



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5245/3
Permit Holder:	Northern Star (Hampton Gold Mining Areas) Limited
Duration of Permit:	17 November 2012 – 17 November 2027

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of mineral exploration and production.

2. Land on which clearing is to be done

Lot 105 on Deposited Plan 40396, Karramindie.
Mining Lease 15/717, Karramindie.

3. Area of Clearing

The Permit Holder must not clear more than 200 hectares of native vegetation within the area shaded yellow on attached Plan 5245/3.

4. Type of clearing authorised

The Permit Holder shall not clear native vegetation unless the purpose for which the clearing is authorised is enacted within three months of the authorised clearing being undertaken.

5. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 17 November 2022.

6. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II – MANAGEMENT CONDITIONS

7. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

8. Weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

9. Vegetation management

- (a) Where practicable the Permit Holder shall avoid clearing riparian vegetation.
- (b) Where a watercourse is to be impacted by clearing, the Permit Holder shall maintain the existing surface flow by use of culverts.

10. Flora management

Where *Diocirea acutifolia* has been identified and the its written location(s) provided to the CEO within report 'Level 1 Flora and Vegetation Survey for the Exploration of Location Lease 53 and M15/717 – Alacer Gold South Kalgoorlie Operations' (Native Vegetation Solution, May 2013), the Permit Holder shall ensure that when clearing for the purpose of mineral production:

- (a) no clearing of identified *Diocirea acutifolia* occurs; and
- (b) no clearing occurs within 10 metres of identified *Diocirea acutifolia*, unless approved by the CEO.

11. Malleefowl management

- (a) Prior to undertaking any clearing, for the purpose of mineral production, authorised under this Permit, the Permit Holder shall engage a *fauna specialist* to conduct a *fauna survey* within the Permit Area to identify *Leipoa ocellata* (Malleefowl) mounds and *Leipoa ocellata* (Malleefowl) *critical habitat*.
- (b) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall provide the results of the *fauna survey* in a report to the CEO.
- (c) The *fauna survey* report must include;
 - (i) the location of each *Leipoa ocellata* (Malleefowl) mound, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees, to the CEO.
 - (ii) The location of the *Leipoa ocellata* (Malleefowl) *critical habitat*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees, to the CEO.
 - (iii) the methodology used to survey the Permit Area and to establish the *Leipoa ocellata* (Malleefowl) *critical habitat* and to identify the mound/s;
 - (iv) the extent of the *critical habitat* of the *Leipoa ocellata* (Malleefowl) shown on a map; and
 - (v) a description of the *critical habitat* found.
- (d) Where *Leipoa ocellata* (Malleefowl) mounds are identified under condition 11(a) of this Permit, the Permit Holder shall ensure that no clearing of *critical habitat* or of the identified *Leipoa ocellata* (Malleefowl) mounds occurs, unless first approved by the CEO.

12. Fauna management

The Permit Holder shall not clear *habitat trees* found within the area shaded yellow on attached Plan 5245/3 unless:

- (a) the clearing is for the purpose of mineral production; or
- (b) approved by the CEO.

13. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) Retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) At an *optimal time* within 12 months following completion of geotechnical investigations, *revegetate* and *rehabilitate* areas not required for future scheduled and approved development, by:
 - (i) ripping the ground on the contour to remove soil compaction; and
 - (ii) laying the vegetative material and topsoil retained under condition 13(a) on the cleared area(s).
- (c) Within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 13(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 13(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

PART III - RECORD KEEPING AND REPORTING

14. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the date that the area was cleared;
 - (iii) the size of the area cleared (in hectares); and
 - (iv) purpose for which clearing was undertaken;
 - (v) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 7 of this Permit; and
 - (vi) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with condition 8 of this Permit.
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 13 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);

15. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 14 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 17 August 2027, the Permit Holder must provide to the CEO a written report of records required under condition 14 of this Permit where these records have not already been provided under condition 15(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

critical habitat: means any part of the Permit Area comprising of the habitat of flora or fauna species and its population, that is critical for the health and long term survival of the flora or fauna species and its population;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist: means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the CEO as a suitable environmental specialist.

fauna specialist: means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Biodiversity Conservation Regulations 2018*;

fauna survey: means a field-based investigation, including a review of established literature, of the biodiversity of fauna and/or fauna habitat of the Permit Area. Where conservation significant fauna are identified in the Permit Area, the survey should also include sufficient surrounding areas to place the Permit Area into local context.

fill means material used to increase the ground level, or fill a hollow;

habitat tree means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater, that contains or has the potential to develop hollows or roosts suitable for native fauna;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared.

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

optimal time means the period from April to May for undertaking *planting*;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

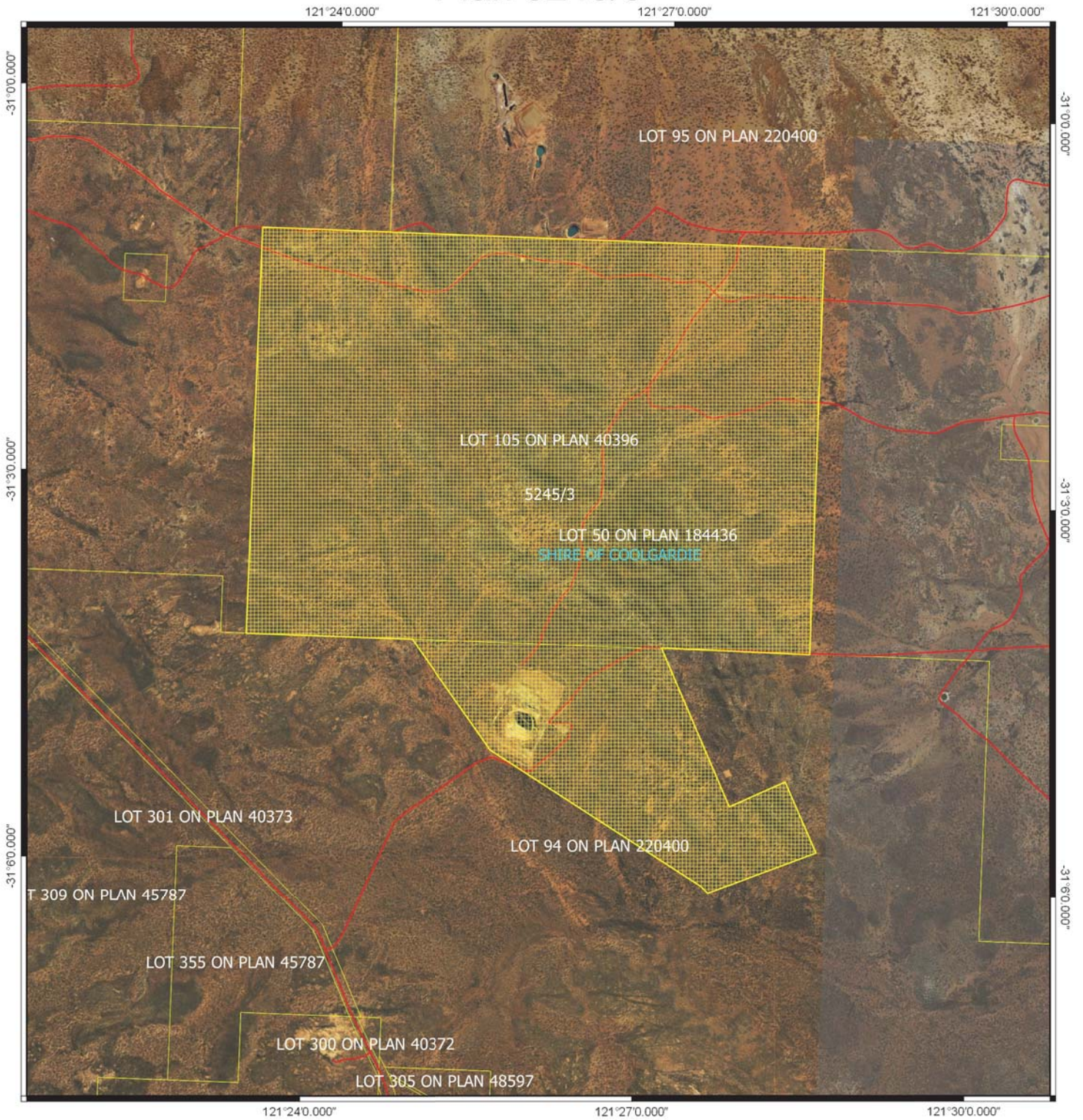


Samara Rogers
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

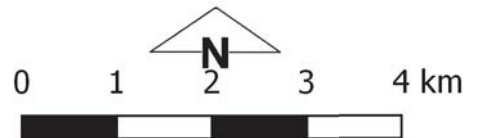
8 April 2019

Plan 5245/3



Legend

-  CPS areas approved to clear
-  Local Government Authorities
-  Cadastre
-  Roads
- Image



MGA 94
Geocentric Datum of Australia 1994

Samara Rogers

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Officer with delegated authority under Section 20
of the Environmental Protection Act 1986



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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: CPS 5245/3
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Northern Star (Hampton Gold Mining Areas) Limited
Application received: 30 January 2019

1.3. Property details

Property: Lot 105 on Plan 40396
Mining Lease 15/717
Local Government Authority: COOLGARDIE, SHIRE OF
Localities: KARRAMINDIE

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
200 hectares	0	Mechanical Removal	Mineral exploration

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 8 April 2019
Reasons for Decision: The clearing permit amendment has been made to amend the period of clearing from 17 November 2017 to 17 November 2022.

The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has been concluded that the assessment against the clearing principles has not changed since the assessment of application CPS 5245/2 which can be found in Clearing Permit Decision Report CPS 5245/2.

The Delegated Officer has added conditions to avoid and minimise clearing and to record actions taken in accordance with this condition and the weed management condition.

In determining to grant a clearing permit, the Delegated Officer determined that the proposed clearing is unlikely to lead to any unacceptable risk to the environment.

2. Site Information

Clearing Description: The application is for the proposed clearing of up to 200 hectares of native vegetation within Mining Lease 15/717, and Lot 105 on Plan 40396, Karramindie for the purpose of mineral exploration and production.

Vegetation Description: The vegetation within the application area is mapped as the following Beard vegetation associations:

- 9 (approximately 92% of the application area): Wheatbelt; York gum, salmon gum etc. Eucalyptus loxophleba, E. salmonophloia. Goldfields; gimlet, redwood etc. E. salubris, E. oleosa. Riverine; rivergum E. camaldulensis. Tropical; messmate, woolyb (Shepherd et al., 2001);
- 936 (approximately 5.9% of the application area): Wheatbelt; York gum, salmon gum etc. Eucalyptus loxophleba, E. salmonophloia. Goldfields; gimlet, redwood etc. E. salubris, E. oleosa. Riverine; rivergum E. camaldulensis. Tropical; messmate, woolyb (Shepherd et al., 2001);
- 1413 (approximately 2% of the application area): Wattle, casuarina and teatree acacia-allocauarina-melaleuca alliance (Shepherd et al., 2001); and
- 128 (approximately 0.1% of the application area): Bare areas; rock outcrops (Shepherd et al., 2001).

Vegetation Condition: The vegetation within the application area is considered to comprise the following condition ratings (Keighery, 1994):

- Excellent: Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species; to
- Degraded: Basic vegetation structure severely impacted by disturbance.

Soils/Landform Type: Soils within the application area are mapped as (Northcote et al., 1960-68):

- BB5 (approximately 48 % of the application area) is described as rocky ranges and hills of greenstones--basic igneous rocks: chief soils seem to be shallow calcareous loamy soils;
- My154 (approximately 47 % of the application area) is described as undulating country on acid volcanic rocks and sedimentary materials: chief soils are probably neutral red earths with a variable content of ironstone gravel; and

- Mx43 (approximately 5 % of the application area) is described as gently undulating valley plains and pediments; some outcrop of basic rock: chief soils are alkaline red earths with limestone or limestone nodules at shallow depth (< 24 in.) on gently sloping slightly concave plains with low gentle rises.

Comments: The local area is defined as 50 kilometre radius measured from the perimeter of the application area. Vegetation description and condition was determined by the flora and vegetation survey Native Vegetation Solutions, 2013). According to available aerial imagery, the local area (50 kilometre radius) retains approximately 90 per cent pre-European native vegetation cover.

3. Assessment of application against clearing principles

Northern Star (Hampton Gold Mining Areas) Limited (Northern Star) has applied to amend the period in which the actual clearing is allowed from 17 November 2017 to 17 November 2022.

A review of current environmental information reveals no new additional information. Therefore the assessment against the clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 5245/2.

Planning instruments and other relevant matters.

The application was advertised on 12 March 2019 for a 28 day submission period. During the submission period one submission was received which stated: "As part of the regulation of exploration activities across the State, have any populations of the Priority 3 flora species *Diocera acutifolia* and any *Malleefowl* mounds been encountered in the exploration areas and been reported to the department? Has topsoil been retained and managed appropriately and have any rehabilitation activities occurred? We trust that these aspects are being appropriately monitored by the staff of the Department of Mines, Industry Regulation and Safety" (Submission, 2019).

In the last available annual report Northern Star (2018) advised that the exploration and mining areas have been systematically inspected by qualified ecologist to identify any ecologically sensitive areas that might occur within the current or future permit areas. Furthermore, prior to a clearing on site, the area is walked by experienced environmental officers to ensure there are no malleefowl nests or activity in the area. The applicant also advised that it is the company's practice that once exploration has been completed, the site is completely rehabilitated within 6 months. All of the exploration drill sites cleared in 2017 have been fully rehabilitated, unless there was a prospect of further drilling in the same area (Northern Star, 2018). A review of annual reports provided indicate that no records of *Diocera acutifolia* or Malleefowl within the areas cleared have been reported to the Department.

In the letter dated 22 March 2019 the applicant requested to amend Malleefowl management condition on the Permit. The applicant advised that given the nature of Exploration Drilling activities, and the frequent adjustments needed, it would be highly impractical to comply with this requirement. Having considered that exploration activities which might occur several times within a month over small area each time, Delegated Officer has concluded that the applicant shall engage a fauna specialist to conduct a fauna survey only prior to undertaking any clearing, for the purpose of mineral production.

Minor wording changes to the permit conditions have been made to bring the conditions in line with current DWER practice.

There are four Aboriginal sites of significance mapped within the application area, for which the applicant has responsibilities under the Aboriginal Heritage Act 1972.

4. References

- HBJ Minerals Pty Ltd. (2013). Further information provided regarding the assessment of CPS 5245/2. Received 4/09/2013. HBJ Minerals Pty Ltd, Australia. (DWER REF: A670203).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Native Vegetation Solutions. (May 2013). *Level 1 Flora and Vegetation Survey for the Exploration of Locations Lease 53 and M15/717. Alacer Gold South Kalgoorlie Operations*. Supporting information for CPS 5245/2 provided by applicant. (DWER Ref: A666708).
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Northern Star (Hampton Gold Mining Areas) Limited. (June 28, 2018). Annual report related to Clearing Permit application CPS 5245/2. (DWER Ref: A1699253).
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Submission. (March 20, 2019). Submission received regarding Clearing Permit application CPS 5245/3. (DWER Ref: A1773759).

GIS Databases:

- Aboriginal Sites of Significance
- DAFWA Heritage
- DBCA Estate
- DEC Covenant
- Groundwater salinity
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed February 2019)
- Soils, Statewide

- Topographic contours
- Wetlands