Under section 13.11 of the BC Act, your obligation to comply with the requirements of this Order continues until the Order is complied with, even if the due date for compliance has passed.
- OEH may conduct inspections to determine whether this Order is being complied with.
- Words and expressions have the same meaning as words and expressions used in the BC Act or Part 5A of the Local Land Services Act 2013 (as the case may be), except where a word is specifically defined in this Order.
- A Remediation Order will not negate the potential for enforcement action (including penalty notice or prosecution). A Remediation Order is separate to any potential enforcement action.



Senior Team Leader, Compliance and Regulation North West Conservation & Regional Delivery Office of Environment & Heritage

(by Delegation)

Attachments: A – Map of Areas of Interest

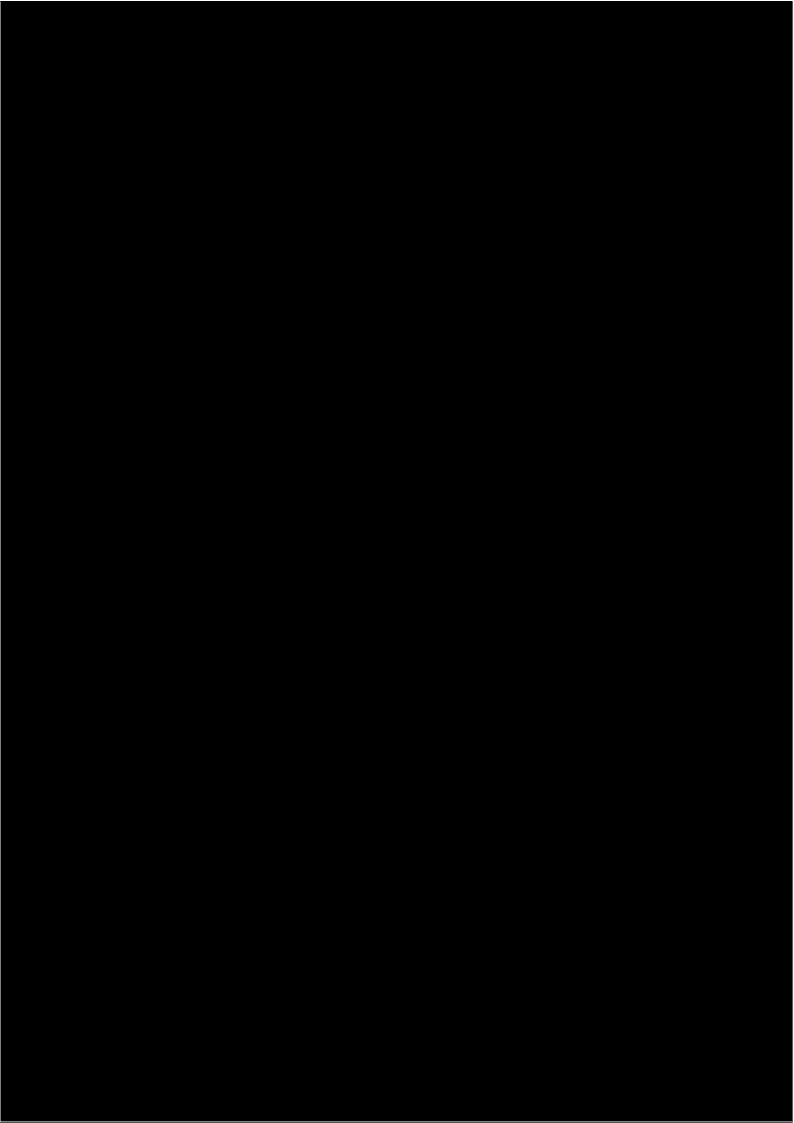
B – Map of Remediation Areas

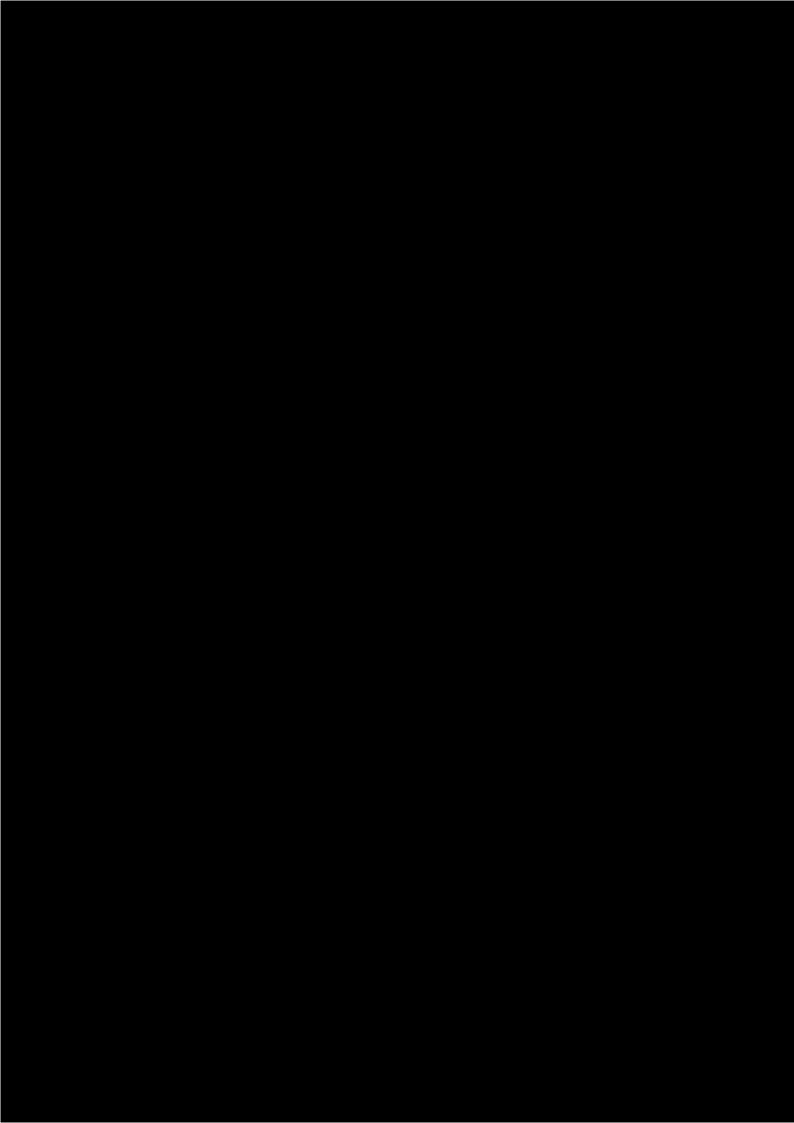
C - Revegetation Requirements and Rationale

D – Annual Reporting Methods



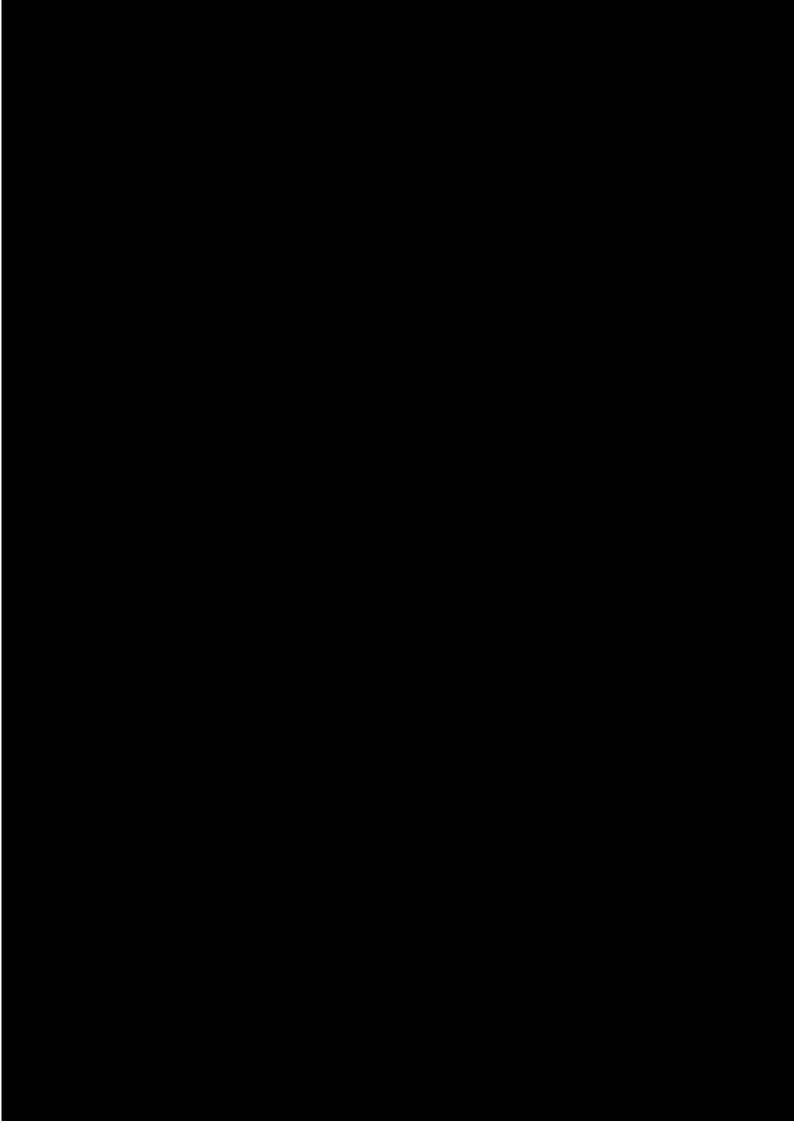
ATTACHMENT A – Maps of the Cleared Areas

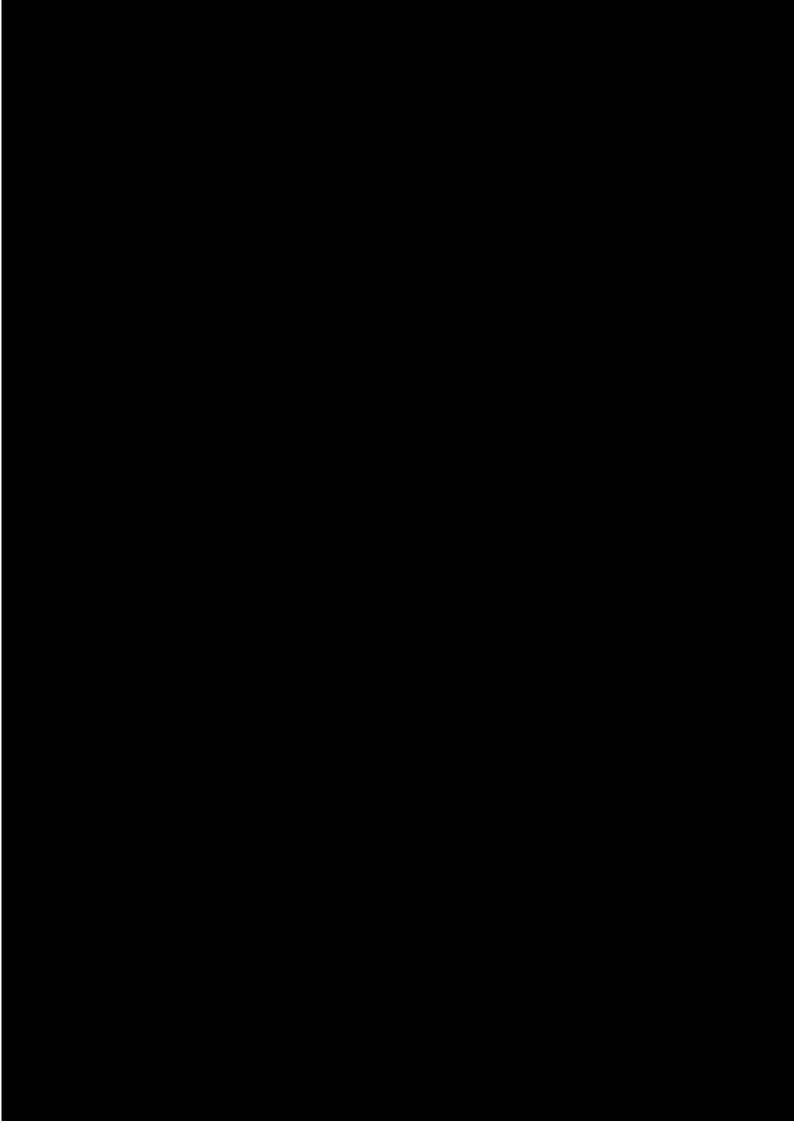






ATTACHMENT B – Map of the Remediation Areas







ATTACHMENT C – Revegetation Requirements and Rationale

1 Cultivated areas

Endemic Grasses

To reduce the likelihood of weed invasion and to promote soil stability the following endemic grass species should be sown in the Remediation Areas that have been previously cultivated:

- Curly Windmill Grass (Enteropogon acicularis)
- Small flower Wallaby Grass (Rytidosperma setaceum)
- Warrego summer grass (Paspalidium jubiflorum)
- Native Millet (Panicum decompositum).

These species should be sown at >50% total groundcover per hectare in the Remediation Areas.

Mitchell Grasses

Astrebla lappacea is a long-lived (up to 30 years), warm season perennial grass which is palatable to livestock even when it is dry. Crude protein levels range from 4.7–10.8% and phosphorus 0.21–0.43%. Mitchell grass provides one of the most stable and economically important pastures in the semi-arid areas of eastern Australia. There are four species of Mitchell grass in Australia of which curly Mitchell Grass is the most widespread. 'Yanda' is a variety of this species bred by NSW Agriculture and selected for high seed yield, superior dry matter and leaf production as well as increased proportion of green leaf growth in winter.

Areas that have been cultivated may be sown with Mitchell Grasses (*Astrebla* spp.) <u>at a rate not exceeding 50% of total ground cover in the Remediation Areas;</u> and at an appropriate time to maximise success of germination. Maximum germination percentages (>90%) can be achieved at temperatures between 20–40°C. Ideal sowing times are September/October or January/February avoiding the hottest part of summer when the soil surface dries out quickly. *Astrebla* spp. have a high-water requirement and therefore it is best to sow when the soil moisture profile is close to full. Conventional seed bed preparation techniques for a cereal crop will apply to paddock preparation for *Astrebla* spp. Good rainfall post sowing will assist in successful field establishment (DPI, 2008).

Naked and fluffy seed can be sown using conventional machinery. Buffel drum seeders have also been successfully used to sow fluffy seed. Seed can be broadcast into a weed free seedbed or into wheat stubble. Aerial seeding has also had some success. A light harrowing after broadcasting or aerial application will assist in achieving good soil/seed contact. Sowing rates for dryland pastures 1–2 kg/ha. Seed is sown shallow, at no more than 1 cm deep.

A specialised root system found on mature plants allows this species to persist through droughts and under heavy grazing. Whilst this species is long-lived, recruitment of new seedlings occurs only infrequently. *Astrebla* spp. responds well to moderate grazing or cutting which tends to stimulate tillering (Tiller - aerial shoot usually lateral and basal and more or less erect) and seed production. As this species ages both the number and size of inflorescences are reduced, however, cutting and irrigation may help to promote new growth. *A. lappacea* is susceptible to frost and floods.

2 Overstory regeneration

Coolabah (*Eucalyptus coolabah*) and Black Box (*Eucalyptus largiflorens*) require intermittent flooding to regenerate. The preferred method for regeneration of the mid and upper strata is natural following a flood event. If these species fail to regenerate after a significant rainfall / flooding event, or in accordance with condition 3(f) of this Order; plant the following species at the rates provided in **Table 2**.



Table 2: Planting rates for tree species

| Scientific name | Common Name | Planting rate | Planting location |
|--|-----------------|---------------------|--|
| Eucalyptus coolabah subsp. coolabah or subsp. excerata | Coolabah | 5 stems per hectare | All areas |
| Eucalyptus largiflorens | Black Box | 5 stems per hectare | All areas |
| Casuarina cristata | Belah | 1 stem per hectare | More than 50m from upper edge of depressions or watercourses |
| Acacia stenophylla | River Cooba | 2 stems per hectare | Within 50m of depressions or watercourses |
| Geijera parviflora | Wilga | 2 stems per hectare | All areas |
| Capparis mitchellii | Wild Orange | 2 stems per hectare | All areas |
| Eremophila maculata | Spotted Fuchsia | 1 stem per hectare | All areas |



ATTACHMENT D – Regeneration Reporting Methods

In the Remediation Areas, there are 7 monitoring points located at the GPS coordinates given in **Table 3** below.

Table 3: Location of monitoring points

| Monitoring Point | Latitude | Longitude |
|--------------------|----------|-----------|
| Monitoring Point 1 | -30.0855 | 148.1229 |
| Monitoring Point 2 | -30.0855 | 148.144 |
| Monitoring Point 3 | -30.1268 | 148.0013 |
| Monitoring Point 4 | -30.1443 | 148.0164 |
| Monitoring Point 5 | -30.1467 | 147.9744 |
| Monitoring Point 6 | -30.1676 | 147.9307 |
| Monitoring Point 7 | -30.1792 | 147.9453 |

The fourth (annual) inspection each reporting period will include an inspection of regeneration within the Remediation Areas utilising this methodology.

- The western end of the transect at the co-ordinates given must be permanently marked to ensure the location starting point is the same each monitoring period.
- At each of the 7 monitoring points, four images must be taken to record the view facing North, East, South and West. Each image must be identified by the monitoring point number, direction and date taken. Each image must be included in the annual report.
- The Remediator must traverse one hundred metres (100m) to the east of this point. Distance can be measured by tape or GPS.
- All canopy tree species seedlings and saplings are to be counted within an area 10 metres either side of the transect. These counts are to be multiplied by 5 to estimate density of stems per hectare. These counts must be provided to OEH annually.
- An estimate is to be given of the percentage of ground cover that is:
 - Native species.
 - Exotic species.
 - Priority Weeds.
 - o Bare earth.