



MINISTER FOR THE ENVIRONMENT;  
LABOUR RELATIONS

Statement No.

000555

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED  
(PURSUANT TO THE PROVISIONS OF THE  
ENVIRONMENTAL PROTECTION ACT 1986)**

**ESPERANCE PORT - UPGRADING OF MARINE FACILITIES**

**Proposal:** The upgrading of marine facilities consists of deepening berths 1 and 2, dredging of the harbour basin and shipping channel, construction of a new deepwater berth, reclamation of approximately 15 hectares of land, construction of a new iron ore shed and associated shiploading and conveyor systems, and an increased throughput of iron ore from 2 to 4 million tonnes per annum, as detailed in schedule 1 of this statement.

**Proponent:** Esperance Port Authority

**Proponent Address:** PO Box 35, ESPERANCE WA 6450.

**Assessment Number:** 1277

**Report of the Environmental Protection Authority:** Bulletin 989

The proposal to which the above report of the Environmental Protection Authority relates may be implemented subject to the following conditions and procedures:

*Procedures*

**1 Implementation**

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

Published on

31 OCT 2000

- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

## **2 Proponent Commitments**

- 2-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of conditions and procedures in this statement.

## **3 Proponent**

- 3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person in respect of the proposal.
- 3-2 Any request for the exercise of that power of the Minister referred to in condition 3-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.
- 3-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

## **4 Commencement**

- 4-1 The proponent shall provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced.
- 4-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.
- 4-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five year period referred to in conditions 4-1 and 4-2.
- 4-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the

environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years for the substantial commencement of the proposal.

## **5 Compliance Auditing**

- 5-1 The proponent shall submit periodic Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.
- 5-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal, written advice that the requirements have been met.
- 5-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

### *Conditions*

## **6 Environmental Management System**

- 6-1 In order to manage the environmental impacts of the project, and to fulfil the requirements of the conditions and procedures in this statement, prior to commissioning of the new port facilities, the proponent shall demonstrate to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection that there is in place an environmental management system which includes the following elements:
  - 1 An environmental policy and corporate commitment to it;
  - 2 Mechanisms and processes to ensure:
    - planning to meet environmental requirements;
    - implementation and operation of actions to meet environmental requirements;
    - measurement and evaluation of environmental performance; and
  - 3 Review and improvement of environmental outcomes.
- 6-2 The proponent shall implement the environmental management system referred to in condition 6-1.

## **7 Seagrass Management**

- 7-1 Prior to the commencement of dredging operations, the proponent shall incorporate management measures for seagrass management within the Dredging and Reclamation Management Plan (See commitment 2.1), to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.
- 7-2 Prior to commencing post reclamation and breakwater construction activities, the proponent shall determine and document the area of seagrass coverage within the provisional seagrass management unit (see Figure 3, schedule 1), to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

The objectives of this investigation are to:

- confirm that seagrass losses are consistent with management objectives for seagrass communities in the management unit; and
- determine total seagrass coverage for future management decisions.

This determination shall include:

1. confirmation of the seagrass management unit area and boundary limits;
  2. an estimate of historical losses;
  3. confirmation of losses due to the implementation of the proposal; and
  4. cumulative losses to date.
- 7-3 Within two weeks following completion of reclamation, the proponent shall record baseline seagrass coverage along the seaward edge of the reclamation area, and then immediately commence a monitoring program of seagrass habitat to determine further seagrass community losses resulting from reclamation activities, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This monitoring program shall be undertaken at six monthly intervals and run initially for a period of two years. At the end of this two-year period, the proponent shall report the results to the Environmental Protection Authority.

- 7-4 The Environmental Protection Authority will review the need for further monitoring after two years.
- 7-5 In the event that unexpected or adverse impacts are detected, the proponent shall report these to the Environmental Protection Authority within one month.

## **8 Sediment Quality Management**

- 8-1 On commencement of reclamation activities, the proponent shall analyse tri-butyl tin and nickel levels in the reclamation fill material to confirm tri-butyl tin and nickel levels in that material. The results of these analyses shall be reported to the Environmental Protection Authority throughout the reclamation activity.

- 8-2 The proponent shall compare the tri-butyl tin and nickel levels in sediment immediately adjacent to the reclamation site, as determined in the proponent's monitoring program referred to in commitment 8, with the Southern Metropolitan Coastal Waters Study (1996) criteria, or other criteria as appropriate, to ensure that acceptable criteria are met, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

Note: As part of the Dredging and Reclamation Management Plan (See commitment 2.1), the proponent is required to outline contingency measures to be implemented in the event that tri-butyl tin and nickel levels in the reclamation fill material exceed agreed criteria (agreed between the Environmental Protection Authority and the proponent) as determined in the harbour sediment survey undertaken during the preparation of the public environmental review document.

- 8-3 Within three months following completion of construction of the new port facilities, the proponent shall prepare a Sediment Quality Management Plan for port operations to:

- ensure that sediment quality outside the inner harbour complies with Environmental Quality Criteria identified in the Southern Metropolitan Coastal Waters Study (1996), or other criteria as appropriate, consistent with identified Environmental Quality Objectives outside the inner harbour; and

- ensure that operational activities have no significant impact on beneficial users outside the inner harbour,

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

This plan shall address:

- 1 Potential impacts of port operations;
  - 2 Monitoring protocols, including frequency and duration of sampling;
  - 3 Sediment quality criteria;
  - 4 Management measures; and
  - 5 Contingency plans in the event of spill incidents or unexpected results demonstrated by the plan.
- 8-4 The proponent shall implement the Sediment Quality Management Plan required by condition 8-3.
- 8-5 The Environmental Protection Authority will review the need for further monitoring after two years pending the results reported.
- 8-6 In the event that unexpected or adverse impacts are detected, the proponent shall report these to the Environmental Protection Authority within one month.

## **9 Shutdown Provisions**

- 9-1 In the event that dust from iron ore operations is affecting, or likely to affect, surrounding landuses, the proponent shall cease iron ore handling operations to the requirements of the Department of Environmental Protection.

## **10 Decommissioning Plan**

- 10-1 At least six months prior to the anticipated date of decommissioning, or at a time agreed with the Department of Environmental Protection, the proponent shall prepare a Decommissioning Plan designed to ensure that the site is left in a suitable condition, with no liability to the State, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

The Decommissioning Plan shall address:

- 1 removal or, if appropriate, retention of plant and infrastructure;
  - 2 rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and
  - 3 identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.
- 10-2 The proponent shall implement the Decommissioning Plan required by condition 10-1 until such time as the Minister for the Environment determines that decommissioning is complete.
- 10-3 The proponent shall make the Decommissioning Plan required by condition 10-1 publicly available, to the requirements of the Environmental Protection Authority.

## **11 Performance Review (Dust and Noise)**

- 11-1 Each three years following the commissioning of the new port facilities, the proponent shall submit a Performance Review report to the Department of Environmental Protection:

- to document the outcomes, beneficial or otherwise;
- to review the success of goals, objectives and targets; and
- to evaluate the environmental performance with respect to dust and noise over the three years;

relevant to the following:

- 1 environmental objectives reported on in Environmental Protection Authority Bulletin 989;

- 2 proponent's consolidated environmental management commitments documented in schedule 2 of this statement and those arising from the fulfilment of conditions and procedures in this statement;
- 3 environmental management system environmental performance targets;
- 4 environmental management programs and plans; and/or
- 5 environmental performance indicators;

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

Note: The Environmental Protection Authority may recommend changes and actions to the Minister for the Environment following consideration of the Performance Review report.

#### Note

- 1 The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the Environmental Protection Act.
- 2 Westrail will review and update the existing environmental management program for rail operations within 12 months following the issue of this statement. This revision will address issues of noise, dust, social amenity and traffic management associated with the upgrading and increased iron ore throughput.
- 3 Conditions to manage noise related to this proposal will form part of an Approval Notice to be gazetted pursuant to Regulation 17 of the Environmental Protection (Noise) Regulations 1997.



CHEERYL EDWARDES (Mrs) MLA  
MINISTER FOR THE ENVIRONMENT

31 OCT 2000

## **Schedule 1**

### **The Proposal (1277)**

Esperance Port is situated immediately east to south-east of the town of Esperance and provides a dominant feature in the region (Figure 1).

The upgrading of marine facilities consists of:

1. deepening berths 1 and 2;
2. dredging of the harbour basin and entry channel;
3. construction of a new deepwater berth;
4. reclamation of approximately 15 hectares of land;
5. construction of a new iron ore shed; and
6. installation of associated shiploading and conveyor systems.

The proposal is totally within Port Authority boundaries and port-controlled waters.

The upgrading of port facilities will facilitate an increased throughput of iron ore from 2 to 4 million tonnes per annum.

See Table 1 – Key Proposal Characteristics (attached).

### **Plans (attached)**

Figure 1: Proposal location, showing proximity of port to townsite.

Figure 2: Esperance Port Upgrade - key proposal characteristics.

Figure 3: Proposed seagrass management unit.



**Table 1 - Key Proposal Characteristics (1277)**

<b>Element</b>	<b>Description</b>
Dredge the harbour basin and Berths 1 & 2.	<ul style="list-style-type: none"> <li>• Deepen Berths 1 &amp; 2 from -12.5 metres (reduced level) to -14.7 metres (reduced level).</li> <li>• Deepen harbour basin from approximately -12.8 metres (reduced level) to -15.1 metres (reduced level).</li> <li>• Dredge an area of approximately 50 hectares.</li> <li>• Generate approximately 1,500,000 cubic metres of dredged material.</li> </ul>
Extend the existing groyne, relocate the existing breakwater and construct a new breakwater.	<ul style="list-style-type: none"> <li>• Extend existing 170 metre groyne by an additional 100 metres.</li> <li>• Widen the base of the existing breakwater by approximately 200 metres.</li> <li>• Build a new breakwater, approximately 700 metres long.</li> <li>• Construct a sand apron seaward of the breakwater as a protective measure against erosion.</li> </ul>
Reclaim land on the south easterly side of the Port.	<ul style="list-style-type: none"> <li>• Pump dredged material to behind the new breakwater.</li> <li>• Reclaim approximately 15 hectares.</li> </ul>
Construct third berth.	<ul style="list-style-type: none"> <li>• Construct new deep draft berth and shipping channel along the shoreward side of the existing harbour breakwater.</li> <li>• Deepen new berth and shipping channel to -19 metres (reduced level).</li> </ul>
Construct iron ore ship outloading and handling equipment.	<ul style="list-style-type: none"> <li>• Construct an iron ore shiploader designed to suit Cape Class vessels.</li> <li>• Construct new iron ore conveyor and handling equipment.</li> </ul>
Construct an additional iron ore storage shed.	<ul style="list-style-type: none"> <li>• Construct shed with a capacity of 200,000 tonnes (nominally 300 metres x 60 metres, and 22 metres high).</li> </ul>
Timing of construction activities.	<ul style="list-style-type: none"> <li>• The proposal will commence as soon as all approvals are granted and will take approximately 20 – 24 months to complete.</li> <li>• Dredging and breakwater relocation is expected to take 9 months.</li> <li>• Construction of the third berth and the iron ore shiploader is expected to take 15 months.</li> <li>• Construction of additional iron ore storage and handling facilities is expected to take 12 months.</li> </ul>
Ongoing Operation.	<ul style="list-style-type: none"> <li>• Iron ore delivered to the Port by rail will increase from 2 to 4 million tonnes per annum.</li> <li>• The number of trains from the mine will increase from 7 to 14 trains per week. Train movements in and out of the Port will increase from 26 to 46 movements per week.</li> <li>• Iron ore export will increase from 2 to 4 million tonnes per annum.</li> <li>• An additional 15 – 25 iron ore ships will be added to the current 35 – 40 iron ore ships per year. Note, total number of ships entering the port is currently approximately 120. An additional 15 - 25 ships will thus increase annual shipping by approximately 20%.</li> </ul>

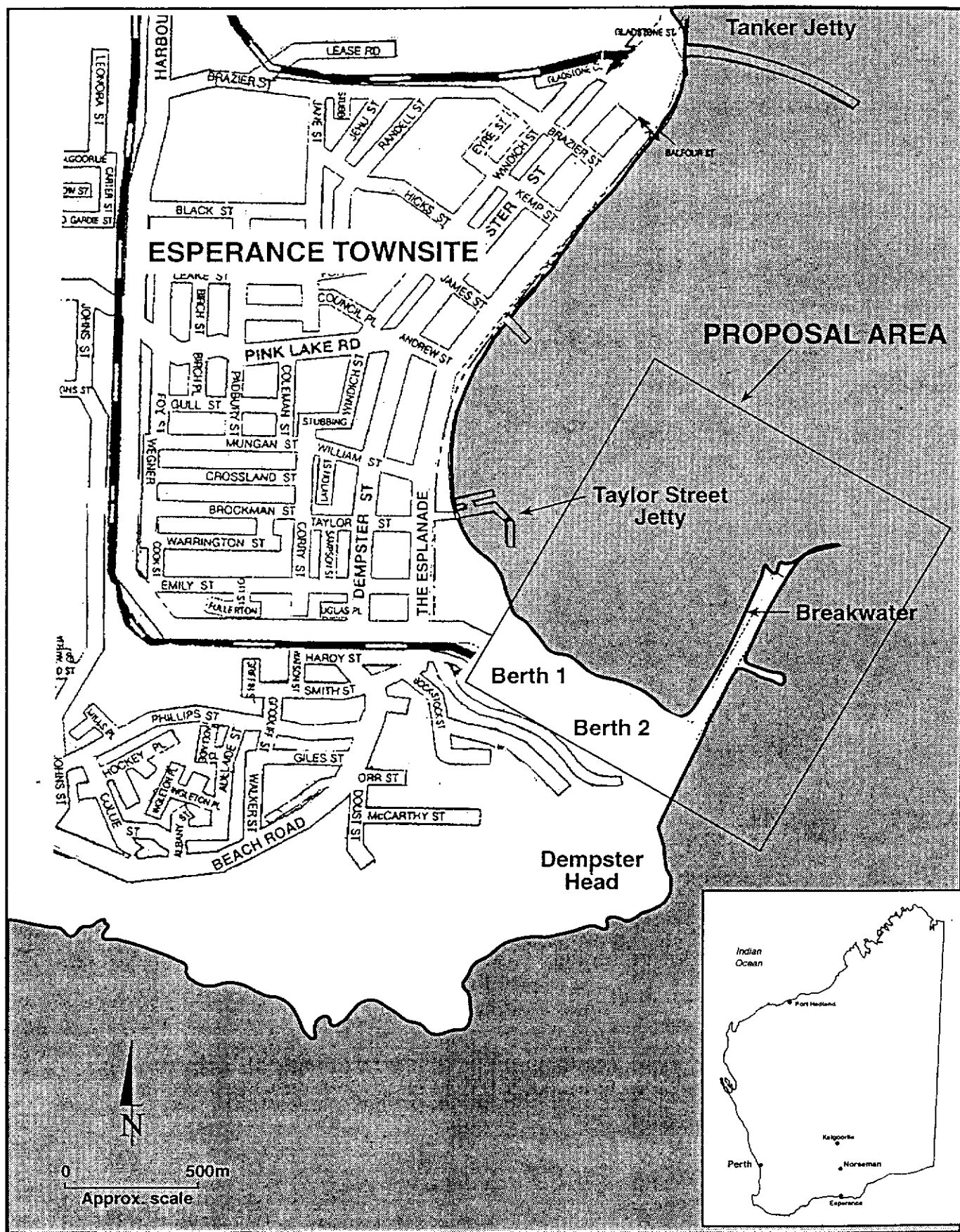


Figure 1. Proposal location, showing proximity of port to townsite.

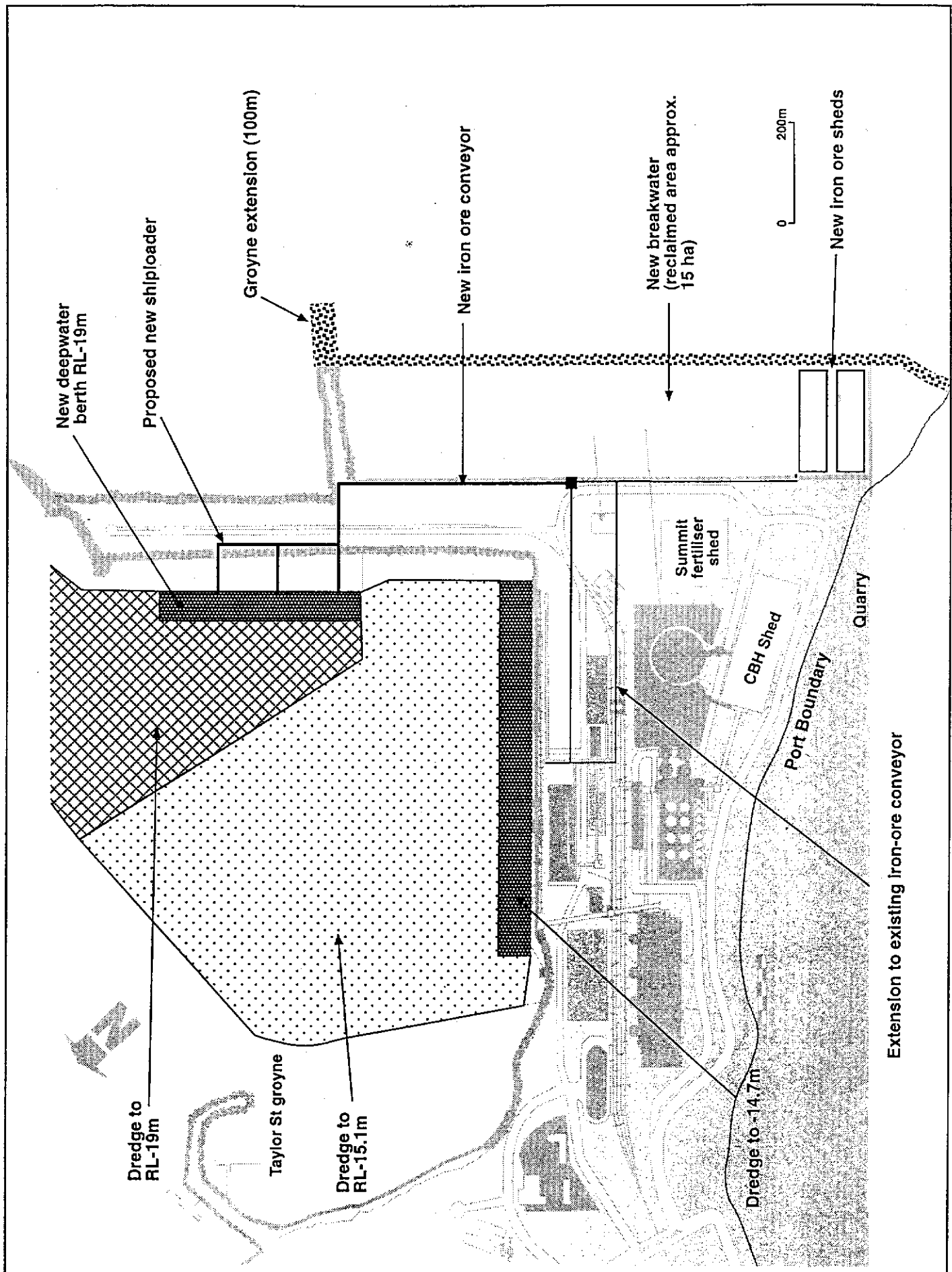


Figure 2. Esperance Port Upgrade — key proposal characteristics.

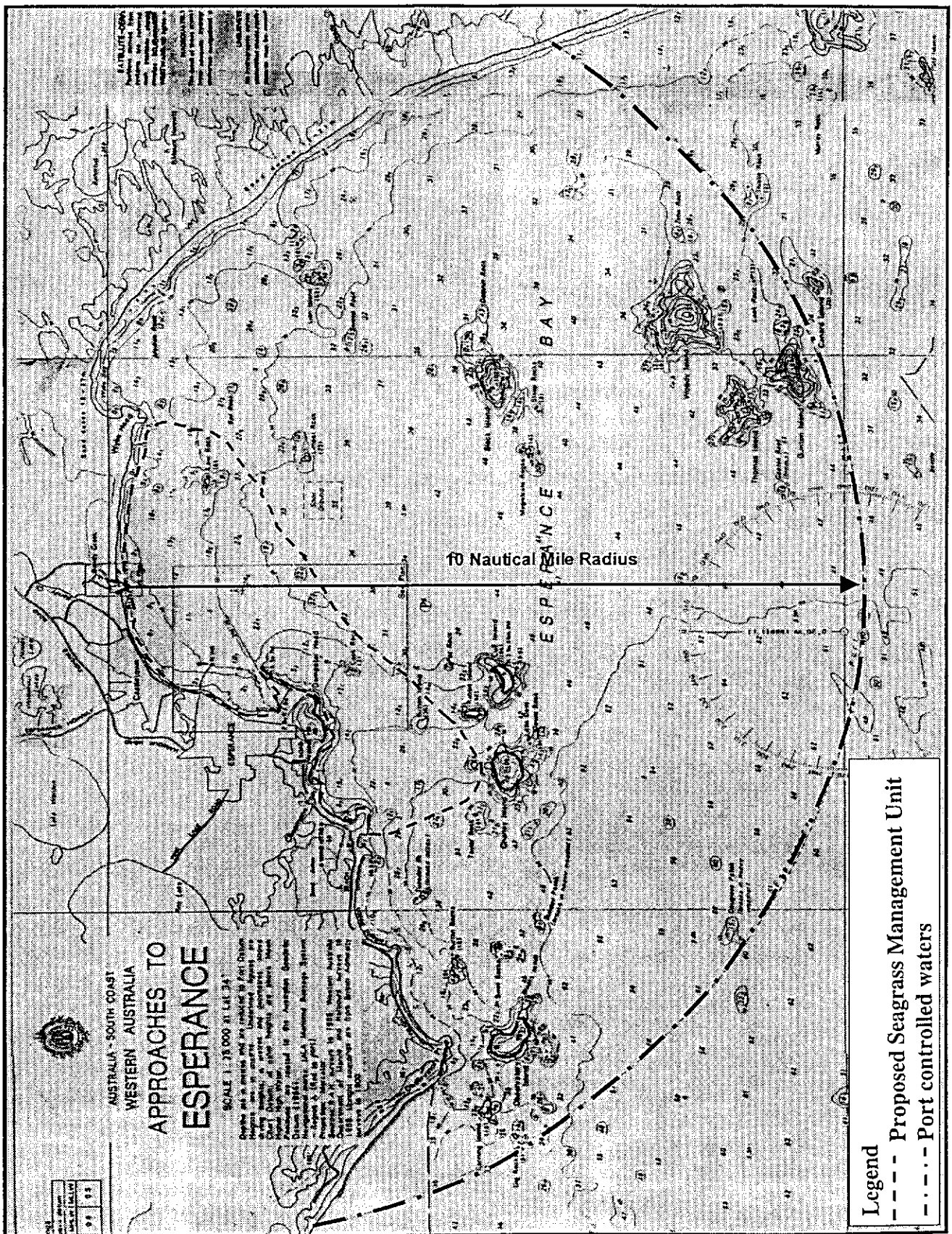


Figure 3. (Schedule 1):

**Proponent's Consolidated Environmental Management  
Commitments**

October 2000

**ESPERANCE PORT - UPGRADING OF  
MARINE FACILITIES**

**ESPERANCE PORT AUTHORITY**

**SUMMARY OF PROPONENT'S ENVIRONMENTAL MANAGEMENT COMMITMENTS – ESPERANCE PORT – UPGRADING OF MARINE FACILITIES  
(1277)**

No.	Topic	Action	Objective	Timing	Advice
<b>CONSTRUCTION PHASE (RECLAMATION, DREDGING AND LAND-BASED CONSTRUCTION)</b>					
1.	Environmental Management.	<p>1.1 Prepare an Environmental Management Program (EMP) for construction works.</p> <p>Program to detail;</p> <ol style="list-style-type: none"> <li>1. responsibility;</li> <li>2. potential environmental impacts;</li> <li>3. management and monitoring programs;</li> <li>4. incident reporting; and</li> <li>5. corrective and preventative action.</li> </ol> <p>1.2 Implement EMP.</p>	To manage environmental issues associated with construction activities.	<p>Prior to commencement of construction.</p> <p>During construction phase</p> <p>Prior to the commencement of dredging operations.</p>	Shire of Esperance
2.	Marine water and sediment quality	<p>2.1 Develop a Dredging and Reclamation Management Plan (DRMP).</p> <p>The plan shall address:</p> <ol style="list-style-type: none"> <li>1 Dredging and reclamation methods;</li> <li>2 Assessment of potential impacts;</li> <li>3 Contamination assessment;</li> <li>4 Disposal of sediments and slurry;</li> <li>5 Monitoring plans and water quality criteria;</li> <li>6 Management measures; and</li> <li>7 Contingency measures.</li> </ol>	Maintain water quality within the inner harbour at pre-construction levels and ensure dredging and reclamation activities have no long term significant impact on overall water quality of the harbour or beneficial users outside the inner harbour		Shire of Esperance.

		2.2	Implement DRMP.			At commencement of and during dredging and reclamation operations.	
3.	Sediment Quality	3.1	Analyse levels of tri-butyl tin and nickel in all material proposed for beach renourishment.	Confirm tri-butyl tin levels in material. Ensure nickel levels within acceptable limits as specified under the National Environment Protection (Assessment of Site Contamination) Measure.	During disposal or relocation of material.		
		3.2	Report results of sediment analysis		During disposal or relocation of material.		
4.	Noise	4.1	Comply with Australian Standard 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites and Environmental Protection (Noise) Regulations 1997 (EPNR), in accordance with EPA Guidance No. 8, Environmental Noise (1998)	Ensure noise impacts resulting from construction activities comply with statutory requirements.	During construction.		
		4.2	Prepare a construction noise management plan (CNMP) in accordance with EPNR.	Ensure noise impacts resulting from construction activities comply with statutory requirements.	Prior to commencement of construction.	Shire of Esperance	
		4.3	Implement CNMP.		During construction		
5.	Air Quality	5.1	Develop a dust management plan for construction activities.	Protect surrounding landuses and environmental values.	Prior to commencement of reclamation and land construction works.	Shire of Esperance	

		5.2	Implement dust management plan			During reclamation and other construction activities.	
6.	Visual amenity	6.1	Locate and install new port infrastructure consistent with details provided in section 6.3.1 of the Public Environmental Review (See schedule 2, attachment A).		To minimise visual intrusion.	Prior to construction of land based infrastructure components.	
<b>PORT OPERATIONS</b>							
7.	Environmental Management.	7.1	Review and update existing port operations EMP to incorporate the individual management and/or monitoring plans/programs specified in commitments 8 – 16.		Manage environmental issues identified through the upgrade assessment.	Prior to commissioning of new port facilities.	Shire of Esperance
		7.2	Implement EMP through an Environmental Management System			Operation	
8.	Marine Flora and Fauna	8.1	Prepare a program of on-going biological monitoring. Program to include: 1 Monitoring of potential tri-butyl tin and nickel leaching from reclamation area; and 2 appropriate remedial and contingency measures.		Ensure operational phases of the proposed upgrade have no adverse off-site impacts outside the inner harbour.	Prior to the completion of reclamation works.	Coastcare



	8.2	Implement biological monitoring program.		Immediately post reclamation/dredging activities at six monthly intervals.  Review after 2 years with need for further monitoring dependent on results.	
	8.3	Report results of biological monitoring program.		Annual reporting if unexpected or negative impacts. Otherwise at 2 year review.	

9.	Coastal processes and littoral drift.	9.1	<p>Review and update coastal processes monitoring program and incorporate management plans for long term resolution of beach erosion issues.</p> <p>Program to address:</p> <ol style="list-style-type: none"> <li>1. historical aspects of beach erosion;</li> <li>2. agreed amenity value of beach;</li> <li>3. specifications for the quantity of suitable material for beach renourishment;</li> <li>4. identification of suitable source of beach renourishment material;</li> <li>5. investigation of management measures to address beach erosion;</li> <li>6. a framework for appropriate management actions;</li> <li>7. monitoring; and</li> <li>8. participation of proponent with other relevant agencies to develop and implement management strategy to address beach erosion.</li> </ol>	<p>Ensure proposed upgrade:</p> <ul style="list-style-type: none"> <li>• does not exacerbate existing beach erosion problems;</li> <li>• provides a mechanism for implementing management measures if impacts are noted;</li> <li>• provides a mechanism for the development and implementation of solutions to the historical problem of beach erosion issues at Esperance.</li> </ul>	Prior to commencing post-reclamation phase.	Coastcare, Shire of Esperance and Transport WA.
		9.2	Implement coastal processes monitoring program, incorporating management strategies.		During port operations.	
10.	Introduction of foreign species.	10.1	Participate in a recognized program of research co-ordinated by the Centre for Research on Introduced Marine Pests	Maintain diversity of local marine flora and fauna.	Within next 5 years.	CSIRO

	10.2	Adopt strategies consistent with AQIS guidelines for ballast water management.	Minimise risk of introduction of unwanted marine organisms.	Within 6 months following completion of construction activities.	AQIS
	10.3	Continue prohibiting in-water hull cleaning in port controlled waters	Minimise risk of introduction of unwanted marine organisms.	During port operations	
11.	11.1	Review and update ship/shore cargo handling procedures.	Minimise spill incidents resulting from loading operations.	Within 3 months following commencement of dredging operations.	
	11.2	Review and update oil spill management strategy.	Maintain water quality within Esperance Harbour and areas adjacent to shipping channels.	Within 3 months following commencement of increased shipping operations.	State Combat Committee for Oil Spill Management, Transport WA.
12.	12.1	Prepare noise monitoring and management plan (NMMP) consistent with any statutory mechanisms and approvals.	Ensure noise impacts resulting from on-going operations comply with statutory requirements.	Prior to commissioning new port facilities	Shire of Esperance
	12.2	Implement NMMP.		During port operations	
13.	13.1	Establish an agreed code of conduct for train drivers and alternative locomotive practices in consultation with Westrail.	Manage impact to noise sensitive premises from increased traffic movement.	Prior to increasing iron-ore throughput.	Westrail (or other relevant rail operator).
	13.2	Implement the agreed Code of Practice		During port operations.	Westrail(or other relevant rail operator).

14.	Air Quality.	14.1	Review and update dust monitoring and management plan for port operations to accommodate upgrade (as required by Works Approval, Licence or Registration).	Protect surrounding landuses and environmental values.	Prior to increasing iron ore throughput.	Shire of Esperance.
		14.2	Implement revised dust monitoring and management plan.		During port operations	
		14.3	Enclose all iron-ore conveyors and transfer towers.	Protect surrounding landuses and environmental values.	During construction	
15.	Community liaison	15.1	Review and update community liaison procedures.	To maintain and develop communication links between the proponent and local residents to ensure the public is aware of project progress through design, commissioning and operational phases.	Prior to increase in iron ore throughput.	Shire of Esperance.
		15.2	Implement community liaison procedures.		Prior to increase in iron ore throughput.	
16.	Public Health and Safety (Traffic management)	16.1	Prepare a traffic management plan in consultation with relevant stakeholders.	Manage impacts resulting from additional rail movements associated with an increased iron ore throughput.	Prior to increased iron ore throughput.	Shire of Esperance, Westrail (or relevant rail authority), MRWA and Transport WA

	16.2	Implement traffic management plan in conjunction with relevant stakeholders.		During operations associated with increase in iron ore throughput.	Shire of Esperance, Westrail (or relevant rail authority), MRWA and Transport WA.
--	------	------------------------------------------------------------------------------	--	--------------------------------------------------------------------	-----------------------------------------------------------------------------------

**Abbreviations:**

AQIS      Australian Quarantine and Inspection Service  
 CSIRO     Commonwealth Scientific & Industrial Research Organisation  
 DEP       Department of Environmental Protection  
 MRWA    Main Roads Western Australia

**ESPERANCE PORT - UPGRADING OF MARINE  
FACILITIES (1277)**

**Extract from Public Environmental Review  
Document**

**(Section 6.3.1, Esperance Port Authority, January 2000)**

## **Social Surroundings**

### **6.3.1 Visual Amenity**

Dredging of the Esperance Harbour will cause temporary discolouration of the sea around the Port. Suspended sediment associated with the 1988/1989 dredging settled within a few weeks, and harbour waters have remained clear ever since. Photos 6.1 and 6.2 show the discolouration that occurred during the 1988/1989 dredging. Based on past experience, similar discolouration is expected with the current proposal.

The new iron ore handling facilities will impact on coastline views<sup>1</sup>. The impact will be most obvious from the area to the north west of the Port, along The Esplanade.

A dual quadrant (cantilever system) shiploader will be constructed. It will be approximately 30 m high at its highest point. If a traditional shiploader like the current shiploader used at the Port were to be constructed, it would constitute a 40 - 50 m high structure. The dual quadrant shiploader allows for iron ore conveyor and handling equipment to run along the ground (unlike a traditional shiploader which requires this equipment to be up in the air, with greater visual impacts).

The new iron ore shed will be located behind existing Port structures which will serve as an effective screen. The new shed will be similar in appearance to the existing iron ore shed.

The new works will be painted with colours that blend with the surrounding environment.

Refer to the following figures for an impression of the visual impact of the proposed works:

- Figure 6.2 - View of Proposed Berth 3 from Taylor Street Beach;
- Figure 6.3 - View of Proposed Berth 3 from Taylor Street Beach with Cape Class Vessel;
- Figure 6.4 - View of Proposed Berth 3 if Traditional Style Shiploader is Constructed; and
- Figure 6.5 - View of Proposed Iron Ore Infrastructure from Top of Dempster Head.

### **6.3.2 Recreation**

Figure 5.6 shows the primary areas where recreational fishing is currently undertaken around the Port<sup>2</sup>. In particular, there is a popular fishing spot in the Port basin, off the boat shed, to the east of the Port Authority Offices.

Views have been expressed by various local fishermen that the stirring up of the harbour basin during dredging may attract fish to the area and improve recreational fishing in the short term.

Small boat fishing will still be possible provided that it does not encroach on dredging operations. Once Berth 3 has been constructed a 100 m clearance zone around the berth will be enforced for safety reasons. Notices advising of clearance requirement will be installed.

### **6.3.3 Tourism**

---

<sup>1</sup> i.e., the new iron ore conveyor and handling equipment and shed, Berth 3, the larger vessels berthing at Berth 3, and the ship loader used at Berth 3.

<sup>2</sup> The Recreational Fisheries Advisory Committee (RFAC) of Esperance was consulted in order to help prepare the map.