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COMSTOCK MINE
WEED AND DISEASE MANAGEMENT PLAN

For
Zeehan Zinc Limited

September 2007
Revision 3

Project No: 1292.001

PREFACE

PROJECT: Comstock Mine EMP Review **PROJECT NO.:** 1292.001

AUTHOR: Annette Foster
B Sci (Botany, Zoology), B Ant Stud (Hons)

Date	Purpose of Issue/Nature of Revision	Rev	Reviewed by	Issue Authorised by
20/07/0	Initial draft	1	JMC	JMC
12/09/07	Internal review.	2	RB	RB
28/09/07	Internal review.	3	AFF	AFF

SEMF Pty Ltd
Level 2, 45 Murray Street,
Hobart Tasmania 7001 Australia
ACN 117 492 814 ABN 24 117 492 814

Telephone: (61 3) 6231 1211
Facsimile: (61 3) 6234 8709
Email: semf@semf.com.au

WEED MANAGEMENT PLAN

OBJECTIVES AND SCOPE:

The **objectives** of the Weed and Disease Management Plan (the Plan) are to:

- Implement practical and effective management measures during the proposed mining operations to prevent weeds from spreading beyond the mining lease boundaries;
- Improve 'progressive' rehabilitation and amenity on the mining leases through a reduction in cover and extent of weed infestations;
- Implement practical and effective management measures during mining operations to reduce the risk of spreading *Phytophthora cinnamomi* (root-rot fungus), which has been positively identified within ML 2M/2005 ("Oceana Mine") to the Comstock Mine; and
- Establish and maintain a North-west heath (*Epacris curtisiae*) Management Zone at the Comstock Mine for the protection and ongoing management of this biogeographically important threatened species site.

The **scope** of this Plan is to outline the management measures that will:

- Control weed growth within the mining leases;
- Minimise the risk of *Phytophthora cinnamomi* spread within Oceana Mine;
- Minimise the risk of *Phytophthora cinnamomi* introduction to Comstock Mine;
- Be applied to the stages of pre-construction, construction, operation, and ongoing rehabilitation of the mining leases; and
- Meet statutory requirements and background information, which provide the rationale for the development of this management plan.

This Plan should be read in conjunction with the *Water Management Plan* for the Mining Leases to ensure integration across these areas of site development.

STANDARDS AND GUIDELINES

- *Tasmanian Weed Management Act 1999*;
- State Weed Management Plan (DPIWE 2002);
- Weed Plan: Tasmania's Weed Management Strategy (2005);
- Cradle Coast Regional Weed Management Strategy (2005);
- West Coast Weed and Fire Management Strategy (2001);
- Tasmanian Washdown Guidelines for Weed and Disease Control: Machinery, Vehicles, and Equipment (DPIWE 2004);
- Gorse National Best Practice Manual (2006);
- Quarry Code of Practice (DPIWE 1999);

- Australian Minerals Industry Code for Environmental Management (Minerals Council for Australia 2000); and
- Best Practice Environmental Management in Mining series (Environment Australia 1995-2002);
- Tasmanian Washdown Guidelines for Weed and Disease Control (DPIWE 2004);
- Conservation of Tasmanian Plant Species and Communities Threatened by *Phytophthora cinnamomi*: Strategic Regional Plan for Tasmania (Schahinger *et al.* 2003);
- Interim *Phytophthora cinnamomi* Management Guidelines (Rudman 2005);
- Management of *Phytophthora cinnamomi* for Biodiversity Conservation in Australia (DEH 2006); and
- Leading Practice Sustainable Development Program for the Mining Industry series (Department of Tourism and Resources 2006-2007).

BACKGROUND INFORMATION

Location of the Mining Leases

The Mining Leases are located near Zeehan in western Tasmania:

- Oceana Mine (2M/2005) is accessed via the Henty Road and is a highly disturbed landscape due to previous mining activities; and
- Comstock Mine (5M/2007) is accessed via Trial Harbour Road, to the west of Zeehan.

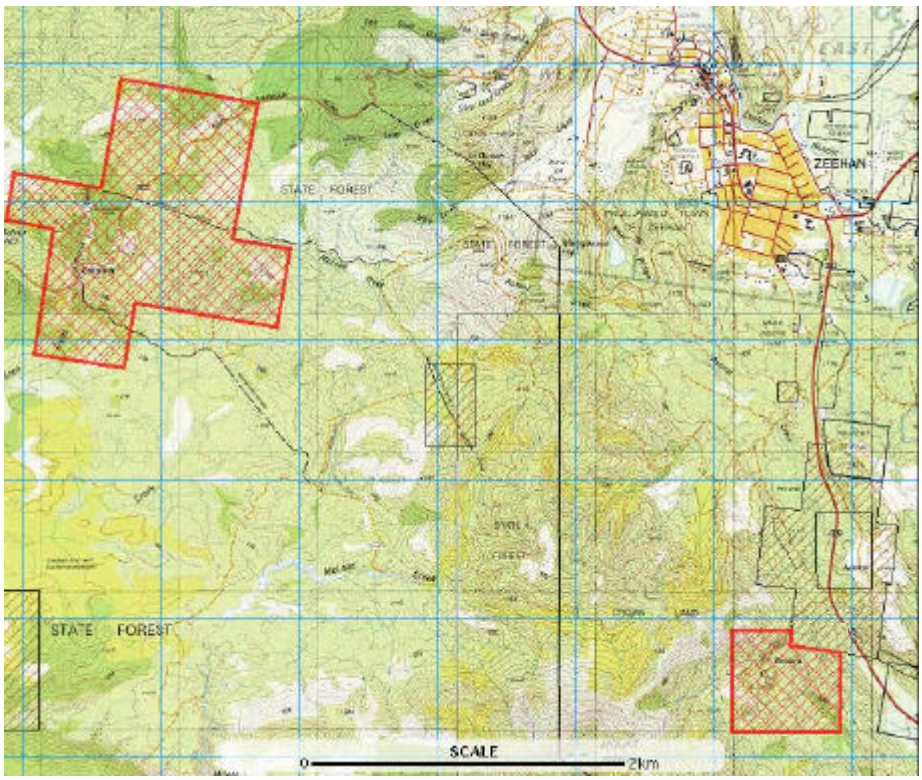


Figure 1. The location of the Comstock Mine and Oceana Mine relative to Zeehan.

Potential Causes of Weed and Phytophthora cinnamomi *Introduction and Spread in the Mining Leases*

The main potential causes (risks) for the spread and invasion of weeds and disease (particularly *Phytophthora cinnamomi*) are expected to be:

- Transportation on or off site by un-washed vehicles and machinery;
- Transportation of high risk products such as gravels, plants, clays and topsoils into the mining leases;
- Soil and vegetation disturbance during pre-construction, construction, and ongoing operation of the mines;
- Uncontrolled stormwater movement;
- Inadequate or ineffective weed management, containment and/or eradication programs;
- Inadequate soil-disease management and prevention measures; and/or
- Ineffective revegetation works and follow-up at revegetated sites.

Weed Infestations and Locations in the Mining Leases

A large infestation of gorse *(Ulex europaeus*) occurs at the Oceana Mine, with minor occurrences of this woody weed along Trail Harbour Road and some access tracks at Comstock Mine.

Small infestations of blackberry (*Rubus fruticosus* agg.) and Himalayan honeysuckle (*Leycesteria formosa*) occur along the abandoned tramway and on the margins of tracks within Oceana Mine. These two invasive weeds are absent from Comstock Mine.

Current and Past Weed Control Programs

Zeehan Zinc has an active program to control gorse in their Mining Leases, and regular herbicide application has occurred in the past.

Target Weeds in the Mining Leases

A wide variety of plant species have been introduced into Tasmania, some of which are recognised as Declared Weeds, requiring management under the Tasmanian *Weed Management Act 1999*.

Statutory Weed Management Plans (WMP) have been developed for Declared Weeds, including the three (3) target weed species located on the Mining Leases.

During the mine operation, should any weed species that is either (a) listed as a Declared Weed under the Tasmanian *Weed Management Act 1999* and/or (b) is considered to be a potential environmental weed, appropriate management measures should be implemented. This will include the revision of this Plan.

Three (3) weed species are the primary focus of weed management activities within the Mining Leases. These are:

- Gorse (*Ulex europaeus*)

  Gorse is a widely distributed and serious environmental and economic weed in Tasmania. Common treatments for gorse include removing small plants by digging, or for larger infestations the most common control technique is spraying.

- Himalayan honeysuckle (*Leycesteria formosa*)

  Himalayan honeysuckle is a deciduous or (occasionally) semi-evergreen, hollow-stemmed shrub from the temperate Himalayas. Himalayan honeysuckle displaces native vegetation and has become a weed in a number of temperate areas around the world, including New Zealand. Common treatments for Himalayan honeysuckle include hand digging of small plants through to spot-spraying or 'cut and paint' techniques for larger plants.

- Blackberry (*Rubus fruticosus* agg.)

  Blackberry is the name commonly used for a range of closely-related brambles. At least nine "species", including the distinctive cutleaf blackberry, are known to occur in Tasmania, but there may be others that are not yet identified. Blackberries occur across the State, especially in the wet forests of the central north, north-west and north-east. Blackberry grows vigorously in higher rainfall areas, but in drier areas they tend to be restricted to the edges of creeks and rivers. Common control/eradication treatments for blackberry include spraying or 'cut and paint' techniques.

Regional Weed and Disease Control Participation

Zeehan Zinc should liaise with the relevant authorities prior to implementing any weed management activities along Trial Harbour Road.

ROLES & RESPONSIBILITES

Mine Manager:

The Mine Manager is directly responsible for ensuring:

- That this Plan is implemented across the operations;
- That immediate mitigation action is taken in the event of any incident causing or threatening environmental nuisance or environmental harm;
- The community complaints are recorded and addressed;
- That monitoring, assessment, and statutory reporting pertaining to weed and soil disease management is carried out; and
- That this Plan is reviewed as necessary, such as: after any changes to the operation, after a new weed species is identified; after management methods are altered; or every three years coinciding with the EMP Review Report.

Environmental Manager:

The Environmental Manager is responsible for:

- Reporting to the Mine Manager on the implementation of this Plan;
- Implementing and maintaining this Plan;
- Informing and training all staff and contractors in weed and soil disease management measures, with particular emphasis on those relevant to their tasks;
- Holding training refreshers regularly, or when weed/soil disease management changes are to be implemented;
- Developing and maintaining a database containing the *Phytophthora cinnamomi* survey datasheets and data on the known occurrences of weeds at both mine sites; and
- Ensuring that all complaints are investigated, mitigation measures are put in place and resolutions found, implemented, and documented.

Staff and Contractors:

All staff and contractors are responsible for:

- Applying all reasonable weed and soil disease management methods and practices available to them to help prevent the spread of the weeds and/or soil disease within the mining lease;
- Immediately reporting any weed occurrences or symptoms of *Phytophthora cinnamomi* to the Environmental Manager; and
- Being proactive, by reporting potential incidents and suggesting management methods or improvements.

Regional Weed Management Officer:

A **Regional Management Officer** is employed by the Department of Primary Industries and Water (DPIW) to carry out the following functions (as specified by DPIW):

- Facilitate the development of local weed and soil disease management strategies;
- Provide advice on weed management; and
- Enforce weed regulations under the Tasmanian *Weed Management Act 1999*.

Currently the position of the Regional Weed Management Officer for North-western Tasmania is **Karen Stewart** and can be contacted on **(03) 6421 7654**[1].

The Principal Weed Management Officer for Tasmania is **Michael Askey-Doran** and can be contacted on **(03) 6233 6168**[2].

PROCEDURES AND METHODS

To prevent and manage new weed infestation, weed management procedures primarily follow the hierarchy of prevention and early intervention. For the management of existing infestations, management measures endeavour to control with the objective of future eradication and continue management to reduce the impact of weeds on native vegetation.

This Plan should be read in conjunction with the *Water Management Plan* for the Mining Leases to ensure integration across these areas of site development.

Stage: **Applicable to All Stages and Mining Leases**

Staff and contractor training

No staff or contractors should work on site without having undergone induction and training for the management of weeds and soil disease within the Mining Leases.

Prevention

To mitigate the risk of additional weeds or diseases entering and establishing within the Mining Leases, staff and contractors should be equipped with the necessary knowledge to act in the event of:

- An outbreak of a weed species not currently known to occur in the Mining Leases;
- A new infestation of a weed species that already occurs in the Mining Leases; and/or
- A confirmed presence of *Phytophthora cinnamomi* at Comstock Mine.

[1] The Weed Management Officer for North-west Tasmania is Karen Stewart. Rundle Road DEVONPORT TAS 7310 TAS. Phone: 03 6421 7654, Fax: 03 6424 5142, Email: Karen.Stewart@dpiw.tas.gov.au.

[2] The Principal Weed Management Officer is Michael Askey-Doran. 134 Macquarie Street HOBART TAS 7000. Phone: (03) 6233 6168, Fax: (03) 6223 3477, Email: Michael.Askey-Doran@dpiw.tas.gov.au

Vehicles, Equipment and Machinery hygiene

The implementation of specific hygiene measures at the Mining Leases (as outlined below for each Mining Lease) should minimise the risk of weed and disease spread into, and out of, the Mining Leases.

Monitoring and review

- A survey to identify new weed infestations within the Mining Leases should be conducted at least every 3 years to ensure that new infestations are detected (unless they are detected through normal mine operation and reports from staff and contractors). The maximum 3 year approach should identify new infestations before they reach an extent where control and eradication is not achievable.
- Those sites treated as part of any weed control measure should be assessed each year by Zeehan Zinc, or its contractor, to ensure that control measures were implemented successfully. Where the measures have been unsuccessful, they should be repeated or the technique modified to suit the type of weed and its extent

Stage: **Pre-Construction, Construction and Operations at the Oceana Mine**

Reactive Operational Measures

Given the extent of weeds at the site, eradication in the short to medium-term is very unlikely. A containment approach, with gradual reduction of weed cover and extent, should be the main objective for Oceana Mine.

Before or during preparatory works for construction and mine operation, the following should be implemented:

1. Survey to locate known weed and disease infestations

   The location of the weed and disease infestations that were identified during ecological surveys (Appendices 1 and 2) will be re-located by Zeehan Zinc or their representative and clearly marked with flagging tape or similar material.

2. Implement weed control program

   Zeehan Zinc, or its contractor, should implement a weed control program at Oceana Mine. Short-term weed control is achievable at the Oceana Mine site, while complete eradication is unlikely in the short to medium-term.

   The primary focus should be the control of gorse, then blackberry and Himalayan honeysuckle. Small patches of any weed species should be targeted prior to large patches, with isolated occurrences receiving the highest priority for control as these plants have not become so dense that control is difficult. Isolated plants often represent 'finder' populations that is indicative of weed outbreaks in a stage of geographic expansion so their control is extremely important.

Key aspects to the weed control program are summarised in Appendix 6, and include:

- The use of appropriate techniques to stop the spread of weeds;
- A reduction in overall weed cover and abundance in the medium-term through progressive weed control;
- Target small patches first, larger clumps later; and
- Compliance with the laws of Tasmania as they relate to the use and handling of chemical and chemical products for the purpose of weed control.

Proactive Operational Measures

As a means to reduce weed and disease spread into, or out of, the Oceana Mine site the following should be implemented:

1. Establish a single vehicle entry – exit point

A 'single location' containment/wash down system that is established to limit or control the spread of weeds and diseases can only be effective if there is a single entry and exit point to the site. The likely single access point is the main access off Henty Road. All other access tracks and roads should be gated and signed (see below) as soon as possible to limit access to the site.

2. Installation of a Dry 'Rumble Grid'

As there is a high risk of disease and weed spread associated with clods of mud and dirt on vehicles as opposed to footwear, some form vehicle hygiene measure is desirable at Oceana Mine. However, the site poses some operational issues for the installation of a wash down station; there is no established water supply on site, and no means to process large volumes of wastewater from a standard washdown station.

To address the site constraints, but provide for a satisfactory reduction in risk of *Phytophthora cinnamomi* spread from Oceana Mine, it is recommended that a dry 'rumble grid' be constructed at the site over which all vehicles traverse to enter and leave the site. The grids need to be of sufficient size and spacing to vibrate the vehicles traversing them to dislodge clods of dirt, mud and soil. The rumble grid should have underneath it a soil containment basin constructed of cement or similar product, and have a single water over-flow point. The over-flow should be established near the top of the basin so that as the basin fills with water (from rain), most of the suspended sediment settles prior to the water leaving the basin. The over-flow should be directed into the roadside drainage channel along which a series (3-4, subject to their size) of small settling ponds through which sediment (and other debris) would be caught.

The settling ponds and area around the dry 'rumble grid' should be monitored annually by Zeehan Zinc, or its contractor, for any weed growth. Any detected weeds should be *eradicated* as soon as possible using the most appropriate technique.

Soil/sediment/debris should be carefully extracted from the containment basin and settling ponds and transported to a quarantine zone approved by the Regional Weed Officer that meets the requirements of the WMP's for gorse, blackberry and Himalayan honeysuckle.

3. Signage

The main access point to the site, and all other access points (when gated), should be signed with signs similar to those shown in Appendices 4 and 5.

4. Stockpile management

Any topsoil that is stockpiled on site should be considered as 'contaminated with weed propagules and *Phytophthora cinnamomi*' and managed by containment through the use of geotextile fabric and low flow weirs. Watershed from the stockpile should be directed into a series of settling ponds (3 to 4, subject to their size and the size of the watershed) to enable sediment and potential weed propagules to settle out from the water.

Stockpiles should be annually assessed by Zeehan Zinc, or its contractor, for germination and growth of weeds (especially gorse). Appropriate control/eradication measures should be taken as soon as possible after weed detection.

Soil/sediment/debris should be carefully extracted from the settling ponds, as required, and transported to a quarantine zone approved by the Regional Weed Officer that meets the requirements of the WMP's for gorse, blackberry and Himalayan honeysuckle.

5. Quarry face management

Where hard-rock quarries are to be established at Oceana Mine, it is likely that water moving from up-slope down to the quarry face may transport spores of the root-rot fungus (*Phytophthora cinnamomi*) which could contaminate the quarry.

To minimise the risk of quarry contamination, water diversion channels should be constructed around the top of the quarry face(s) to direct surface water away from the quarry face. This diverted surface water should be directed (via the channels) into settling ponds that both capture sediment and any mobile *Phytophthora cinnamomi* spores.

The same ponds and associated geotextile containment areas established for stockpile management (refer to Section 4 above) could be used for managing the diverted surface water if this is operationally practical.

Stage: **Pre-Construction, Construction and Operations at the Comstock Mine**

Reactive Operational Measures

Considering the limited nature of the existing weed infestations and absence of *Phytophthora cinnamomi* at Comstock Mine, an aim should be to prevent the introduction and establishment of weed species that do not already occur on the mine site.

Before or during preparatory works for construction and mine operation, the following should be implemented (also refer to Appendix 6):

1. Survey to locate known weed infestations

The location of the weed infestations that were identified during previous ecological surveys (Appendix 3) will be re-located by Zeehan Zinc or their representative and clearly marked with flagging tape or similar material.

2. Implement weed control program

Zeehan Zinc, or its contractor, should implement a weed control program at Comstock Mine. Short-term weed control is achievable at the Comstock Mine, with complete eradication possible in the medium-term.

The primary focus should be the control of gorse. Small patches should be targeted prior to large patches, with isolated occurrences receiving the highest priority for control as these plants have not become so dense that control is difficult.

Key aspects to the weed control program include:

- The use of appropriate techniques to stop the spread of weeds;
- A reduction in overall weed cover and abundance in the medium-term through progressive weed control;
- Target small patches first, larger clumps later; and
- Compliance with the laws of Tasmania as they relate to the use and handling of chemical and chemical products for the purpose of weed control.

Proactive Operational Measures

As a means to reduce weed and disease spread into, or out of, the Comstock Mine site the following should be implemented:

1. Establish a single vehicle entry – exit point

A 'single location' containment/washdown system that is established to limit or control the spread of weeds and diseases can only be effective if there is a single entry and exit point to the site. The likely single access point is the main access off Trial Harbour Road. All other access tracks and roads should be gated and signed (see below) as soon as possible to limit access to the site.

2. Installation of a 'Washdown Station'

As there is a high risk of soil disease and weed spread associated with clods of mud and dirt on vehicles as opposed to footwear, some form of water based washdown system should be installed at the Comstock Mine. The current *Phytophthora cinnamomi* free status of the Comstock Mine site, and paucity of weed occurrences, warrants a higher level of preventative measures to be implemented at the Comstock Mine (as opposed to the more weedy Oceana Mine site).

The site has an accessible water supply and a means to process large volumes of wastewater from a washdown (tailings dam and polishing pond).

It is recommended that a water-based washdown system be constructed at the site over which all vehicles traverse to enter and exit the site.

The washdown station should be automated such that trucks and vehicles trigger the washdown station upon entry. Manually operated hoses should also be accessible at the washdown station for large vehicles, or those that are unable to use the automated system (e.g. cranes). The installation of an automated system means less time is spent washing vehicles, and it lessens the risk of personnel injury near the washdown station as contractors would not need to leave their vehicles to use the system.

The system should consist of a containment basin with a grid to enable dirt and water to fall through the grid into the basin. The basin should have a single water over-flow point located near its maximum fill level so that as it fills with water, most of the sediment settles prior to the water leaving the basin. The over-flow pipe should be directed into a series of settling ponds (3-4, subject to their size) through which sediment (and other debris) would be trapped. Water would then pass into the drainage channel that flows to the tailings dam for wastewater processing.

The washdown station settling ponds, and general area around the washdown station, should be monitored 6 monthly by Zeehan Zinc, or its contractor, for any weed growth. Any detected weeds should be eradicated as soon as possible using the most appropriate technique.

Soil/sediment/debris should be extracted from the containment basin and settling ponds (as required) and carefully transported to a quarantine zone (approved by the Regional Weed Officer) that meets the requirements of the WMP's for gorse, blackberry and Himalayan honeysuckle.

The washdown station could be constructed to accommodate two vehicles (one entering, one exiting the site), but this would be subject to cost and the overall frequency of vehicles entering and exiting the site.

3. Signage

The main access point to the site, and all other access points (when gated), should be signed with a sign similar to that shown in Appendix 5.

4. Stockpile management

Any top-soil stockpiled on site should be managed by containment through the use of geotextile fabric and low flow weirs. Watershed from stockpiles should be directed into a series of settling ponds (3 to 4, subject to their size and the size of the watershed) to enable sediment and potential weed propagules to settle out from the water.

Stockpiles should be annually assessed by Zeehan Zinc, or its contractor, for germination and growth of weeds (especially gorse). Appropriate control/eradication measures should be taken as soon as possible after weed detection.

Soil/sediment/debris should be carefully extracted from the settling ponds, as required, and transported to a quarantine zone approved by the Regional Weed Officer that meets the requirements of the WMP for gorse.

5. North-west heath Management Zone

The proposed North-west heath Management Zone is shown in Appendix 7.

The population of north-west heath (*Epacris curtisiae*; Rare species listed on the Tasmanian *Threatened Species Protection Act 1995*) comprises 250-500 plants and

appears to be free of *Phytophthora cinnamomi* (north-west heath is highly susceptible to *Phytophthora cinnamomi)*.

Appendix 7 contains coordinate data for the recorded locations at the site.

Most of the north-west heath plants at the site occur in the scrubby ecotone between the *Eucalyptus nitida* (Smithton peppermint) dominated forest and woodland and the low open heathland.

The two access points to the site (a track that occurs downhill to the east of the population) should be gated and signed with a sign similar to that shown in Appendix 8.

For this North-west heath Management Zone, the following is recommended:

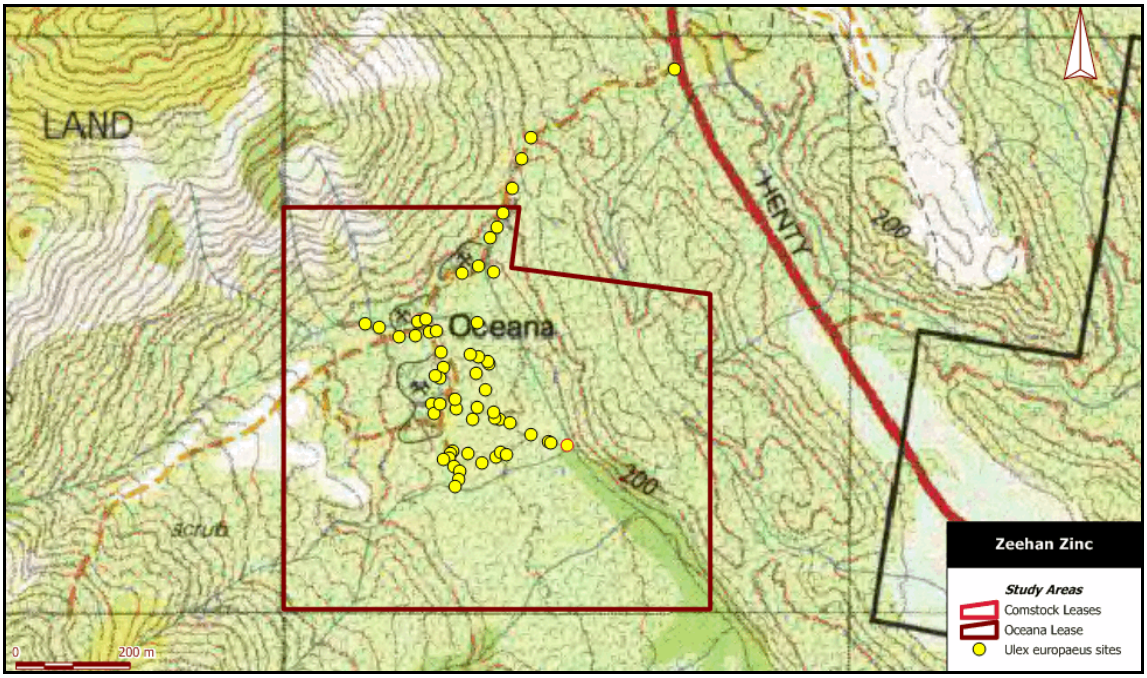
- Vehicles washdown at the Comstock Mine washdown station prior to entering the zone;
- Permission must be gained from the Environment Manager prior to entering the zone;
- Footwear should be clean and free of dirt and mud; and
- No soil or soil products are to be taken into the zone.

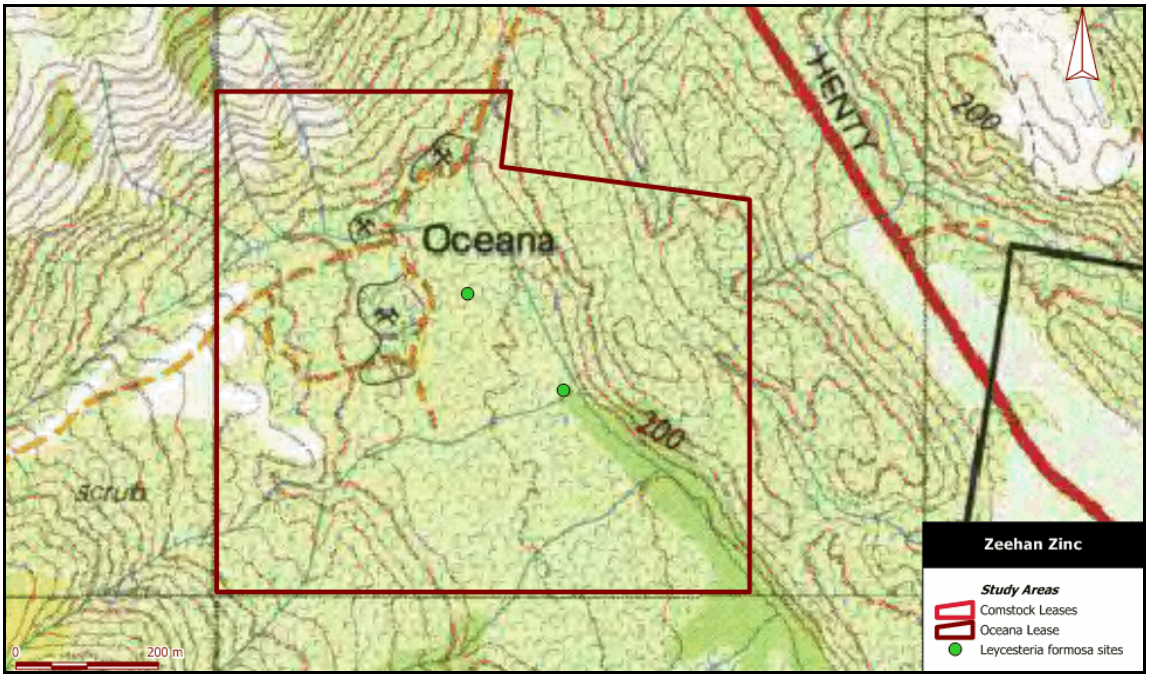
Stage: **Rehabilitation Monitoring for all Mining Leases**

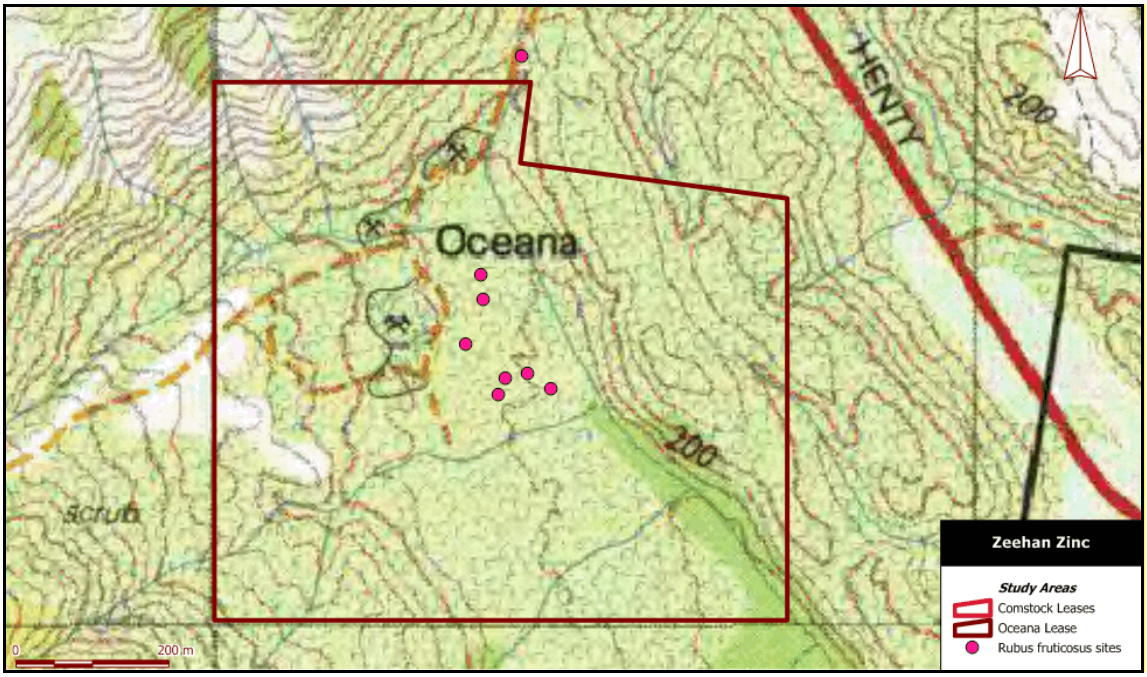
Monitoring for the presence of weeds, and their control if present, is a very important component of rehabilitation monitoring. Any weed infestations that are identified during rehabilitation monitoring will be dealt with following the procedures outlined above.

Appendix 1 – *Weed distribution maps for Oceana Mine*

Maps by ECO*tas* (2007)



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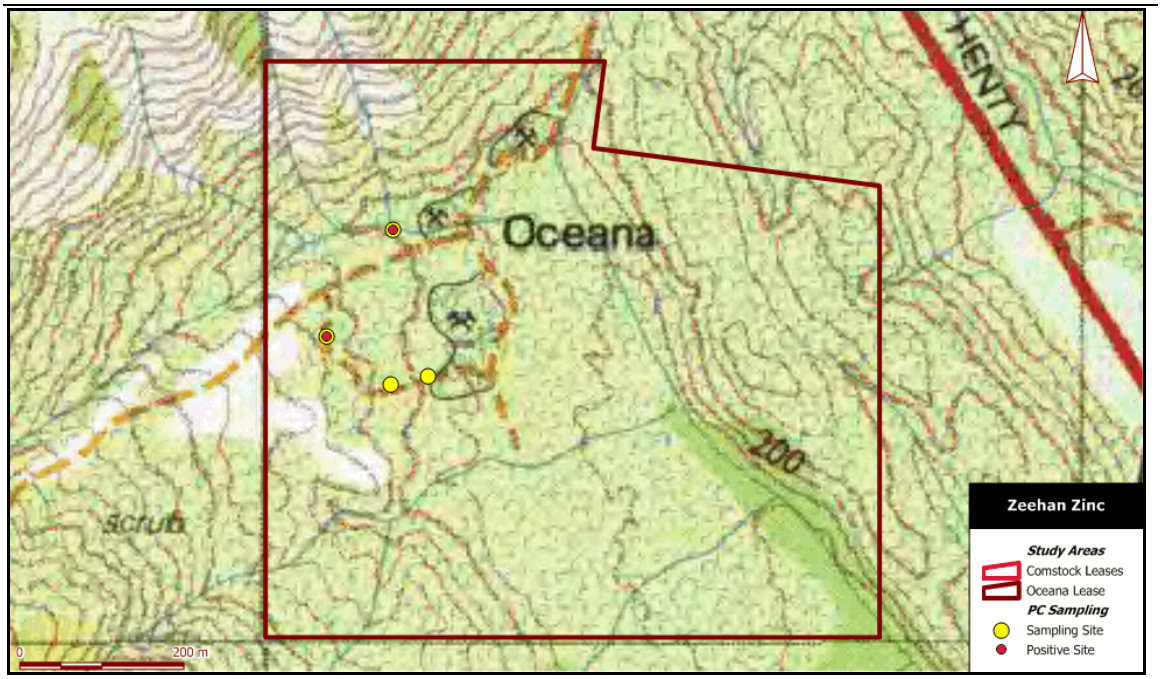
Zeehan Zinc
Study Areas
Comstock Leases
Oceana Lease
Rubus fruticosus sites

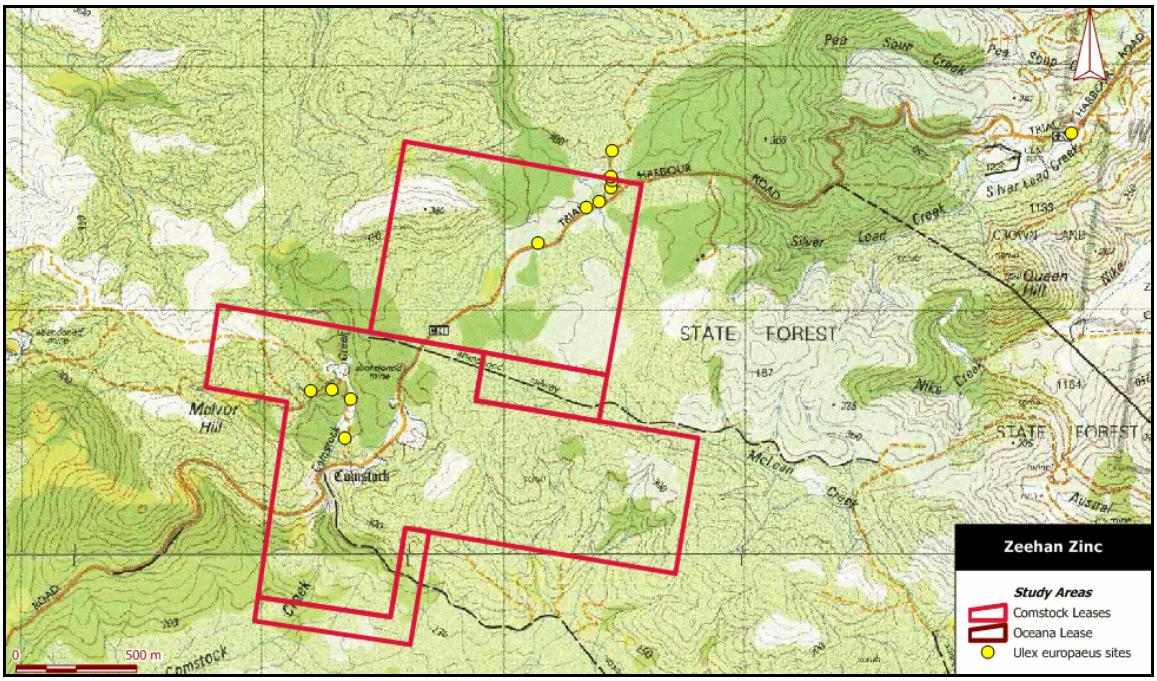
Appendix 2 – Phytophthora cinnamomi *location map for Oceana Mine*

Map by ECO*tas* (2007)



Appendix 3 – *Weed distribution map for Comstock Mine*

Map by ECO*tas* (2007)



Appendix 4 – Phytophthora cinnamomi *Signage*

The below is the suggested wording of a sign that would be erected at the entrance to the Oceana Mine site, and at the gates at each access point to the site.

WARNING

***Phytophthora cinnamomi* OCCURS WITHIN THIS MINING LEASE**

All vehicles should be clean when entering and exiting the Mine.

Do not enter Special Management Zones or Quarantine Zones without permission.

No top-soil is to be brought into or taken out of this lease without permission.

Contact the Zeehan Zinc Environmental Manager for more details

[Insert contact details]

Appendix 5 – *Comstock Mine and Oceana Mine Signage*

The below is the suggested wording of a sign that would be erected at the entrance to the Comstock Mine and Oceana Mine sites, and at the gates at each access point to the site.

WARNING

GORSE OCCURS WITHIN
THIS MINING LEASE

All vehicles should be clean when entering and exiting the Mine.

Do not enter Special Management Zones or
Quarantine Zones without permission.

No top-soil is to be brought into, or taken out of, this Mine
without permission.

Contact the Zeehan Zinc Environmental Manager for more details
[Insert contact details]

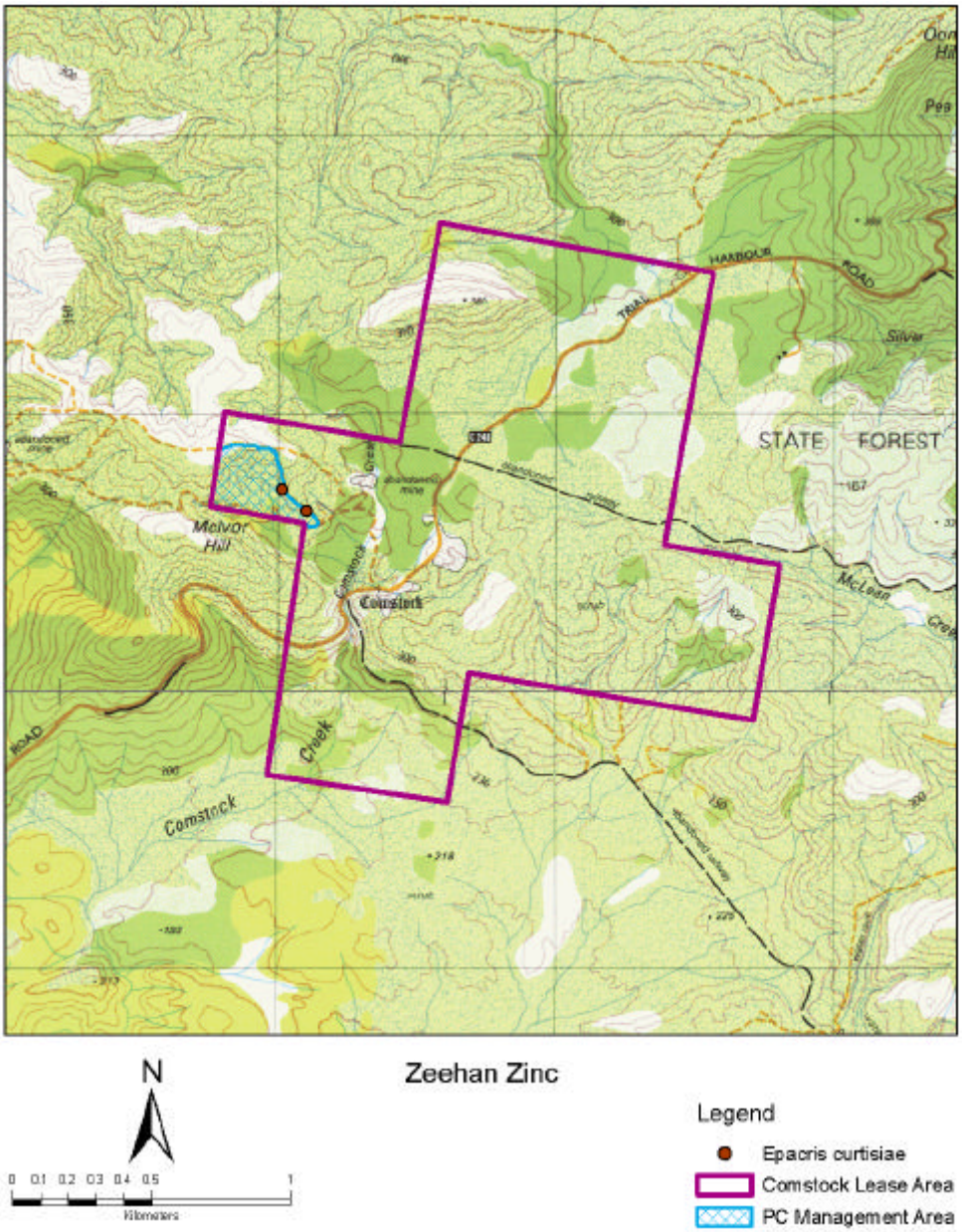
Appendix 6 – *Weed and Disease Action Summary for Comstock Mine and Oceana*

Key Area	Action	Persons/organisations involved	Priority
Training	Train staff and contractors in weed and disease identification and management measures	• Zeehan Zinc (?TAFE)	Urgent
	Train Zeehan Zinc staff in weed control/eradication techniques (unless the weed control program is to be outsourced)	• Zeehan Zinc (?TAFE)	High
Weed Control Program	Commence a weed spraying (control and containment focused) program at Oceana	• Zeehan Zinc or its appointed contractor	Low
	Commence a weed spraying (eradication focused) program at Comstock Mine	• Zeehan Zinc or its appointed contractor	High
Construction	Establish a single exit – entry point to Oceana	• Zeehan Zinc	Urgent
	Establish a single exit – entry point to Comstock Mine	• Zeehan Zinc	Urgent
	Design and construct dry rumble grid at Oceana	• Zeehan Zinc and SEMF	High
	Design and construct a water-based washdown station at Comstock Mine	• Zeehan Zinc and SEMF	Urgent
	Implement the Special Management Zone for the north-west heath	• Zeehan Zinc	Urgent
	Install gates and signage at Comstock Mine	• Zeehan Zinc	High
	Install gates and signage at Oceana	• Zeehan Zinc	High

Key Area	Action	Persons/organisations involved	Priority
	Implement stockpile and quarry face management at Oceana	• Zeehan Zinc	High (when development commences at Oceana)
	Implement stockpile and quarry face management at Comstock Mine	• Zeehan Zinc	Low (due to the low abundance of weeds on site)
Consultation with land managers	Initiate dialogue with other land manager's in the area to implement across tenure management measures	• Zeehan Zinc • West Coast Council • Cradle Coast Authority • Forestry Tasmania • Parks and Wildlife Service • Tasmanian Fire Service	Low (High IF Zeehan Zinc is planning to utilise the same weed control contractor as other land managers in the region)
Monitoring and Review	Establish a database for storing weed and disease site information and the management measures implemented	• Zeehan Zinc (SEMF?)	Low
	Develop a means to assess the effectiveness of weed control/eradication treatments for the site (photopoints etc.)	• Zeehan Zinc (SEMF?)	Low
	Develop a 3 yearly monitoring program to survey each mine site for new weed infestations	• Zeehan Zinc (SEMF?)	Low
	Consider annual PC testing at strategic locations at Comstock Mine IF symptoms are recorded on site	• SEMF for Zeehan Zinc	Urgent IF PC symptoms detected otherwise Low

Appendix 7 – North-west heath Management Zone

Map by Bruce Cairns (SEMF).



Appendix 8 – North-west heath Management Zone *Signage and Site Data*

The below is the suggested wording of a sign that would be erected on the gated track associated with the North-west heath Management Zone at Comstock Mine.

Easting	Northing	Date	Notes
357228	5360835	08/14/2007	*Epacris curtisiae*
357133	5360906	08/14/2007	*Epacris curtisiae*

NO ENTRY

SPECIAL MANAGEMENT ZONE FOR THREATENED PLANTS

Do not enter this zone without permission.

All vehicles **must be clean** before entering this zone.

No soil is to be brought into this zone.

Contact the Zeehan Zinc Environmental Manager for more details
[Insert contact details]