



Referral of a Proposal to the Environmental Protection Authority under Section 38(1) of the Environmental Protection Act.

Referral by the Proponent

PURPOSE OF THIS FORM

Section 38(1) of the *Environmental Protection Act 1986* provides that where a development proposal is likely to have a significant effect on the environment, a proponent may refer the proposal to the Environmental Protection Authority (EPA) for a decision on whether or not it requires assessment under the Act.

A referral to the EPA by a proponent under Section 38(1) must be made on this form.

Before completing this form, proponents are encouraged to familiarise themselves with the EPA's *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* (accessed at the EPA's website at www.epa.wa.gov.au or by contacting the EPA on 6467 5419).

Proponents need to complete Parts A and B of the form by marking the appropriate boxes and providing explanatory or additional information where requested. Part B should be completed based on information known to the proponent. Only those sections of Part B that are pertinent to the proposal need to be completed. If space is insufficient, attach additional pages. Where information is contained in a report that is to be submitted with the referral form, the proponent may complete sections of the form by referring to the pertinent section of the report.

Proponents are encouraged to attach any other environmental information they consider may be relevant to the EPA for making a decision on whether or not to assess the proposal, and, if it is to be assessed, the level of assessment. In general, referrals should contain information on the potential environmental impacts of the proposal, the proposed management mechanisms to be implemented to minimise and mitigate for these impacts, and how the principles of the EP Act have been addressed by the proposal.

In addition to providing a hard copy of referral documentation, proponents are also requested to provide an electronic copy of the referral document, noting that section 39(2) of the EP Act provides for a proponent to request that matters of a confidential nature not be kept on the public record. If confidential matters are included in the referral, proponents are requested to identify the confidential information at this stage of the process, specifically request that it be treated as confidential, and submit the confidential information in a separate hard copy attachment to the referral document. The electronic copy of the referral should be identical to the hard copy of the referral document, excluding any confidential attachment.

You may need to contact government agencies or local authorities to obtain information required by this form. A list of key agencies and their contact details is provided in Attachment 1.

Where the EPA decides that a proposal will be assessed at the level of Public Environmental Review or Environmental Review and Management Programme, it will also require the proponent to prepare an Environmental Scoping Document (refer *Environmental Impact Assessment (Part IV Division 1) Administrative Procedures 2002*).

Proponents should also be aware of the need to determine their obligations under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act is separate legislation to the Environmental Protection Act and it identifies a number of matters of national environmental significance which are subject to assessment and approval by the Commonwealth. The matters identified as triggers for the Commonwealth assessment and approval regime are World Heritage properties, Ramsar

wetlands, nationally threatened species and ecological communities, migratory species, Commonwealth marine areas, and nuclear actions (refer to the Department of Environment and Water Resources website at www.environment.gov.au). Questions in this referral form that may be relevant to matters of national environmental significance are marked with a #.

PART A - PROPONENT AND PROPOSAL INFORMATION

1. PROPONENT DETAILS, PROPOSAL DESCRIPTION AND LOCATION

1.1 Proponent information

- ☐ Proposal title
Marillana Iron Ore Project
- ☐ Name of the Shire in which the proposal is located
Shire of East Pilbara
- ☐ Name of proponent (Person or entity proposing to implement the proposal)
Brockman Iron Pty. Ltd.
- ☐ Names of Joint Venture entities (if applicable)
N/A
- ☐ Address of proponent

Brockman Iron Pty. Ltd.

1/117 Stirling Highway
P.O. Box 141
NEDLANDS WA 6909
Tel: 9389 3000
www.brockman.com.au
ABN: 12 122 652 886
- ☐ Key contact for the proposal
(Name address and phone/facsimile number and email address. The contact may be a consultant, if one is being used)

The environmental manager and key contact for this proposal is Garry Connell.
ecologia Environment
1025 Wellington Street
WEST PERTH WA 6005
Phone: 08 9322 1944
Fax: 08 9322 1599
Mobile: 0418904921
Email: Garry.Connell@ecologia.com.au
www.ecologia.com.au

- ☐ Does the proponent own the land on which the proposal is to be established? If not, what other arrangements have been established to access the land?

The Marillana Iron Ore Project is located in the Hamersley Iron province in the Pilbara region of Western Australia, about 100 km from the town of Newman. The project is located within Exploration Licence E47/1408 and is subject to Mining Lease applications M47/1414 and M47/1419. All tenements are held by Brockman Iron Pty Ltd (Brockman) a wholly owned subsidiary of ASX listed company Brockman Resources Limited.

- ☐ Is rezoning of any land required before the proposal can be implemented?

(please tick)

☐ Yes

If yes, please provide details.

☒ No

The proposed project is to be constructed on freehold pastoral land, therefore a Development Application must be submitted to Shire of East Pilbara. However in considering that application, the Shire cannot take into account any provision of its Town Planning Scheme or of a Local Law which might operate to prohibit or affect the carrying out of Mining Operations Authorised by the Mining Act. A mining lease has been applied for on the tenement, its approval is pending native title negotiations which are ongoing.

- ☐ Is approval required from any Commonwealth or State Government agency or Local Authority for any part of the proposal?

☒ Yes

☐ No

If yes, name all Agencies and Local Authorities from which any approval is required.

Approval is required from the Department of Industry and Resources under the Mining Act.

Approval maybe required for construction from the Shire of East Pilbara.

- ☐ If yes above, have you lodged any of the necessary applications or have you discussed the proposal with any person(s) at the Agency or Local Authority?

☒ Yes

☐ No

If yes, name all Agencies and Local Authorities for which applications have been submitted or with whom the proposal has been discussed.

Formal Submissions: Nil

Meetings and/or discussions

- CALM and DEC
- DoW

- ☐ What is the current land use on the property, and the extent (area in hectares) of the property?

The tenement is located 100 km north north-west from the township of Newman, within the Marillana pastoral station. The current land use is mostly pastoral. Parts of the lease are taken up with a railroad and a public road. The neighbouring area is predominated by mining activities and its supporting infrastructure. The area of Exploration lease E47/1408 is 9532 Ha

1.2 Proposal Description *(Please attach extra pages where necessary)*

- ☐ Provide a description of the proposal.

The Marillana Iron Ore Project (the project) is located in the Hamersley Iron province in the Pilbara region of Western Australia, about 100 km from the town of Newman. The project is located within Exploration Licence E47/1408 and is subject to Mining Lease applications M47/1414 and M47/1419. All tenements are held by Brockman Iron Pty Ltd (Brockman) a wholly owned subsidiary of ASX listed company Brockman Resources Limited.

The Project assumes a production rate of 25 Mtpa, commencing in the fourth quarter of 2011 with a mine life of forty years.

It is anticipated that traditional open pit mining methods of excavating, load and haul will be utilised for the pit development. The mining fleet will likely consist of conventional face shovels and haul trucks, hauling ore to the ROM pad and waste to the dumps established adjacent to the open pits.

Approximately 50 Mtpa of waste material will be produced. Of this, 15 Mtpa will be tailings from a wet process beneficiation plant. Waste dumps and tailings storage facilities (TSFs) will be established north of the pits in the initial years of operation. In-pit waste disposal will be employed once mined-out pit voids become available, after approximately 3 years of operation.

With a sulphur content of less than 0.003 %, the waste material does not have the potential for acid generation. Tailings from the beneficiation plant will be benign with respect to salinity and reagents. Waste dumps will be designed to include slope, batters, height etc.

- ☐ What is the proposed ultimate extent (area in hectares) of the activity?

The Exploration Lease has an area of 9,532 hectares.

- ☐ Provide the timeframe in which the activity or development is proposed to occur. (Include start and finish dates where applicable)

Brockman intends to commence construction activities by September 2010 with the aim of producing by the Q4 2011. The project lifespan is 40 years.

- ☐ Provide details of any staging of the proposal.

Key Aspect	Target Date
Submission of Referral Document	January 2009
Submission of Scoping Document	March 2009
Public Release of PER	November 2009
Ministerial Statement	May 2010
Commence Construction	Q3 2010
Commence production	Q4 2011

- ☐ Indicate whether, and in what way, the proposal is related to other proposals in the region.
Not Applicable

1.3 Location information

- ☐ Provide proposal location details in the following two ways:
- Electronic spatial data
 - GIS or CAD on CD, depicting the proposal extent, geo-referenced and conforming to the following parameters:
 - datum: GDA94
 - projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA)
 - format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.

AND

- Maps and/or directions

Any maps or diagrams of the proposal, together with the following directions:

 - for urban areas: street address, lot number, the suburb and nearest road intersection;
 - for remote localities: the nearest town, together with distance and direction from that town to the proposal site.

Please also attach the following map/plans, clearly showing the location of the development in its regional and local context.

❖ **Locality plan – Broad Scale**

Provide a locality plan (preferably superimposed on an aerial photograph) to identify:

- proposed development site and any associated infrastructure
- main roads
- urban centres
- wetlands and watercourses

- remnant native vegetation
- adjoining land uses (including recreation)
- sensitive marine areas

❖ **Site Plan – Proposal Details**

Provide a site plan to scale and indicate the location of:

- lot boundaries
- road frontages
- extent of the proposed development area
- extent of the proposed buffer area (if applicable)

❖ **Site Plan – Existing Environment**

Provide a site plan to scale (the same scale as above) and indicate the location of:

- lot boundaries
- road frontages
- any information required to be shown from Section 2.2 of this form
- extent of native vegetation of the site (the extent of overlap between the proposed development area and the area of native vegetation must be highlighted)
- extent of hydrological features on the site (this includes wetlands, watercourses, creek lines, seasonal creeks and artificial drainage lines)
- sensitive marine areas

Maps are provided in figures 1.1, 2.2 and 1.3 of the supporting documentation.

PART B - ENVIRONMENTAL IMPACTS AND MANAGEMENT COMMITMENTS

2. ENVIRONMENTAL IMPACTS

Describe the impacts of the proposal on the following elements of the environment, through the questions below:

- flora and vegetation #;
- fauna #;
- rivers, creeks, wetlands and estuaries;
- significant areas and/ or land features;
- coastal zone areas;
- marine areas and biota #;
- water supply and drainage catchments;
- pollution;
- greenhouse gas emissions;
- contamination;
- social surroundings; and
- risk.

These features should be shown on the site plan, where appropriate)

For all information, please indicate:

- (a) the source of the information; and
- (b) the currency of the information.

2.1 Flora and Vegetation

- ☐ Do you propose to clear any native flora and vegetation as a part of this proposal?

(A proposal to clear native vegetation may require a clearing permit under Part V of the EP Act (*Environmental Protection (Clearing of Native Vegetation) Regulations 2004*). Please contact the Department of Environment and Conservation (DEC) for more information.

(please tick)

☒ Yes

If yes, complete the rest of this section

☐ No

If no, go to the next section

- ☐ How much vegetation are you proposing to clear (in hectares)?

The proposed mining operations will involve the clearing of up to 3,300 ha of native vegetation over the life of mine for the open cut pit, crushing and screening facilities, haul road, mining activities, associated infrastructure and accommodation camp catering for up to 500 personnel.

- ☐ Have you submitted an application to clear native vegetation to the DEC (unless you are exempt from such a requirement)?

☐ Yes

☒ No

If yes, on what date and to which office was the application submitted of the DEC?

A vegetation clearing permit will be submitted in 2009 for the clearing of native vegetation at the Marillana tenement.

- ☐ Are you aware of any recent flora surveys carried out over the area to be disturbed by this proposal?

☒ Yes

☐ No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey/s. (If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.)

Ecologia Environment carried out flora survey for Brockman at the Marillana tenement in 2008, see Section 2.1 of supporting documentation.

- ☐ Has a search of DEC records for known occurrences of rare or priority flora or threatened ecological communities been conducted for the site?

☒ Yes

☐ No

If you are proposing to clear native vegetation for any part of your proposal, a search of DEC records of known occurrences of rare or priority flora and threatened ecological communities will be required. Please contact DEC for more information.

A search DEC records were as conducted in mid 2008, Priority flora likely to occur within the project area can be found in Table 2.1 of the supporting documentation.

- ☐ Are there any known occurrences of rare or priority flora or threatened ecological communities on the site? #

☒ Yes

☐ No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

One Priority Flora taxon, *Goodenia nuda* (Priority Three) was recorded once in low numbers (< 2% cover) during the Marillana survey.

Goodenia nuda is an erect non woody herb growing to 50 cm high. The leaves and stems are a pale green to grey-green colour, sometimes with a frosted look from a powdery coating and are between 4 - 10 cm in length and 0.5 - 1 cm in width. The flowering section can be up to 25 cm long, with the yellow flowers less than 2 cm long, occurring between April and August (Figure 0.1).

The preferred habitat of *Goodenia nuda* is in dry river beds and at the edge of floodplains on stony hard pans and cracking clays. There are currently 12 records on FloraBase of *Goodenia nuda* from areas including Newman, Roy Hill and Weeli Wolli Creek (FloraBase, 2008).

Goodenia nuda was recorded at one location (quadrat 16) on the banks of the Weeli Wolli Creek (Figure 2.3 in supporting document).



Figure 0.1 - *Goodenia nuda*

The area in which quadrat 16 lies will not be impacted by any clearing of vegetation associated with the Project construction or operation.

- ☐ If located within the Perth Metropolitan Region, is the proposed development within or adjacent to a listed Bush Forever Site? (You will need to contact the Bush Forever Office, at the Department for Planning and Infrastructure)
- ☐ Yes ☒ No **If yes**, please indicate which Bush Forever site is affected (site number and name of site where appropriate).
- ☐ What is the condition of the vegetation at the site?

The vegetation condition at the Marillana project area was classified as poor on the flat clay pans and creek banks, characterised by high cattle grazing and weed growth. On the low rocky hill slopes in the southern area of the tenement, the vegetation condition is good to excellent, with little grazing and weeds apparent (*ecologia* 2008). The rocky hills are south of the tenement boundary.

Mulga stands have been degraded over time by water flow interruptions associated with the railway line and Munjina to Roy Hill Road.

2.2 **Fauna**

- ☐ Do you expect that any fauna or fauna habitat will be impacted by the proposal?
(please tick) ☒ Yes **If yes, complete the rest of this section**
☐ No **If no, go to the next section**
- ☐ Describe the nature and extent of the expected impact.
- Loss of habitat. The proposed mining operations will involve the clearing of 3,300 ha of native vegetation over the life of mine
- ☐ Are you aware of any recent fauna surveys carried out over the area to be disturbed by this proposal?
- ☒ Yes ☐ No **If yes**, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey/s. (If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.)

Ecologia Environment carried out fauna surveys at the Marillana tenement in 2008, information can be found in Section 2.2 of the supporting documentation.

- ☐ Has a search of DEC records for known occurrences of Specially Protected (Threatened) fauna been conducted for the site?

☒ Yes ☐ No (please tick)

Searches of DEC records were carried out in mid 2008, threatened fauna likely to occur on the tenement can be found in Table 2.2 of the supporting documentation.

☐ Are there any known occurrences of Specially Protected (Threatened) fauna on the site? #

☒ Yes ☐ No **If yes**, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

Fieldwork was conducted by a team of four *ecologia* personnel from 25th April to 7th May 2008. Two conservation significant species were recorded during this survey. The Australian Bustard and Rainbow Bee-eater were both observed at numerous locations within the survey area.

Due to the absence of impact to Weeli Wolli (a favoured habitat) Creek and the abundance of both the Australian Bustard and the Rainbow Bee-eater in the project area and in surrounding areas, there is unlikely to impact the local or regional populations.

2.3 **Rivers, Creeks, Wetlands and Estuaries**

☐ Will the development occur within 200m of a river, creek, wetland or estuary?

(please tick) ☒ Yes **If yes, complete the rest of this section**
☐ No **If no, go to the next section**

☐ Will the development result in the clearing of vegetation within the 200 m zone?

☐ Yes ☒ No **If yes**, please describe the extent of the expected impact.

☐ Will the development result in the filling or excavation of a river, creek, wetland or estuary?

☐ Yes ☒ No **If yes**, please describe the extent of the expected impact.

☐ Will the development result in the impoundment of a river, creek, wetland or estuary?

☐ Yes ☒ No **If yes**, please describe the extent of the expected impact.

☐ Will the development result in draining to a river, creek, wetland or estuary?

☐ Yes ☒ No **If yes**, please describe the extent of the expected impact.

☐ Are you aware if the proposal will impact on a river, creek, wetland or estuary (or its buffer) within one of the following categories? (please tick)

Conservation Category Wetland	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Perth's Bush Forever site	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Environmental Protection (Swan & Canning Rivers) Policy 1998	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
The management area as defined in s4(1) of the Swan River Trust Act 1988	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Which is subject to an international agreement, because of the importance of the wetland for waterbirds and waterbird habitats (e.g. Ramsar, JAMBA, CAMBA) #	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure

2.4 Significant Areas and/ or Land Features

- ☐ Is the proposed development located within or adjacent to an existing or proposed National Park or Nature Reserve?
☐ Yes ☒ No **If yes, please provide details.**
- ☐ Are you aware of any Environmentally Sensitive Areas (as declared by the Minister under section 51B of the EP Act) that will be impacted by the proposed development?
☐ Yes ☒ No **If yes, please provide details.**
- ☐ Are you aware of any significant natural land features (e.g. caves, ranges etc) that will be impacted by the proposed development?
☐ Yes ☒ No **If yes, please provide details.**

2.5 Coastal Zone Areas (Coastal Dunes and Beaches)

- ☐ Will the development occur within 300m of a coastal area?
 (please tick) ☐ Yes **If yes, complete the rest of this section**
 ☒ No **If no, go to the next section**
- ☐ What is the expected setback of the development from the high tide level and from the primary dune?
- ☐ Will the development impact on coastal areas with significant landforms including beach ridge plain, cusped headland, coastal dunes or karst?
☐ Yes ☐ No **If yes, please describe the extent of the expected impact.**
- ☐ Is the development likely to impact on mangroves?
☐ Yes ☐ No **If yes, please describe the extent of the expected impact.**

2.6 Marine Areas and Biota

- ☐ Is the development likely to impact on an area of sensitive benthic communities, such as seagrasses, coral reefs or mangroves?
☐ Yes ☒ No **If yes, please describe the extent of the expected impact.**

- ☐ Is the development likely to impact on marine conservation reserves or areas recommended for reservation (as described in *A Representative Marine Reserve System for Western Australia*, CALM, 1994)?
☐ Yes ☒ No **If yes**, please describe the extent of the expected impact.
- ☐ Is the development likely to impact on marine areas used extensively for recreation or for commercial fishing activities?
☐ Yes ☒ No **If yes**, please describe the extent of the expected impact, and provide any written advice from relevant agencies (e.g. Fisheries WA).

2.7 **Water Supply and Drainage Catchments**

- ☐ Are you in a proclaimed or proposed groundwater or surface water protection area?
(You may need to contact the Department of Water (DoW) for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)
☐ Yes ☒ No **If yes**, please describe what category of area.
- ☐ Are you in an existing or proposed Underground Water Supply and Pollution Control area?
(You may need to contact the DoW for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)
☐ Yes ☒ No **If yes**, please describe what category of area.
- ☐ Are you in a Public Drinking Water Supply Area (PDWSA)?
(You may need to contact the DoW for more information or refer to the DoW website. A proposal to clear vegetation within a PDWSA requires approval from DoW.)
☐ Yes ☒ No **If yes**, please describe what category of area.
- ☐ Is there sufficient water available for the proposal?
(Please consult with the DoW as to whether approvals are required to source water as you propose. Where necessary, please provide a letter of intent from the DoW)
☒ Yes ☐ No (please tick)
- ☐ Will the proposal require drainage of the land?
☐ Yes ☒ No **If yes**, how is the site to be drained and will the drainage be connected to an existing Local Authority or Water Corporation drainage system? Please provide details.

- ☐ Is there a water requirement for the construction and/ or operation of this proposal?
(please tick) ☒ Yes ***If yes, complete the rest of this section***
 ☐ No ***If no, go to the next section***

- ☐ What is the water requirement for the construction and operation of this proposal, in kl/year?
- Approximately 30,000,000 kl/ year of water will be required for operation of the iron ore beneficiation and processing plant.
- A further utilisation of approximately 1,400,000 kl/ year will be required for dust suppression and vehicle wash down which will be supplied from pit dewatering bores.
- The estimated water consumption for the accommodation village is 45,000 kl/year which will be sourced from onsite potable water bores located close to the village.

- ☐ What is the proposed source of water for the proposal? (eg dam, bore, surface water etc.)
- Raw water will be extracted from pit dewatering bores.
- Surplus water from pit dewatering not used in the operation of the mine will be returned to the aquifer by managed aquifer recharge (MAR) on site.

2.8 **Pollution**

- ☐ Is there likely to be any discharge of pollutants from this development, such as noise, vibration, gaseous emissions, dust, liquid effluent, solid waste or other pollutants?
(please tick) ☒ Yes ***If yes, complete the rest of this section***
 ☐ No ***If no, go to the next section***
- ☐ Is the proposal a prescribed premise, under the Environmental Protection Regulations?
(Refer to the EPA *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* for more information)
- ☒ Yes ☐ No ***If yes, please describe what category of prescribed premise.***
- ☐ Will the proposal result in gaseous emissions to air?
- ☒ Yes ☐ No ***If yes, please briefly describe.***

Development and operation of the Marillana Iron Ore Project will directly release carbon dioxide into the atmosphere. As the project will not be connected to the

electricity grid, emissions will result from the burning of diesel fuel for power generation, and combustion engines in diesel vehicles.

- ☐ Have you done any modelling or analysis to demonstrate that air quality standards will be met, including consideration of cumulative impacts from other emission sources?

☐ Yes ☒ No **If yes**, please briefly describe.

- ☐ Will the proposal result in liquid effluent discharge?

☐ Yes ☒ No **If yes**, please briefly describe the nature, concentrations and receiving environment.

- ☐ If there is likely to be discharges to a watercourse or marine environment, has any analysis been done to demonstrate that the State Water Quality Management Strategy or other appropriate standards will be able to be met?

☐ Yes ☒ No **If yes**, please describe.

- ☐ Will the proposal produce or result in solid wastes?

☒ Yes ☐ No **If yes**, please briefly describe the nature, concentrations and disposal location/ method.

Domestic and industrial waste products will be produced. A management plan will be put in place to minimise impacts.

Waste rocks and tailings will be produced. A management plan will be put in place to minimise impacts.

- ☐ Will the proposal result in significant off-site noise emissions?

☐ Yes ☒ No **If yes**, please briefly describe.

The nearest settlement to the tenement is Auski Roadhouse some 60 km away, no significant noise emissions will result.

- ☐ Will the development be subject to the Environmental Protection (Noise) Regulations?

☐ Yes ☒ No **If yes**, has any analysis been carried out to demonstrate that the proposal will comply with the Regulations?

Please attach the analysis.

- ☐ Does the proposal have the potential to generate off-site, air quality impacts, dust, odour or another pollutant that may affect the amenity of residents and other "sensitive premises" such as schools and hospitals (proposals in this category may include intensive agriculture, aquaculture, marinas, mines and quarries etc.)?
- ☐ Yes ☒ No **If yes**, please describe and provide the distance to residences and other "sensitive premises".
- ☐ If the proposal has a residential component or involves "sensitive premises", is it located near a land use that may discharge a pollutant?
- ☐ Yes ☒ No ☐ Not Applicable **If yes**, please describe and provide the distance to the potential pollution source

2.9 **Greenhouse Gas Emissions**

- ☐ Is this proposal likely to result in substantial greenhouse gas emissions (greater than 100 000 tonnes per annum of carbon dioxide equivalent emissions)?
- ☒ Yes ☐ No **If yes**, please provide an estimate of the annual gross emissions in absolute and in carbon dioxide equivalent figures.

Estimated greenhouse gas emissions include both direct and indirect emissions, consistent with Australian and international protocols for reporting greenhouse gases.

Total annual consumption of diesel is estimated to be 22 million litres for power generation and a further 24 million litres for mine machinery.

Using *National Greenhouse Accounts (NGA) Factors* (November 2008) as a guide, an estimate for the Marillana project greenhouse gas emissions has been prepared.

Assuming a total Project diesel usage of 46 (22 + 24) million litres per annum, the diesel energy content factor of 38.6 GJ/kL and a CO₂ emission factor of 69.2 kg CO₂-e/GJ. It is estimated that the Project will emit 122,871.5 tonnes CO₂ per annum during operation.

- ☐ Further, if yes, please describe proposed measures to minimise emissions, and any sink enhancement actions proposed to offset emissions.

Brockman will take all available steps to reduce emissions. However no sink enhancement actions are proposed at this time.

2.10 **Contamination**

- ☐ Has the property on which the proposal is to be located been used in the past for activities which may have caused soil or groundwater contamination?
- ☐ Yes ☒ No ☐ Unsure **If yes**, please describe.

- ☐ Has any assessment been done for soil or groundwater contamination on the site?
☐ Yes ✓ No **If yes**, please describe.
- ☐ Has the site been registered as a contaminated site under the Contaminated Sites Act 2003? (on finalisation of the CS Regulations and proclamation of the CS Act)
☐ Yes ✓ No **If yes**, please describe.

2.11 Social Surroundings

- ☐ Is the proposal on a property which contains or is near a site of Aboriginal ethnographic or archaeological significance that may be disturbed?
☐ Yes ✓ No ☐ Unsure **If yes**, please describe.
- ☐ Is the proposal on a property which contains or is near a site of high public interest (for example, a major recreation area or natural scenic feature)?
☐ Yes ✓ No **If yes**, please describe.
- ☐ Will the proposal result in or require substantial transport of goods, which may affect the amenity of the local area?
☐ Yes ✓ No **If yes**, please describe.

2.12 Risk

- ☐ Is the proposal located near a hazardous industrial plant or high-pressure gas pipeline?
☐ Yes ✓ No **If yes**, please describe.
- ☐ Does the proposal have the potential to generate off-site risk?
☐ Yes ✓ No **If yes**, will the proposal be a major hazardous facility regulated under the *Explosives and Dangerous Goods Act*?

3. **MANAGEMENT**

3.1 **Principles of Environmental Protection**

- ☐ Have you considered how your project gives attention to the following Principles, as set out in section 4A of the EP Act? (For information on the Principles of Environmental Protection, please see EPA Position Statement No. 7, available on the EPA web.)
- | | | | |
|----|---|-------|-----------------------------|
| 1. | The precautionary principle. | ✓ Yes | <input type="checkbox"/> No |
| 2. | The principle of intergenerational equity. | ✓ Yes | <input type="checkbox"/> No |
| 3. | The principle of the conservation of biological diversity and ecological integrity. | ✓ Yes | <input type="checkbox"/> No |
| 4. | Principles relating to improved valuation, pricing and incentive mechanisms. | ✓ Yes | <input type="checkbox"/> No |
| 5. | The principle of waste minimisation. | ✓ Yes | <input type="checkbox"/> No |
- ☐ Is the proposal consistent with the EPA's Position Statements (available on the EPA web)?
- ✓ Yes ☐ No

3.2 Management Commitments

- ☐ How has the proposal been developed to avoid, minimise and manage potential impacts? Please describe any specific commitments you make as the proponent to minimising the potential environmental impacts of this development.

Brockman has undertaken a number of baseline environmental studies of the proposed Marillana site. Surveys undertaken include vegetation and flora surveys and mapping, vertebrate fauna, Short Range Endemic (SRE) invertebrate fauna, troglofauna and stygofauna assessments.

Brockman intends to develop Environmental Management Plans for significant elements of the project which will impact on the environment. Some of these management plans include:

- Vegetation and Flora Management Plan
- Fauna Management Plan
- Dust Management Plan
- Weed Management Plan
- Fire Management Plan
- Hydrocarbon and Chemical Management Plan
- Aboriginal Heritage Management Plan
- Rehabilitation Management Plan
- Topsoil Management Plan

- Water management plan

3.3 Consultation

- ☐ Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?
- ✓ Yes ☐ No **If yes**, please list those consulted and attach comments or summarise response on a separate sheet.

Brockman has been in consultation with key regulatory groups, non-government agencies, traditional land owners and the lease holders since the beginning of feasibility studies. Concerns raised during consultation have been taken into consideration in this document.

CHECKLIST AND DECLARATION

Before you submit this form, have you:	<u>YES</u>	<u>NO</u>
Completed all the questions on this form?	✓	<input type="checkbox"/>
Have you attached any extra information, such as:		
Site plans?	✓	<input type="checkbox"/>
Detailed explanations?	✓	<input type="checkbox"/>
Comments obtained during consultation?	<input type="checkbox"/>	✓
Have you included any electronic information, such as:		
A CD of the referral and documentation, in PDF format, excluding any confidential information?	✓	<input type="checkbox"/>
A CD of the spatial data?	✓	<input type="checkbox"/>
Any other relevant information?	✓	<input type="checkbox"/>

Following a review of the information presented in this form, please consider the following question. (Your response is Optional)

☐ DO YOU CONSIDER THE PROPOSAL REQUIRES FORMAL ENVIRONMENTAL IMPACT ASSESSMENT?
(Information on the levels of environmental impact assessment is available on the EPA website at www.epa.wa.gov.au)

☒ YES ☐ NO ☐ NOT SURE

IF YES, WHAT LEVEL OF ASSESSMENT?

☐ ASSESSMENT ON REFERRAL INFORMATION

☐ ENVIRONMENTAL PROTECTION STATEMENT

☒ PUBLIC ENVIRONMENTAL REVIEW

☐ ENVIRONMENTAL REVIEW AND MANAGEMENT PROGRAMME

☐ STRATEGIC ENVIRONMENTAL ASSESSMENT

I, Brendan Michael Hynes declare that I have completed all of the questions in this form and attached the requested information and declare that the information contained in this form is, to my knowledge, true and not misleading.

Signature



Name

Brendan Michael Hynes

Position

Project Manager

Date

4 February 2009

Government Agency Contact Details

Attachment 1

Environmental Protection Authority

Level 8, The Atrium
168 St Georges Tce
PERTH WA 6000

Please mail completed referrals to:

Postal address:
Locked Bag 33
CLOISTERS SQUARE WA 6850
Website: www.epa.wa.gov.au

EPA Service Unit

Level 8, The Atrium
168 St Georges Tce
PERTH WA 6000

Telephone: (08) 6467 5000
Facsimile : (08) 6467 5562
Website: www.dec.wa.gov.au

Contact details for the head offices of the primary agencies involved in development proposals follow. You may need to contact your relevant district or regional office (details of all State Government agencies are available on the website of the Department of the Premier and Cabinet, www.dpc.wa.gov.au). You will also need to contact your Local Government Authority in the first instance. For some proposals, consultation with or referral to Commonwealth agencies may be required.

Department of Environment and Conservation

The Atrium
168 St Georges Tce
Perth WA 6000

For Licensing and Clearing Permits under Part V -

Telephone: (08) 6467 5000
Website: www.dec.wa.gov.au

Department of Water

The Atrium
168 St Georges Terrace
Perth WA 6000

Telephone: (08) 6364 7600
Website: www.water.wa.gov.au

Department of Industry & Resources

Mineral House
100 Plain St
East Perth WA 6004

Telephone: (08) 9327 5555
Website: www.doir.wa.gov.au

Department of Fisheries

3rd floor, SGIO Atrium
168 St George's Terrace
Perth WA 6000

Telephone: (08) 9482 7333
Website: www.wa.gov.au/westfish

Department for Planning and Infrastructure (including Bush Forever Office)

Albert Facey House
469 Wellington Street
Perth WA 6000

Telephone: (08) 9264 7777
Telephone: 1800 626 477 (Bush Forever Office)
Website: www.planning.wa.gov.au

Department of Indigenous Affairs

Level 1, 197 St George's Terrace
PERTH WA 6000

Telephone: (08) 9235 8000
Website: www.dia.wa.gov.au

Health Department of Western Australia

189 Royal St
EAST PERTH WA 6004

Telephone: (08) 9222 4222
Website