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AMOCO AUSTRALIA
PETROLEUM COMPANY
OIL SPILL CONTINGENCY PLAN
OFFSHORE EMERGENCY TASK FORCE (OETF)
(RELATING TO ENVIRONMENTAL PRESERVATION)

February, 1985 (Revised)

Permit T14P

TPR
OR_0244

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1.0 INTRODUCTION

This manual documents Amoco Australia's policy, procedures and plans to protect the environment during offshore drilling operations. This manual will assist and instruct operating personnel and will be used as a guide by all levels of supervision and management.

Copies of this manual are assigned to specific individuals and locations. All operating and staff personnel are to be familiar with the manual. Operations superintendents are responsible in seeing that the procedures and rules outlined are followed by all company and contractor personnel.

2.0 STATEMENT OF COMPANY POLICY ON ENVIRONMENTAL PROTECTION AND HANDLING
EMERGENCIES

Amoco Australia Petroleum Company (as a subsidiary of Standard Oil Company of Indiana) has traditionally recognized the obligation to conduct its affairs as a constructive corporate member of society. To that end we have long been a leader in safety and environmental conservation activities. We have taken every appropriate step to contribute to society's efforts to protect public health and conserve irreplaceable environmental resources. Our policy is as follows:

- o Establish and maintain controls for the protection of public health and property within the scope of company operations, facilities and products.
- o Establish and maintain controls for environmental conservation in company operations, facilities, and products.
- o Engage in company research and cooperate with others in research on associated technological and medical problems.
- o Cooperate with all levels of government to seek efficient and practicable regulations, controls and enforcement.
- o Provide funds and competent personnel to deal energetically with these matters.

In accordance with this policy, Amoco Australia Petroleum Company is resolved to deal promptly and effectively with any emergencies or spills of oil or chemicals that occur as a result of our operations. The objective is to prevent, as far as practicable, any damage to public health, property, wildlife, and ecology from such events. An effective response will be mobilized at the local level for some emergencies but, for other emergencies, the immediate coordination of effort of various intracompany divisions and, perhaps, outside contractors and/or spill control cooperatives may be required. In any event, the company's response will be timely and adequate to minimize the need for possible intervention in the emergency control operation of outside agencies.

Further to this policy, each Amoco Australia Petroleum Company department, division or operating unit will formulate, publish, distribute and annually exercise a Contingency Plan for handling emergencies in the sphere of responsibility of each operating unit.

3.0 PLANNING FOR EMERGENCY ACTION

(Action required for initiation of the Offshore Emergency Task Force (OETF), Amoco Australia)

3.1 Definition of Emergency

- (a) Loss, or potential loss of life or major equipment
- (b) Damage or potential damage to the environment
- (c) Combination of (a) and (b) above

3.2 Action Required

When any emergency, as described in (3.1), arises then the OETF shall go into effect immediately following a prearranged plan of action, acting upon approved emergency powers generated (and prearranged) by the emergency.

Under situations covered by (3.1), two emergency categories are envisaged: restrictive and nonrestrictive emergencies.

- (a) A Restrictive Emergency is within Amoco Australia's capability and Amoco Australia assumes full responsibility for all measures taken.
- (b) A Nonrestrictive Emergency is a situation outside of Amoco Australia's immediate capability and may involve

resources, services and equipment from Amoco Australia's parent companies, and/or outside operations or contractors or governmental agencies. The category of this situation may change from (a) to (b) or revert from (b) to (a) as the situation deteriorates or eases.

3.3 Type of Emergency

(a) Restrictive

1. Small oil spills
2. Controllable well kicks
3. Serious or fatal injury or accident not involving loss or potential loss of drilling vessel or platform

(b) Nonrestrictive

1. Major oil spills
2. Noncontrollable well kicks
3. Imminent danger of loss or potential loss of drilling vessel or platform from any source

3.4 Purpose of Plan

- (a) To outline what must be done in an emergency with indications of priority.
- (b) To assign jobs beforehand with predesignated authority.
- (c) To establish communications and coordination with outside services or agencies.

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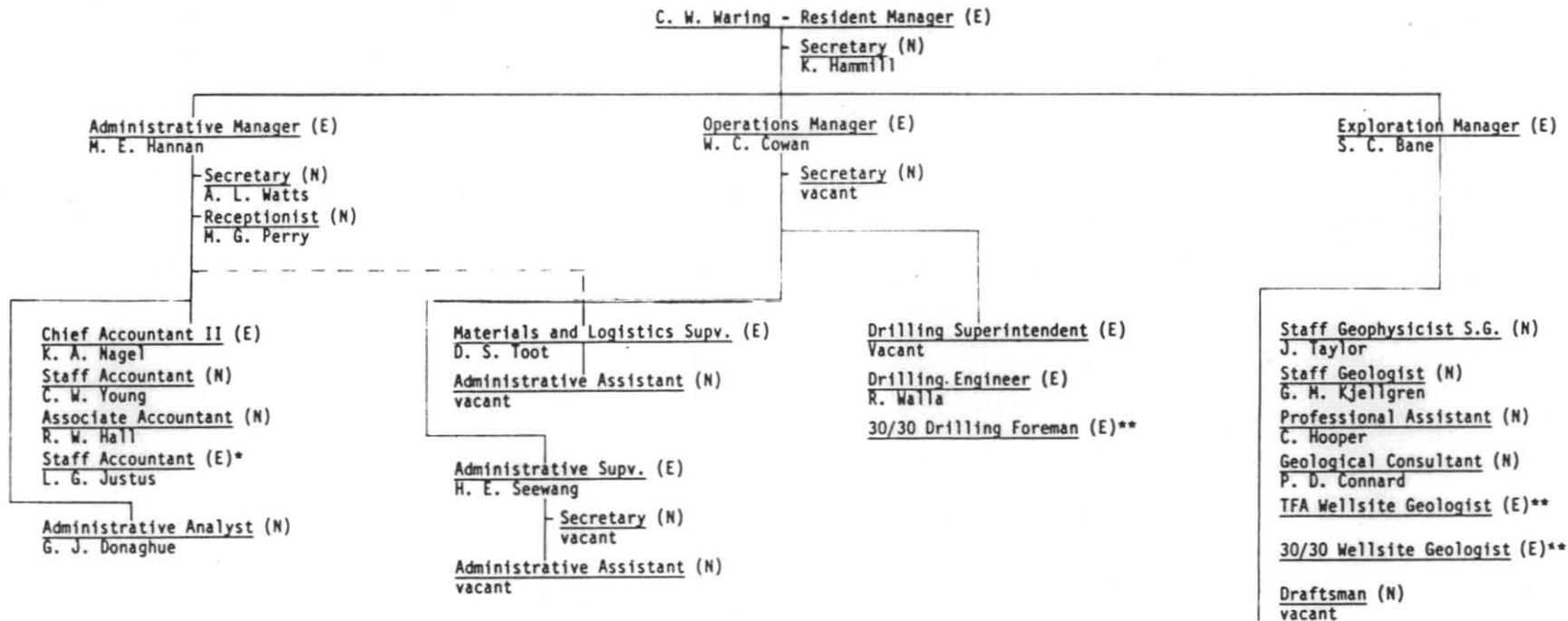
(d) To serve as a frame of reference for procuring vital materials and services.

The plans may be altered, modified or reviewed as circumstances and conditions dictate.

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3.5 PERSONNEL

AMOCO AUSTRALIA PETROLEUM COMPANY



* - TFA to Amoco Indonesia not included on Personnel Forecast
 ** - not included on Personnel Forecast
 vacant - approved on Personnel Forecast

4.0 SMALL OIL SPILLS

While every effort will be made to prevent oil spillage into the marine environment from any source, it is inevitable that an occasional spill may accidentally occur. Amoco Australia's policy is directed towards the prevention of oil spills as the most effective means of control. Primarily, this will be done through good house keeping, providing adequate equipment, properly maintaining that equipment and making efficient utilization thereof. Under normal drilling operations no crude oil will be encountered at the surface. It is only during production testing operations that crude oil will deliberately be brought to the surface. This will be done under closely controlled flow conditions and procedures. Each drilling vessel will be equipped to control the disposal of the well effluent by burning.

To combat small spills, the most convenient work boat in the area, fully equipped with high pressure nozzles and chemical dispersant, will be deployed to the affected area. The dispersant used, is completely biodegradable and has a low toxicity. It meets governmental requirements for the purpose intended; namely as a highly efficient oil spill dispersant. It has also been tested against and is compatible with the low gravity crude produced locally. Work boats normally operating for Amoco Australia would be employed.

Our boats can similarly be deployed to assist the authorities in cleaning up and dispersing oil spills not generated by Amoco

Australia's operations anywhere in the Tasmanian area, conditions permitting.

As one boat is located at the rig, another at Hobart and the third usually in transit between the Rig and Hobart, at least one boat can usually begin clean-up operations within an hour after notification that a spill has been observed at a particular location.

A minimum of two drums of dispersant will be kept on board each of the three work boats. Ten drums will be located on the rig, and 10 drums at Hobart.

The dispersant is emulsified with fresh or seawater in concentrations to be determined and directed towards the affected area by a spray lance, ship's fire hydrant or similar equipment.

4.1 Oil Spill Handling Guidelines

In the event that an oil spill should occur either due to the drilling operation or from attendant vessels the following priorities will be observed:

- Priority 1. Personnel Safety
- Priority 2. Fire Prevention
- Priority 3. Eliminating the source
- Priority 4. Prevention of slick from reaching shore or environmentally sensitive localities.

The following procedure covers the action necessary in the most probable cases of oil spillage, however, all cases or circumstances cannot be foreseen, and it is expected that the supervisor responsible will use his best judgement.

If the spillage of oil does not present a safety hazard and does not endanger any sensitive area or shoreline, then the only action to be taken will be to monitor the movement of the spilled oil.

If the spilled oil is moving towards a shoreline or sensitive area all possible action will be taken to prevent impact on these areas. Due to the impracticalities of deploying booms and skimmers in sea states found in open waters dispersants approved by the State Combat Committee may be required.

If the spilled oil comes within 8 kilometers of a shoreline or environmentally sensitive locality the means of dealing with the oil will be decided in consultation with the State Combat Committee.

4.2 Responsibilities for Handling Oil Spills

Responsibilities for handling an oil spill within the Amoco handling capabilities are summarized in the PHASE I ACTION CHART.

If control of an oil spill is beyond the capabilities of the Company's resources, then the oil industry Marine Oil Spills Action Plan (MOSAP) will be called into action through the Regional Industry Controller. This plan, prepared by the Petroleum Institute Environmental Conservation Executive (PIECE), co-ordinates oil industry spill control facilities and is summarized in the PHASE II ACTION CHART.

In the unlikely event that spill control is beyond the resources of both the Company and MOSAP, assistance will be requested of the National Plan to Combat Pollution of the Sea by Oil (N.P.).

4.3 Oil Spill Reporting Procedures

Any company or contract employee observing an oil slick will immediately notify his supervisor or, in his absence, the Drilling Superintendent.

The Drilling Superintendent will confirm the observation, its possible cause and extent, and will immediately advise the Operations Manager. The Superintendent and/or employee will then take any action possible to stop the flow of oil and will shut off any engines or electrical equipment that may create a fire hazard.

The Drilling Superintendent will alert the marine personnel, aircraft personnel, and organize the equipment necessary to combat the oil spill. The Superintendent will ensure that all necessary action is taken and will confirm that the oil spill has been dispersed.

The Drilling Superintendent will be responsible for notifying head office in the event of any significant escape of hydrocarbon resulting from the operations activities.

Information to be reported is as follows:

1. Time and Location of escape of hydrocarbons
2. Estimated amount of hydrocarbon spilled
3. Any resultant damage
4. Cause of escape of hydrocarbons
5. Steps taken to control the escape

A detailed log of events and actions taken to control a spill will be kept.

4.4 Action Steps

Phase I - Spill Control Within Company Capacity

Safety of personnel and prevention of fire are the only matters taking precedence over oil spill control.

1. Identify fire risk and take action to control the escape of hydrocarbons.
2. Commence surveillance of spilled oil and identify the amount, type and direction of movement of the spilled oil.
3. If necessary for safety reasons, apply approved dispersant in adequate concentration to achieve proper dispersion.
4. Plot the anticipated course of the spilled oil; use the best available means to track the spill if it moves away from the rig; determine what areas may be affected by the spilled oil.
5. Mobilize sufficient approved dispersant (Corexit 9527 or BP1100) and apply as required to deal with the spill. The following dispersants should not be used without approval from the State Combat Committee: Corexit 7554, 8666, 8667, Gamlin WV, V.
6. Any control action including use of dispersants which is likely to affect areas within 8 kilometres of a shoreline should first have the concurrence of the State Combat Committee. If further action seems unlikely to prevent oil reaching sandy shore, arrange for spreading absorbent materials (e.g. sawdust). A beach already covered with oil must not be sprayed with dispersant.
7. If warranted mobilize earth moving equipment and locate an area approved by the local government for disposal of oil soaked sand and absorbent.
8. Where feasible, rehabilitate beaches and foreshore in areas damaged by oil, vehicles and equipment.

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Phase II - Spill Control Within MOSAP Capacity

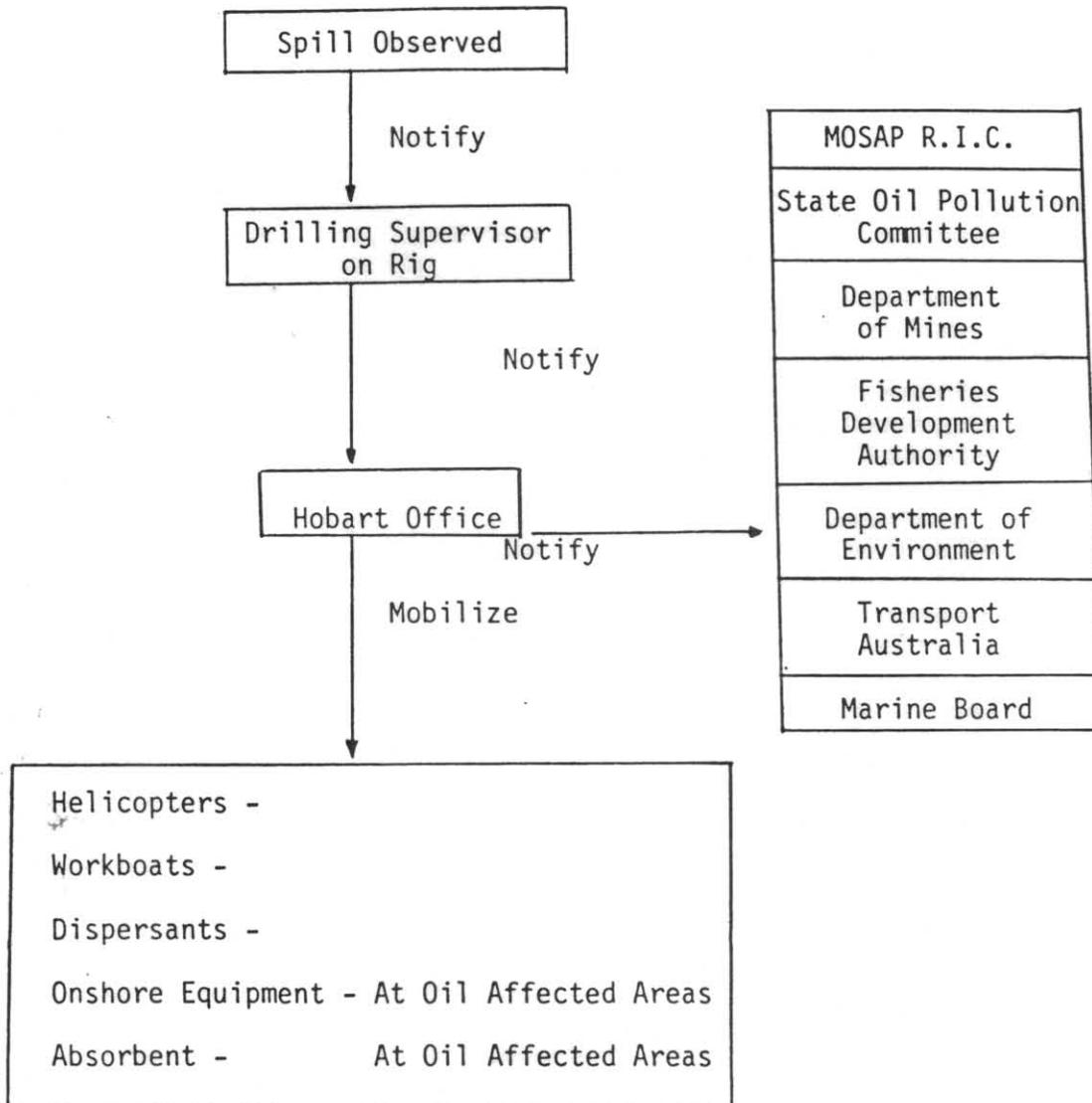
1. Advise MOSAP Regional Industry Controller that the spill is beyond the Company's capacity and request assistance.
2. Provide support for MOSAP operation to extent possible.

Phase III - Spill Control Beyond MOSAP Capacity

1. Advise Department of Mines and State Combat Committee that spill control is beyond MOSAP and Company capacity and request assistance from National plan be sought.
2. Provide assistance to MOSAP and National Plan operations to extent possible.

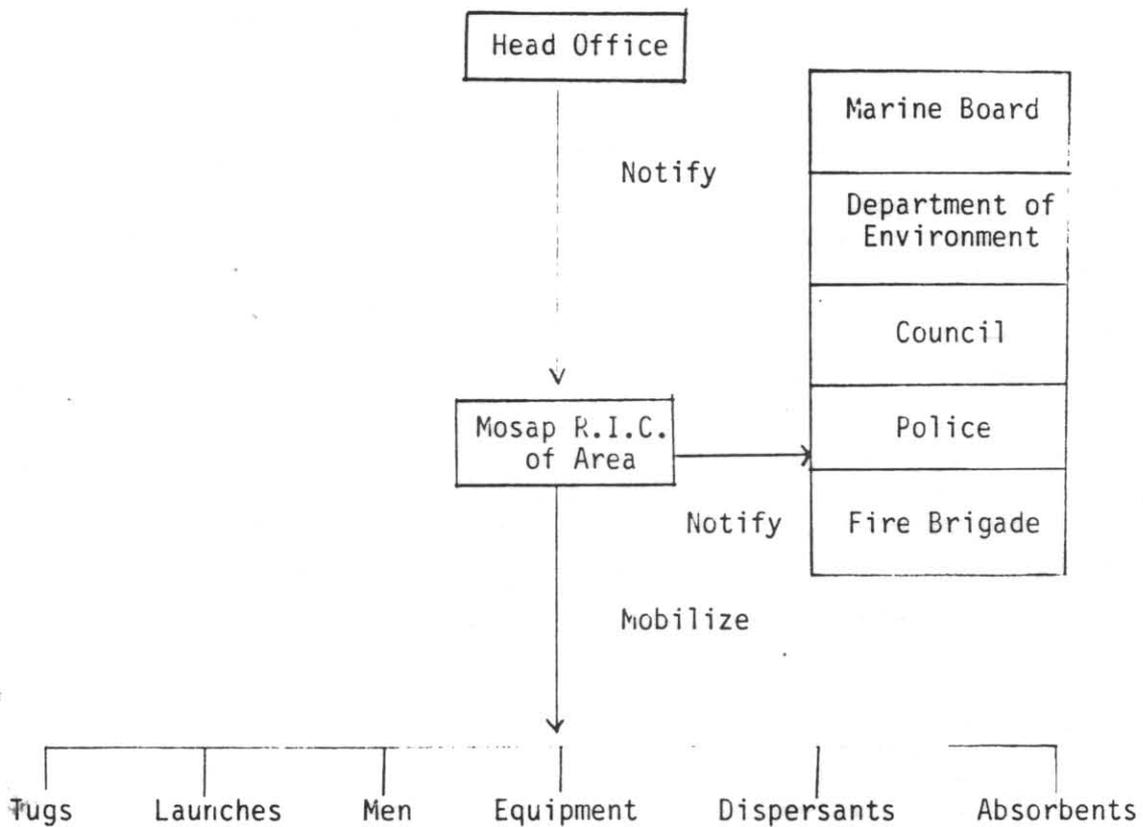
PHASE I SPILL ACTION
CHART

HANDLING AN OIL SPILL WITHIN THE
COMPANY'S CAPABILITY



PHASE II SPILL ACTION
CHART

HANDLING A LARGE OIL SPILL
BEYOND COMPANY'S HANDLING CAPABILITY



Locations at which these facilities are mobilized will depend upon the magnitude of the spill and the area which it is likely to affect.

5.0 EQUIPMENT AVAILABLE TO HANDLE AN OIL SPILL

Equipment available to handle an oil spill includes Company contracted workboats and helicopters at the drillsite and shore base as well as many other facilities which can be called upon through PIECE Marine Oil Spill Action Plan.

5.1 Workboats

The workboats will be equipped with Minimax Oil Dispersant spray booms, pump, tank, etc., capable of applying dispersant over a wide area. Each vessel will carry at least 2 drums of either Corexit 9527 or BP1100. (See Appendix, Tas. Req. Supp., Sections 10, 12.2, 12.3).

5.2 Helicopters

The helicopters servicing the rig will be available for evaluating the size of the spill and monitoring its movement under the influence of winds and currents. A "Huss Bucket" (680 litres capacity) can be fitted to helicopters to enable the helicopters to apply approved undiluted dispersant. Actual dispersant load capacity is dependent upon the distance of the spilled oil from the dispersant supply point. (See Appendix, Tas. Req. Supp., Section 11.2).

5.3 Dispersants

Dispersant stocks will be maintained at the Company shore base at Hobart. (See Appendix, Tas. Req. Supp., Section 12.1)

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6.0

DEPARTMENT OF TRANSPORT
MARINE POLLUTION OPERATIONS

<u>Direct Lines</u>		(062) <u>O.H.</u>	(062) <u>A.H.</u>
David Kay	Director	644560	541674
Don Brodie	Technical Advisor	644561	319910
	Operations Co-ordinator	644558	
	Administrative Officer	644556	

Telex: AA61680 (Office Hours) - AA62349 (After Hours)

Postal Address Marine Pollution Operations
Department of Transport
PO Box 594
CIVIC SQUARE ACT 2608

6.0

REGIONAL AUTHORITIES ORGANISATION

	<u>TELEPHONE</u>	
	<u>Office</u>	<u>After Hours</u>
6.1 <u>Commonwealth Government</u>		
<u>Department of Transport</u>		
<u>Central Office (Canberra)</u>	(062)	(062)
Director Pollution Prevention	644560	541674
<u>Regional Office (Hobart)</u>	(002)	
Responsible Authority - Assistant Director, Mr J. Hartley	205299	296848
Operations Controller - Captain M. Brahan	205309	486380
<u>Regional Sub-Office (Devonport)</u>	(044)	
Deputy Ops. Controller Capt C.W. Filor	241597	244497
<u>Department of Administrative Services</u>		
Manager, Transport and Storage Mr R.T. Clarke	205221	479320
Assistant Manager Operations Mr B.J. Brooks	205224	443785
<u>Department of Defence (Army)</u>		
Duty Officer	212200	212310
<u>Department of Defence (Navy)</u>		
N.O.C. Tasmania After Hours Duty Room	212336	344758

	<u>Office</u>	<u>After Hours</u>
6.2 <u>State Government</u>		
<u>Department of the Environment</u>		
A/Director of Environmental Control - Mr B.O. Healey	302770	725887
State Oil Pollution Control Officer - Mr R.J. Montgomery	306041	442034 571133
A/Chief Environmental Officer (Dept. of the Environment) Mr J.A. Isaac	302781	478584
<u>State Emergency Service</u>		
All hours	303030 302848	
A/Deputy Director State Emergency Service - Mr J.M. Paul	302938	681218
Principal Staff Officer (Operations) - Mr B.G. Brand	302848	284434
Principal Staff Officer (Training) - Mr R.A. Claxton	306386	294537
<u>On Scene Co-Ordinators</u> (Refer paragraph 2.3 including 2.3.1)		
Marine Board of Burnie Captain M.C. Strachan	(004) 313444	313493
Marine Board of Circular Head, Captain M.C. Strachan	(004) 313444	313493
Port of Devonport Authority Captain W.J. Stuart	(004) 241951	241805
Marine Board of Flinders Island	(003) 593502	593572
Marine Board of Hobart Captain J.M. Lucas	(002) 346722	251600
Marine Board of King Island	(004) 621455	
Port of Launceston Authority Captain R.E.N. Barber	(003) 821222	821460

	<u>Office</u>	<u>After Hours</u>
<u>Reserved</u>		
<u>State Committee</u>		
A member is to notify the Chairman or Executive Officer if circumstances require delegation of an officer to act in his place.		
A/Director of Environmental Control (Chairman) Mr B.O. Healey	302770	725887
Deputy Director State Emergency Service Mr J. Paul	302938	681218
T.F.D.A. Fisheries Development Manager Mr A.J. Harrison	303520	479589
Tasmanian Harbour Authorities representative Captain J.M. Lucas	346722	251600
Police Representative Inspector T.F. Whyman	381393	444803
Regional Industry Controller A.I.P.E.C.E. Mr C. Windley	284834	723943
Regional Controller Assistant Director, Department of Transport (Commonwealth) Mr J. Hartley	205299	296848
State Oil Pollution Control Officer (Executive Officer to Committee) Mr R.J. Montgomery	306041	442034 571133
Municipal Association of Tasmania (Mr A. Gerard)	295555	674456
Commissioner for Transport (Mr R.W. Morris) (A.H. - Mr N.A. Macmillan)	389201 389201	252623
<u>Police Rescue Squad</u>		
O.I.C. - Inspector T.F. Whyman	381393	444803
2.1.C. - Sgt. A.J. Power	381393	236783

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	<u>Office</u>	<u>After Hours</u>
6.3 <u>A.I.P.E.C.E.</u>		
Regional Industry Controller Mr C. Windley	284661	723943
Deputy Regional Industry Controller Mr T. Wylie	780333	493046
<u>On Scene Co-ordinator</u>		
Captain J.M. Lucas (Harbour Master - Marine Board of Hobart)	346722	251600
<u>Deputy On Scene Co-Ordinator</u>		
Captain J.B.N. Hodgson Marine Board of Hobart	346722	487204

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7.0 MARINE OIL SPILL ACTION PLAN (MOSAP)

- OVERALL PLAN



**Australian Institute
of Petroleum Ltd**

Environmental Conservation Executive

**MARINE OIL SPILL ACTION PLAN
(MOSAP)**

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227 Collins Street,
Melbourne, Victoria 3000.
Telephone (03) 654 1411
International + 61 3 654 1411
Telex 33421

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PREFACE

This manual describes the Australian oil industry's voluntary mutual aid plan to combat marine oil spills. The industry plan aids the marine oil spills response plans of individual companies.

Also it supplements the Commonwealth and State Governments' marine oil spills contingency plan funded by a levy on all ships including oil tankers visiting Australian ports. The Government plan, called the National Plan to Combat Pollution of the Sea by Oil, combats all marine oil spills from other than the oil industry; it also combats *major* marine oil spills from the oil industry.

The oil industry plan is called the Oil Industry Marine Oil Spills Action Plan (MOSAP) and is approved by the Environmental Conservation Executive of the Australian Institute of Petroleum Ltd. (A.I.P.). The major oil companies operating in Australia are members of AIP.

Through their representatives, these oil companies have agreed to provide in appropriate ways the requisite support to enable MOSAP to perform its role.

MOSAP's role is to maintain a vital organisation capable of assisting an individual member company on request in combating an oil spill beyond its ability to handle adequately.

MOSAP is also ready to assist the National Plan at Commonwealth, State or local level in the event of a major oil spill incident and also whenever called upon for aid.

The oil industry in Papua New Guinea continues to be part of MOSAP.

Oil exploration companies, in their role as offshore operators, belong to (or are eligible to join) AIP, and thus participate in MOSAP.

The oil industry shares with the Government and the community the common objective of clean seas. MOSAP helps.

BASIC CONCEPT

A minor oil spill will be attended to by the oil company concerned, which will use the normal equipment it has available at or near the site. The term "the oil company concerned," in this context, does not necessarily imply that such company is responsible, or even partly responsible, for the spillage.

MOSAP comes into action essentially when an oil spill is beyond the capability of the oil company concerned or of any other company, port authority or government department and that company, authority or department seeks help from AIP. In this case two or more oil companies may channel their aid through the Local Industry Controller or Deputy who has an inventory of all oil industry equipment at his disposal in the particular port.

The Local Industry Controller's function is to:

- mobilise industry expertise and resources within the port to contain, combat and clean up the spill;
- provide advice to the company first dealing with the situation;
- liaise with port and/or government authorities on planning and implementing the clean-up.

From the time of his appointment, each Local Industry Controller (LIC) should establish an exact interface, and maintain liaison, with the local authorities so that in his port there exists a realistic and effective approach to oil spills even before one occurs. Few generalisations can be made because ports differ substantially in the volume and variety of shipping they handle and in the resources and expertise their respective authorities can marshal to deal with an oil spill.

If a spill exceeds the capability of the LIC and the resources at his disposal, the Regional Industry Controller (RIC) will be contacted and he will arrange for personnel and/or resources from other areas inside and/or outside his region to help with the clean-up. He or the local authority may ask for assistance from the National Plan to Combat Pollution of the Sea by Oil NATPLAN. In such a situation the State Committee of NATPLAN may have been called upon to act (see National Plan Manual).

An important part of each RIC's responsibility is to establish and maintain liaison with State authorities, State branches of Commonwealth authorities, and particularly the State Committee of NATPLAN. RICs are usually members of NATPLAN State Committees.

If a spill of major disaster proportions occurs, the RIC will immediately notify the Overall Industry Co-ordinator. He in turn will liaise direct with the Commonwealth Department of Transport to ensure that oil industry action dovetails into NATPLAN. He will continue to co-ordinate the industry's activities for that purpose.

MOSAP is a co-operative scheme to facilitate prompt, effective action on an industry basis whenever and wherever necessary. When an oil spill occurs, there needs to be an immediate response, not an argument about where the responsibility lies for causing it or cleaning it up. However, it is assumed that if the responsibility is clearly that of an AIP member company, that company will, as quickly as possible, step up its input of resources to an appropriate level and thus relieve the pressure on MOSAP.



- | | |
|--|--|
| 1. QUEENSLAND | 6. SOUTH AUSTRALIA |
| 2. NEW SOUTH WALES | 7. Southern WESTERN AUSTRALIA |
| 3. Eastern VICTORIA AND
BASS STRAIT | 8. North West WESTERN AUSTRALIA |
| 4. Western VICTORIA | 9. NORTHERN TERRITORY AND
Far North WESTERN AUSTRALIA |
| 5. TASMANIA | 10. PAPUA NEW GUINEA |

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DUTIES AND RESPONSIBILITIES – OVERALL INDUSTRY CO-ORDINATOR (OIC)

The Overall Industry Co-ordinator is the AIP's Director, Environmental Affairs. His terms of reference are:–

- Objectives:**
- To be responsible for the line organisation established to ensure that any marine oil spill caused by the Industry is dealt with in the most effective and expeditious manner.
 - To keep the line organisation in a proper state of preparedness.
 - To offer this organisation to the authorities to assist in handling related matters outside the Industry.
 - To provide technical services and advise and to co-operate with the National Plan in the event of a major spill.
- Reports to:** The Overall Industry Co-ordinator is responsible to the Institute's Environmental Conservation Executive, via its Chairman for matters within the scope of this action plan.
- Organisation:** The Overall Industry Co-ordinator has reporting directly to him several Regional Controllers who in turn have Local Industry Controllers reporting to them for all the Industry seaboard ports and offshore producing areas in matters pertaining to oil spill.
- Training:** He is accountable for ensuring that adequate training is provided and maintained through every level of his action organisation. (This would include periodic case studies and review of incidents.)
- Inventory:** To maintain this manual containing a complete inventory of oil spill equipment in Australia accessible to the Overall Industry Co-ordinator and his line organisation.
- State of Readiness:** He is responsible for ensuring that the inventory of equipment and the people involved are in a constant state of readiness. A prompt response on behalf of the Industry is the essential basis of this Plan.
- Government Relationships:** The Overall Industry Co-ordinator will develop appropriate Government relationships to facilitate the integration of this Marine Oil Spill Action Plan with the relevant National Plan.

DUTIES AND RESPONSIBILITIES – REGIONAL INDUSTRY CONTROLLER (RIC)

The Regional Industry Controller as selected is a responsible manager from an oil company operating in a major port within the region. He has the support of all oil companies operating in the region and is of such a calibre that he can deal directly with the authority with prime responsibility for oil spill control.

OBJECTIVE:

To represent the Industry in all matters pertaining to the operation of the M.O.S.A.P. in his region. To assist the LIC's and liaise with the authorities or industry regarding oil spill clean-up. To nominate the appointment of Local Industry Controllers and to ensure that they are adequately discharging their duties as laid down in the MOSAP plan.

RESPONSIBILITIES:

1. To ensure that all ports are represented by adequately trained LIC's.
2. To know and visit at least annually:
 - (a) All the Local Industry Controllers of the region;
 - (b) Relevant port authority personnel; and
 - (c) Relevant D.O.T. (NATPLAN) personnel.
3. To assist the Local Industry Controllers in the performance of their duties and to ensure each LIC has the full co-operation of all companies in the port.
4. To have a broad knowledge of oil spill clean-up procedures.
5. To appoint a Deputy RIC and ensure he is conversant with the RIC's full-role and is advised when the RIC will be absent from the Region.
6.
 - (a) To attend State Committee Meetings of the NATPLAN when required;
 - (b) To attend MOSAP meetings and MOSC meetings when required; and
 - (c) To attend MOSC Training Courses and encourage LIC attendance at courses relevant to the LIC terms of reference.
7. To maintain an up-to-date MOSAP Manual for his region, and advise the OIC of change and update as they occur.
8. To be aware and knowledgeable about the Region's environmentally sensitive areas; in the event of a spill, know how to ascertain the sensitivity at the time.
9. Examine both the short and long-term equipment needs of each LIC and co-ordinate plans and recommendations to satisfy current and changing needs.
10. To advise the OIC of any major oil spill situation.
11. To know how to contact LIC's, OIC and authority personnel at all hours.

EQUIPMENT:

Know the equipment which is available within the region from industry, statutory and contractor sources and who is responsible to operate it. Ensure MOSAP equipment is properly maintained by the LIC's.

TRAINING:

Make recommendations on the training needs within his region and ensure that all available training is received by industry oil spill personnel within the Region.

ACCOUNTING:

To ensure that complete records are maintained by himself or the relevant LIC of all industry expenditure in an oil spill situation.

REPORTING RESPONSIBILITY:

The RIC is responsible directly to the OIC in any matter concerning the MOSAP plan.

PLEASE SEE ATTACHED SHEET FOR:

DUTIES AND RESPONSIBILITIES – LOCAL INDUSTRY CONTROLLER (LIC)

DUTIES AND RESPONSIBILITIES LOCAL INDUSTRY CONTROLLER (LIC)

The Local Industry Controller (LIC) has been selected as a responsible management member of industry from one of the oil companies operating in each port.

The nomination of Local Industry Controllers from as many different member companies as possible within the region is a prerequisite for active participation and representation in the plan.

OBJECTIVE:

To liaise and provide technical assistance to the local industry and local port authorities, and to deal expeditiously and effectively with marine oil spills that invoke the oil industry's Marine Oil Spill Action Plan.

RESPONSIBILITIES:

In order to be able to achieve the objective above, the LIC must:

1. Know all relevant oil industry personnel in the port.
2. Know what clean-up equipment is available in the port – as well as relevant equipment which may be available to the port from (say) local contractors.
3. Know how to use the clean-up equipment he has.
4. Know who else can use the equipment.
5. Ensure the appointment of a deputy or deputies during his absences from the port.
6. Ensure the deputy or deputies are conversant with equipment and are well briefed on the LIC responsibilities.
7. Know the port's particularly environmentally sensitive areas.
8. Maintain and/or ensure that port clean-up equipment is in good working order.
9. Know how to contact outside help and in particular be familiar with the Regional Industry Controller (RIC) and his movements.
10. Perform any local functional requirements as suggested by the RIC.
11. Be knowledgeable about oil spill prevention and clean-up.

INVENTORY:

In addition to the responsibilities above, the LIC is responsible for the written inventory in his area. He must review this inventory in terms of adequacy and updating, and when necessary should make recommendations to the RIC for the upgrading of equipment and also the operational functions. Finally, he must update his own Action Chart which forms a part of this Plan.

REPORTING RESPONSIBILITY:

The LIC is responsible directly to the Regional Industry Controller in any matter concerning the MOSAP Plan.

TEMPORARY LICs : OFFSHORE EXPLORERS

The scope of this Industry plan extends to cover itinerant offshore exploration and in doing so intends that the explorer attaches himself to the Regional Industry Controller in the appropriate region. In this way the exploration driller is made aware of the regional facilities and National Plan and can mesh with these and support the Industry with his own equipment. An offshore oil explorer, being a member of AIP, may apply to appoint a temporary L.I.C.

MARINE OIL SPILLS COMMITTEE

The Marine Oil Spills Committee is a technical committee of the Institute and is composed of experienced people from each of the oil companies in Australia. It is responsible to the AIP Environmental Conservation Executive.

The Marine Oil Spills Committee was charged initially with the task of developing an industry co-operative organisation for the handling of oil spills as a specific project. The organisation and action plan contained herein is a result of this project and now has the approval of AIP.

The Committee is not included in the line action in this plan but now performs as a technical services group to the Overall Co-ordinator and the Regional Controllers. In this capacity the Committee will assist with case studies for equipment, evaluating assessment of inventory levels and other technical studies. Task force members will be provided in emergencies.

The Committee will consider and prepare training material and assist the Action Plan in running training programmes. It will also keep abreast of new techniques and developments and bring these to the attention of the line organisation.

The MOS Committee is therefore responsible for advising and assisting the line organisation (MOSAP) to carry out its task based on the best available up-to-date information.

STATE COMMITTEES OF THE NATIONAL PLAN (NATPLAN)

New South Wales:

<p>Chairman: Harbourmaster (Sydney Port) MSB Deputy Harbourmaster MSB Principal Engineer MSB Controller Oil and Dangerous goods Assistant Director, Surface Operations DOT Principal Surveyor DOT Acting Chief, Water Waste Division SPCC Principal Officer – Investigations SPCC Master Attendant RAN Garden Island PIECE RIC Region 2 PIECE Deputy RIC</p>	<p>Capt. B. Druce Capt. S.J. Costelloe Mr. G. Turner Mr. K. Gotham Mr. M. Hawes Mr. P. McDougall Mr. P. Yates Mr. J. Oliff Cdr. R. Bayley Mr. F.C. Horsley Mr. P. Simpson</p>
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Tasmania:

<p>Chairman: ^{Acting} Director of Environmental Control State Emergency Services</p> <p>Fisheries Development Authority Tasmanian Harbour Authority Police Search and Rescue The State Oil Pollution Control Officer (Dept. of Environment) The Department of Transport Municipal Assoc. Rep. State Dept. of Transport PIECE/RIC or Deputy Region 5</p>	<p>B.O. Healey Mr. J.F. Pottinger Mr. J.M. Paul representing Deputy Director Mr. A.J. Harrison Capt. F.G. Christie Insp. T.F. Whayman</p> <p>Mr. R.J. Montgomery Mr. J. Hartley Mr. A. Gerrard Mr. N.A. MacMillan Mr. C. Windley</p>
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Northern Territory:

<p>Chairman: Harbourmaster, Northern Territory Port Authority Dep. Harbourmaster, Northern Territory Port Auth. Surveyor, Department of Transport Department of Defence, Navy Northern Territory Fisheries Northern Territory Emergency Services PIECE Regional Industry Controller Region 9 PIECE Local Industry Controller</p>	<p>Capt. R.J. Wilson Capt. M. Fleming Capt. K. MacMahon</p> <p>Mr. D. Thomas Mr. E. Simmonds Mr. V. Snelling Mr. R. Pennock</p>
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Victoria:

<p>Chairman: Marine Supt. Ports (Commercial) Ports & Harbours Division Marine Supt. Ports (Non-Commercial) Ports & Harbours Division Principal Marine Surveyor Department of Transport Chief Officer Port Emergency Service Port of Melbourne Authority PIECE Region 3 Chief Investigations Officer Environment Protection Authority Chief Engineer Oil & Gas Division Minerals & Energy</p>	<p>Capt. K.H. Dann Capt. R. Weston Mr. C. Robinson</p> <p>Capt. A. Buttner Mr. E. McGregor Mr. R. Hudson</p>
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West Australia:

State Committee consists of:

<p>Department of Marine & Harbours Deputy Fremantle Port Authority Department of Transport</p>	<p>Capt. W. Spencer Capt. P. Douglas Capt. M. Coleman Capt. M. Kiely</p>
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Technical Advisory Committee consists of:

PIECE RIC Region 7
Department of Fisheries & Wildlife
Department of Mines

Mr. A. Allan
Dr. H. Jones
Mr. T. Pippett

South Australia:

Chairman: Department of Marine & Harbours
Harbour Master & Port Manager

Department of Marine & Harbours
Operation Controller

Department of Marine & Harbours
Assistant Operation Controller

S.A. Department for the Environment
Deputy Director General

S.A. Department of Agriculture & Fisheries

S.A. Police

Commonwealth Department of
Administrative Services

Commonwealth Department of Transport
– Assistant Director Surface Operations

Commonwealth Department of Transport
– Operation Controller

Commonwealth Department of Transport
– Asst. Operation Controller

Commonwealth Department of Transport
– Secretary

PIECE RIC for Region 6

Capt. R. Pearson
Capt. R. Amberg (Sec.)

Capt. R. Buchanan

Capt. D. Kemp

Mr. G. Inglis
Dr. D. Gartside
Inspector P. Mildren

Mr. J. Broderick

Capt. J. Nicholson

Capt. D. Morrison

Capt. S. Gledhill

Mr. P.C. Amberg
Mr. M.J. Pierce

Queensland:

Harbours & Marine Department

Department of Transport
Department of Transport
PIECE RIC Region 1

Capt. T. Beckinsale
Capt. B. Neave
Capt. D. Owens
Mr. A. Rolfe
Mr. A. Lovell

OIL INDUSTRY REGIONAL INDUSTRY CONTROLLERS AND DEPUTIES

Region	Area	Company	RIC & Deputy	Home Phone Number	Work Phone Number
1	Qld.	Ampol "	A. Lovell J. Major	(07) 396 4256 (07) 206 4837	(07) 396 3111 (07) 396 3111
2	NSW	AOR Caltex	F. Horsley P. Simpson	(02) 524 8330 (02) 908 1074	(02) 668 9911 (02) 923 9222
3	East. Vic.	Esso "	D. Lesslie K. Rainey	(051) 57 6216 (051) 44 4382	(051) 49 5225 (051) 49 5224
4	West. Vic.	Shell "	J. Keily S. Filipis	(052) 78 4975 (052) 43 6509	(052) 43 8348 (052) 73 0333
5	Tasmania	Shell	C. Windley	(002) 72 3943	(002) 28 4834
6	South Aust.	PRA "	M.J. Pierce W.J.V. Clack	(08) 278 5639 (08) 278 2149	(08) 382 1133 (08) 382 1133
7	South WA	BP "	A. Allan C. Robinson	(095) 27 1261 (095) 27 2167	(09) 419 0222 (09) 419 0222
8	North WA	Shell "	P.C. Moyle D.G. Hyde	(09) 384 9402 - (09) 457 6224	(09) 335 3951 (09) 335 3951
9	NT	BP Shell	V. Snelling R. Pennock	(089) 85 4116 (089) 81 8380	(089) 81 2285 (089) 81 9100
10	Papua N.G.	Shell	J. Mar	21 4632 (PNG access number is 0014675)	22 8700
	Overall Industry Controller	AIP	N.F. Lefoe	(03) 232 9072	(03) 654 1411
	Deputy OIC	Ampol	A.H. Lovell	(07) 396 4256	(07) 396 3111
	Deputy OIC	Mobil	A.J. Buttner	(03) 836 6394	(03) 617 3111
	Deputy OIC	Shell	S.J. Rodger	(03) 560 8529	(03) 609 1711

STATE COMMITTEE CHAIRMEN & DEPUTIES

State	Personnel	Private	Work
Vic.	Capt. K.H. Dann Capt. R. Weston	(03) 789 5338 (03) 570 1663	(03) 669 8541 (03) 669 8541
NT	Capt. R.J. Wilson Capt. M. Fleming	(089) 81 3781 (089) 81 6258	(089) 81 6701 (089) 81 6701
SA	Capt. R. Pearson Mr. P. Amberg (Sec.)	(08) 42 4840	(08) 47 0611 (08) 49 4077
NSW	Capt. B.R. Druce Capt. S.J. Costelloe	(02) 20 545 (02) 20 545	(02) 20 545 (02) 20 545
Tas.	J.F. Pottinger B.O. Healey J. ISAAC	(002) 25 3745 (002) 72 5887 002 47 8504 ✓	(002) 30 2770 (002) 30 6574 302770 002 30 6574
WA	Capt. W. Spencer Capt. P. Douglas	(09) 339 2455 (09) 330 6731	(09) 335 1211 (09) 335 1211
Qld.	Capt. T. Beckinsale Capt. B. Neave	(07) 263 3094	(07) 227 8235 (07) 227 8245

AUSTRALIAN COASTAL SURVEILLANCE CENTRE

Telephone	(062) 47 5244
Telex	62349

AUSTRALIAN GOVERNMENT ANALYTICAL LABORATORIES

NT	(089) 81 5555
NSW	(02) 27 3270
VIC	(03) 615 6383
TAS	(002) 23 7577
SA	(08) 356 3399
WA	(09) 384 1511
QLD	(07) 224 0515

DEPARTMENT OF TRANSPORT

Marine Pollution Section (Canberra)

	Home	Work
Director Wally Blumenfeld	(062) 54 5034	(062) 64 4560
Tech. Advisor (Don Brodie)	(062) 31 9910	(062) 64 4561
Ops. Co-ordinator TBA	TBA	(062) 64 4558

COMMONWEALTH REGIONAL DIRECTORS

(i.e. Assistant Directors – Surface Operations):

Region	Personnel	Private	Work
Vic.	J. Glover	878 5800	(03) 662 2455
NSW	M. Hawes	(02) 949 2138	(02) 2 0929
Tas.	Mr. J. Hartley	(002) 29 6848	(002) 20 5299
Qld.	J. Milne	(07) 371 2895	(07) 358 9211
SA/NT	J. Nicholson	(08) 332 7792	(08) 218 0306
	K. McMahon (Surveyor Darwin)	(089) 27 2004	(089) 81 8814
WA	D. Clarke	(09) 383 1594	(09) 326 9236

DEPARTMENT OF HOME AFFAIRS – ENVIRONMENT

O.S.S.M. DEVELOPMENT:

Canberra	Wayne Furler	(062) 46 7380
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241039

7.1 MOSAP - Tasmania

a) Action Charts

b) Available Equipment and Materials Lists

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REGION 5
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KING ISLAND



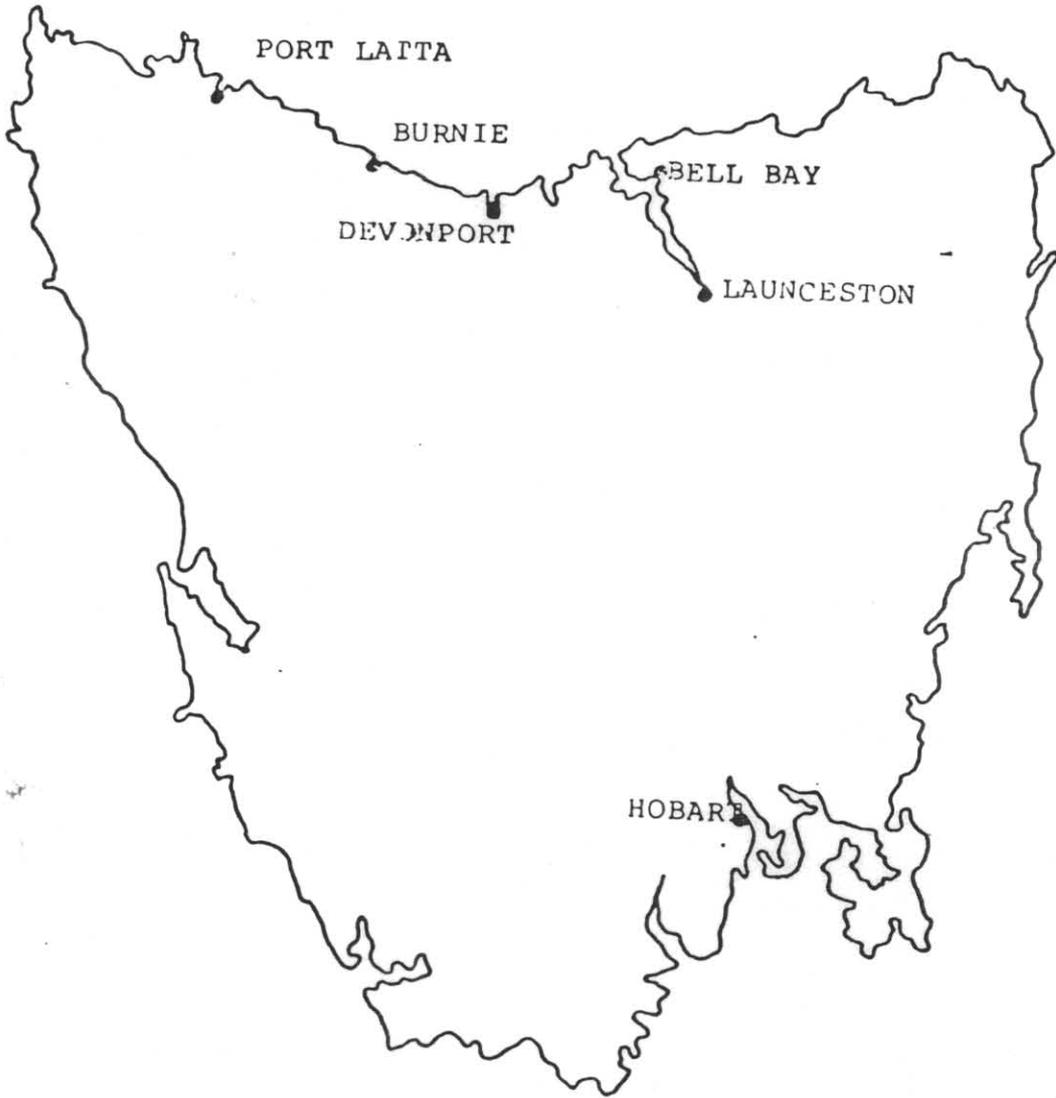
NARACOOPA



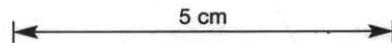
FLINDERS ISLAND



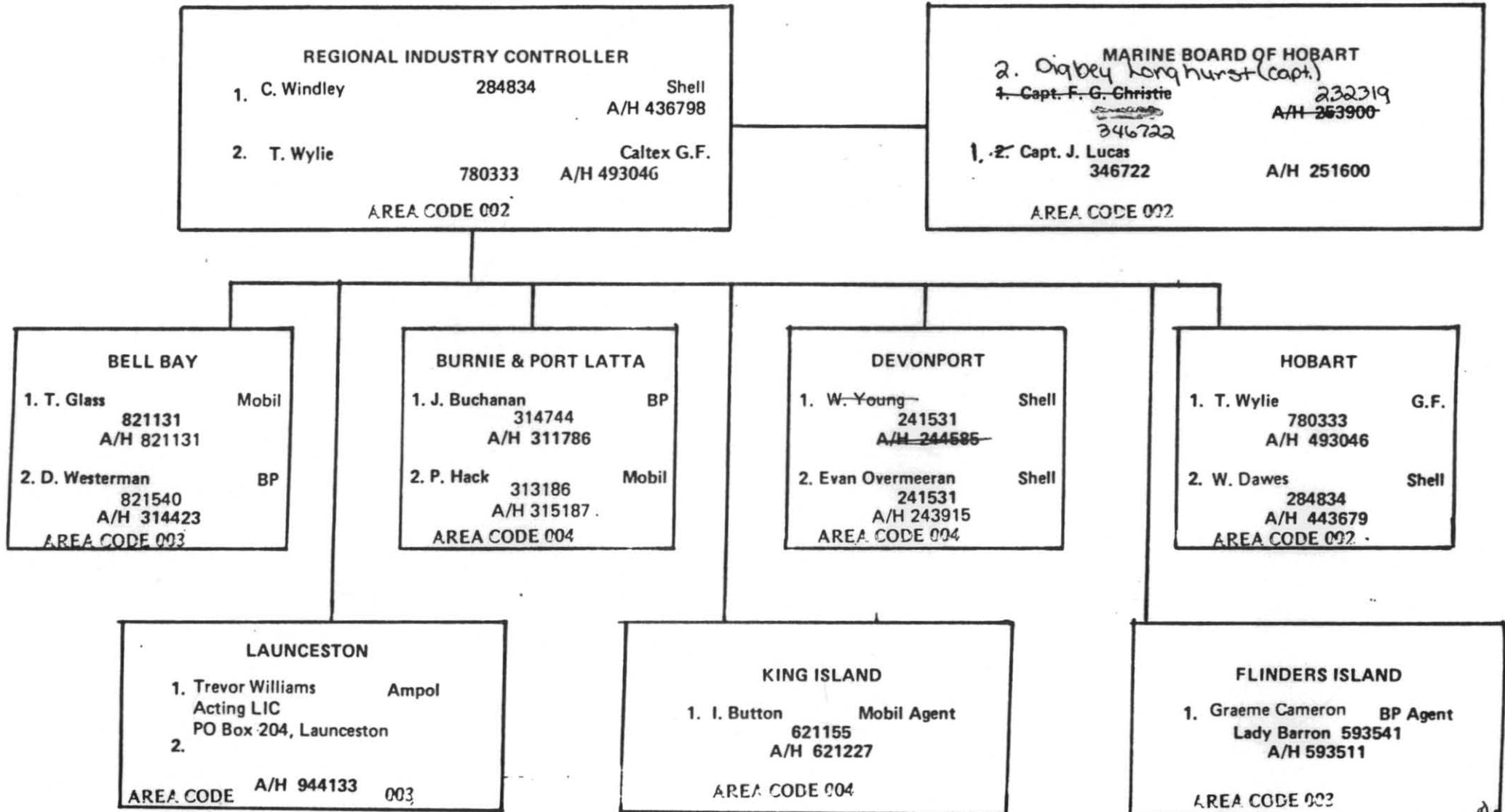
LADY BARRON



MAP RÉGION (5) TASMANIA



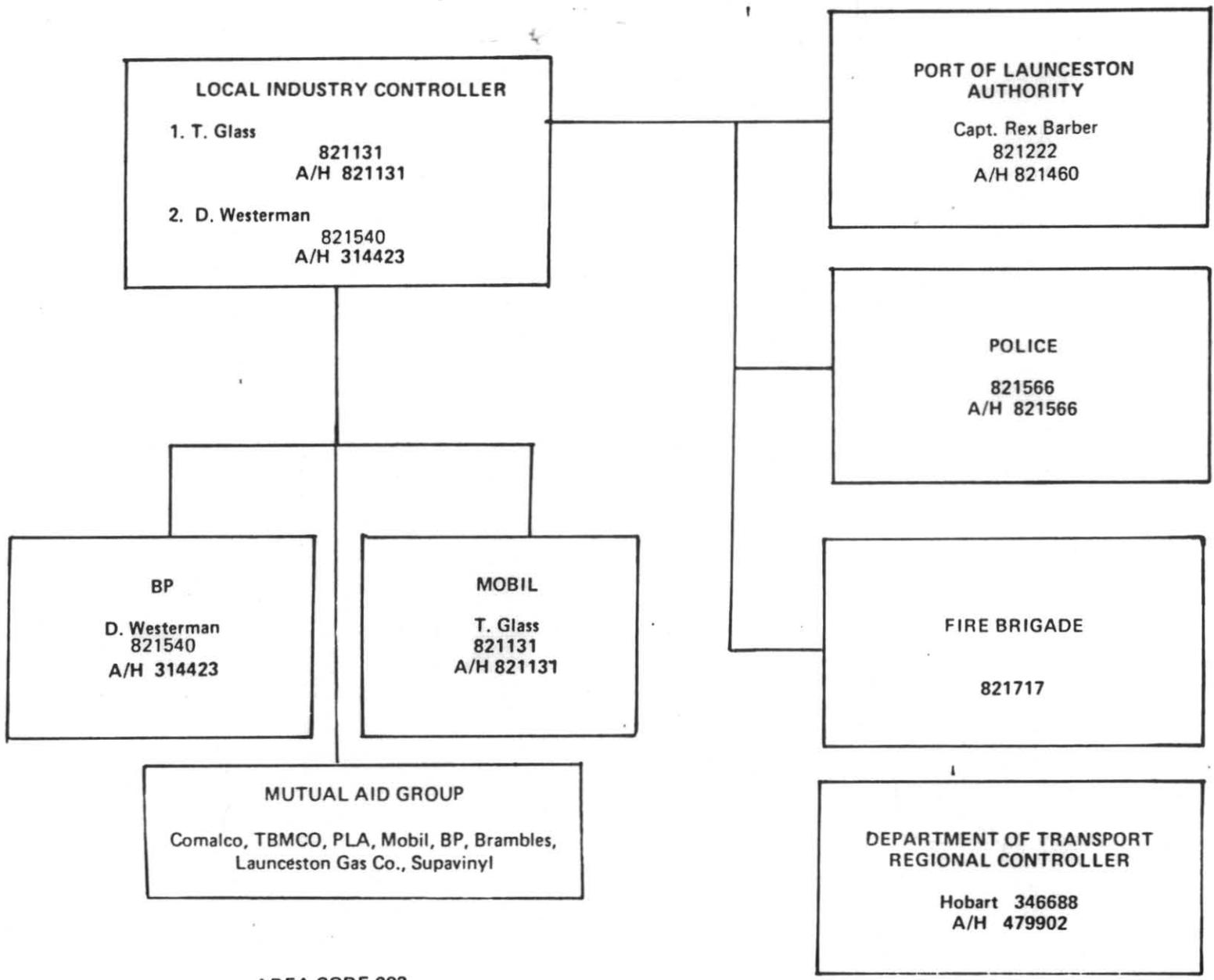
ORGANISATION PLAN



53

441042

ACTION-CHART BELL BAY

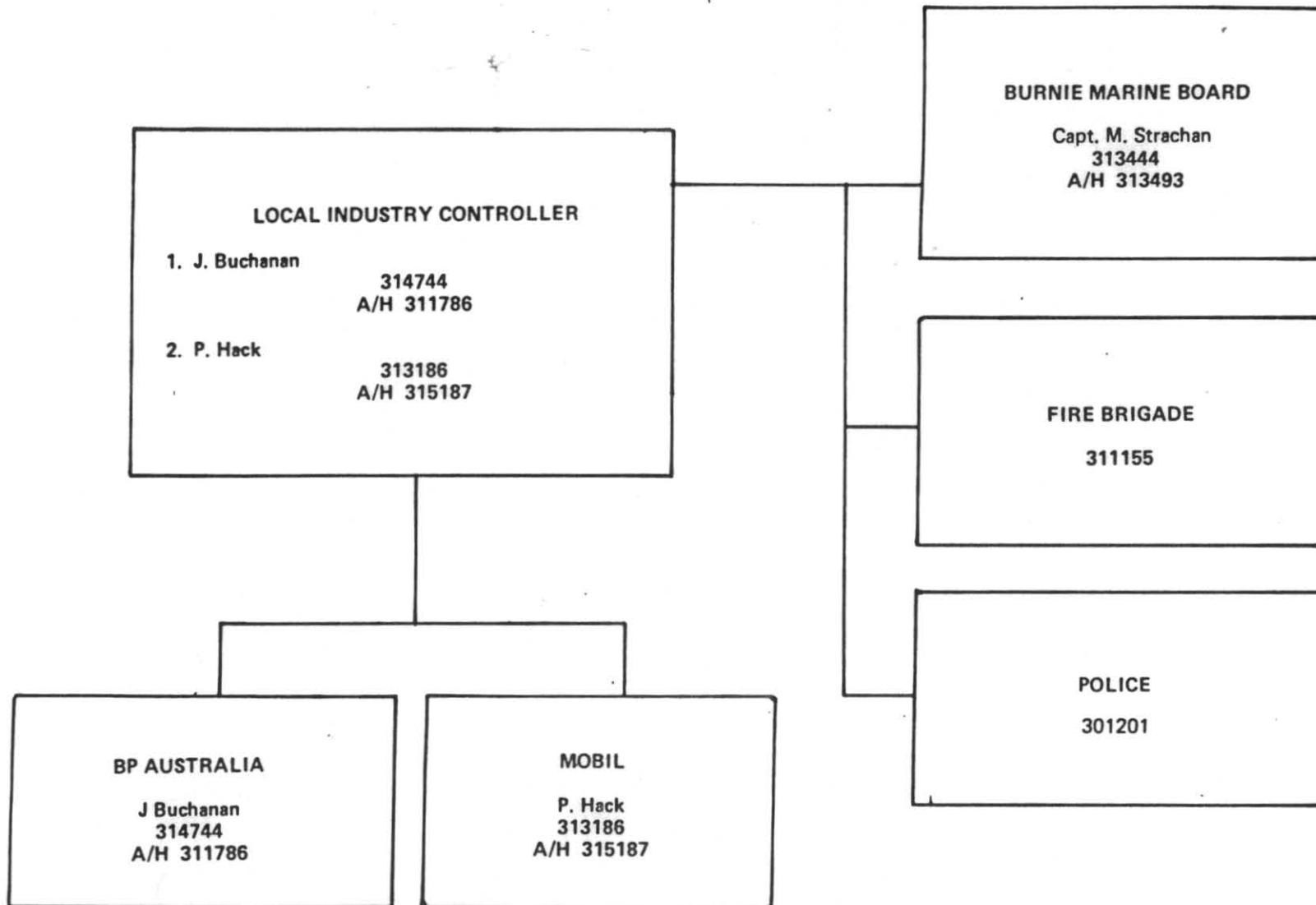


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S.4

241043

ACTION CHART BURNIE

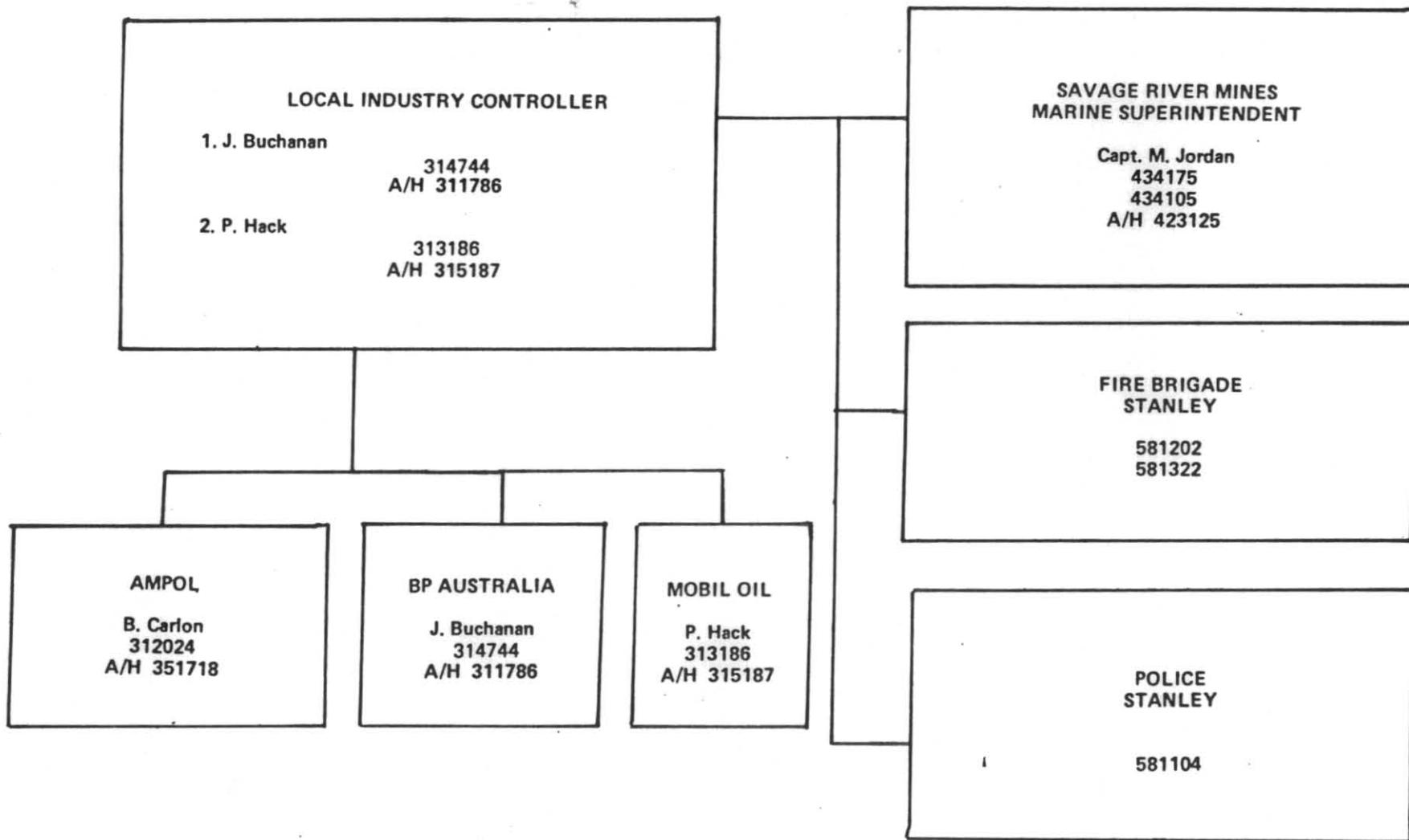


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241044

ACTION CHART PORT LATTA

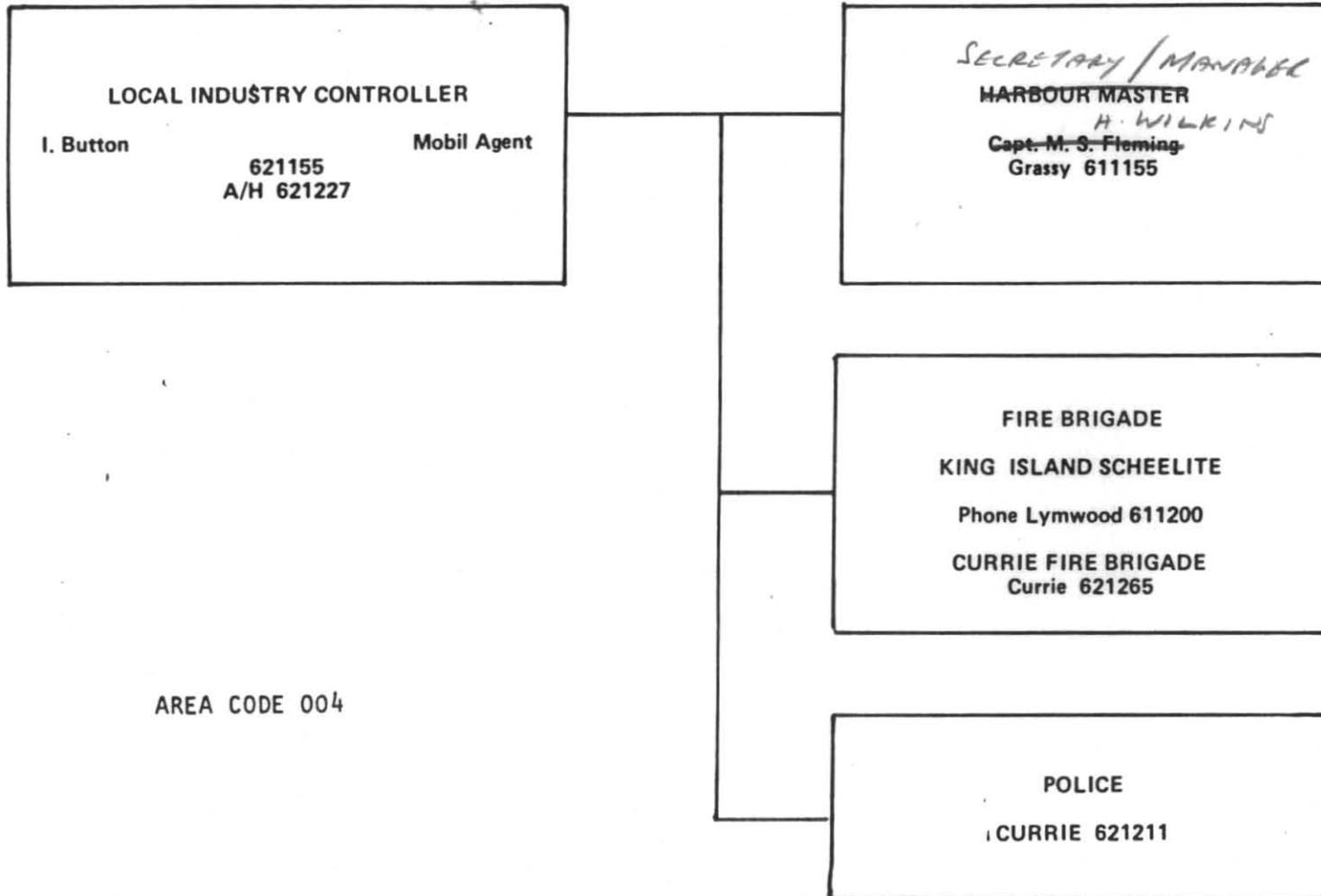


AREA CODE 004

5.6

241045

ACTION CHART KING ISLAND



AREA CODE 004

5.8

241047

ACTION CHART FLINDERS ISLAND

LOCAL INDUSTRY CONTROLLER
G. Cameron BP Agent
Phone Lady Barron 593541
A/H Lady Barron 593511

MARINE BOARD
Phone Lady Barron
593502

FIRE BRIGADE
RANGA 594505

POLICE
Phone Whitemark
59200

FLINDERS COUNCIL
Phone Whitemark 592131
A/H Whitemark 592035

AREA CODE 003

59

241048

ACTION CHART HOBART

LOCAL INDUSTRY CONTROLLER

1. T. Wylie Golden Fleece
 780333
 A/H 493046

2. W. Dawes Shell
 284834
 A/H 729938

MARINE BOARD OF HOBART
J. LUCAS

1. ~~Capt. F. G. Christie~~
 346722 ✓
 A/H 253900 *251600*

2. ~~Capt. J. Lucas~~ *J. HODGSON*
 346722 ✓
 A/H 253900 *487209*

DEPARTMENT OF TRANSPORT

Assistant Director
 J. Hartley
 205304
 A/H 296848

FIRE BRIGADE

000 EMERGENCY
 Continuous 345655

POLICE

000 EMERGENCY
 Continuous 281101

SHELL COMPANY

W. Dawes
 284834
 A/H 729938

MOBIL

T. Sewell
 236933

BP

B. McKinlay
 345811
 A/H 280781

GOLDEN FLEECE

T. Wylie
 780333
 A/H 493046

AREA CODE 002

5.10

241049

241050

ABSORBENTS

LOCATION	OPERATOR	DETAILS
BELL BAY	ASSOCIATED PULP & PAPER LONG REACH CONTACT JACOBSON PHONE 003 947201	SAWDUST ANY QUANTITY DELIVERED
BURNIE	ASSOCIATED PULP & PAPER BURNIE CONTACT MR. FLEMING PHONE 311222	SAWDUST ANY QUANTITY AVAILABLE
DEVONPORT	RIVERSDALE TIMBERS DEVONPORT CONTACT MR. R. WILKINSON PHONE 241896 A/H 242468	SAWDUST
HOBART	B. G. CLENNETT PTY LTD 406 BROOKER AVENUE MOONAH CONTACT R. CLENNETT 728777 A/H 236015	SAWDUST

241051

AIRCRAFT

LOCATION	FIXED WING	HELICOPTER	DETAILS
			TASMANIAN AERO CLUB WESTERN JUNCTION
BELL BAY LAUNCESTON	X		AIRCRAFT ARE SUITABLE FOR PATROL WORK ONLY. CONTACT MR. R. ROBERTS PHONE 918330 or 918107 A/H 445513 or 911222
DEVONPORT	X		AUSTRAL AIRWAYS CONTACT R. McENCHERN PHONE 279219 A/H 246806
BURNIE	X		AUSTRAL AIRWAYS WYNYARD PHONE 422205 A/H D/PORT 246806
HOBART	X		BENDERS SPREADING SERVICES CAMBRIDGE AERODROME HOBART CONTACT A. HAWKINS " R. BENDER PHONE 280041 A/H 232078, 252476 ALL AIRCRAFT CAN BE SET UP WITH SPRAYERS FOR IMMEDIATE USE
		X	HOOKWAY AVIATION PTY LTD CONTACT J. GRANT PHONE 485130 A/H 479010

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BARGES

LOCATION	OPERATOR	DETAILS
BELL BAY	PORT LAUNCESTON AUTHORITY ESPLANADE LAUNCESTON CONTACT HARBOUR MASTER PHONE 317144 A/H 944154	DUMB & FLAT TOP BARGES
BURNIE	BURNIE MARINE BOARD NORTH TERRACE BURNIE CONTACT HARBOUR MASTER (CAPT. STRACHAN) PHONE 313444 A/H 313493	FLAT TOP BARGES
DEVONPORT	MARINE BOARD OF DEVONPORT FORMBY ROAD DEVONPORT PHONE 241951 A/H 241805	SELF PROPELLED HOPPER BARGE 800 TONNE CAPACITY
HOBART	HOBART TUG & LIGHTERAGE CO. PTY LTD PAVILION POINT HOBART CONTACT MR. H. SMART PHONE 344354 A/H 251116	FLAT TOP BARGE 6 TANKS 200 TONNES CAPACITY FITTED WITH 5 TON CRANE

COMMUNICATIONS

LOCATION	OPERATOR	TELEPHONE	DETAILS			
			CALL SIGN	FREQUENCY	MAKE	NO.SETS/DETAILS
BELL BAY	BP AUST LTD	821540	VH7Y1	469.925	MOTOROLA	2
	BELL BAY MUTUAL AID GROUP	A/H 314423	VJ7FM	75/77	AWA	BASE STATION
BURNIE	MOBIL OIL	821131		469.925	MOTOROLA	3
	BELL BAY MUTUAL AID GROUP	A/H 821131	VJ7AY	75/77	AWA	BASE STATION
DEVONPORT	BP AUST LTD	314744		27.24	SONY	4
	MOBIL OIL	A/H 311786				
HOBART	MOBIL OIL	313186	VH7EW	469.800	MOTOROLA	5
	SHELL CO.	241531	V7BJ	469.775	MOTOROLA	3
HOBART	CALTEX		VJ7AV	469.8	MOTOROLA	3
	GOLDEN FLEECE	780333		27.24	TELECON	2
		A/H 493046				
	BP AUST	345811		27.24	NATIONAL	3
		A/H 726700				
	SHELL CO.	284834	VH753AA		MOTOROLA	2
		A/H 443679				

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DIVERS

LOCATION	OPERATOR	DETAILS
BELL BAY	PORT OF LAUNCESTON AUTHORITY CONTACT HARBOUR MASTER 317144 A/H 944154 NORTHERN ALLIED DIVING CONTACT M. HARTLEY 944457	SKIN DIVING COMMERCIAL DIVING
BURNIE	BURNIE MARINE BOARD CONTACT HARBOUR MASTER 313444 A/H 313493	HELMET AND SKIN DIVERS
PORT LATTA	SAVAGE RIVER MINES CONTACT CAPT. JORDAN 434175 A/H 423125	
HOBART	AQUA SCUBA DIVING SERVICES CONTACT C. ONN 345658 A/H 23	COMMERCIAL DIVING
KING ISLAND	MARINE AND HARBOUR CURRIE PH. CURRIE 621455 A/H CURRIE 621493	

EQUIPMENT

DETAILS

LOCATION	OPERATOR	BULLDOZER	DUMP TRUCKS	CRANES	FRONT END LOADERS	VACUUM TRUCKS	BOOMS	SKIMMERS	BACK HOE
BELL BAY	WOODFIELD & FRENCH LINDSAY ST. LAUNCESTON CONTACT 314255 A/H 469912	X	X		X				
BURNIE	L.G. HOLLOWAY BASS HIGHWAY WIVENHOE 312788 A/H 357453	X	X	X					
	LINDSAY KING PTY. LTD. 242956 A/H 242956	X	X	X					X
HOBART	G. JENNINGS PTY. LTD. 57A DERWENT HOBART PUMPING SERVICES 5 LAMPTON AVE 724544 A/H 346039	X		X				X	
FLINDERS ISLAND	FLINDERS ISLAND COUNCIL WHITEMARK 592131 A/H WHITEMARK 592035		X	X	X				
KING ISLAND	KING ISLAND SHEELITE PH. LYMWOOD 611200 A/H	X	X		X				

5.17

241056

LAUNCHES

241057

LOCATION	OPERATOR	DETAILS
BELL BAY	PORT LAUNCESTON AUTHORITY ESPLANADE LAUNCESTON 317144 A/H 944154	CAPT.GIBSON 53 LOA SPEED 9KTS RADIO VHF SUITABLE FOR OUTSIDE HARBOUR LIMITS CARRINGTON 52' LOA SPEED 9.5 KTS RANGE 100 HRS
	MOBIL OIL BELL BAY	ALUMINIUM DINGHY AND OUTBOARD MOTOR
BURNIE	BURNIE MARINE BOARD NORTH TERRACE BURNIE 313444 313493	MIDWERA 46' LOA SPEED 9 KTS RANGE 90 HRS SUITABLE FOR OUTSIDE HARBOUR LIMITS
	MR. McKENZIE STRUDWICK ROBOTHAM PLACE, Ph. 315696 MONTELLO, BURNIE	LOWANA 43' LOA SPEED 8 KTS. RANGE 20 HRS
PORT LATTA	SAVAGE RIVER MINES PORT LATTA 434175 A/H 434104	SRM 22 42 LOA SPEED 8 KTS. RADIO VHF
		SRM 35 42 LOA SPEED 8 KTS EQUIPPED WITH 1900 LITRE DISPERSANT & SPRAY EQUIPMENT
DEVONPORT	MARINE BOARD OF DEVONPORT FORMBY ROAD, DEVONPORT 24 1951 A/H 24 1202	5 WORK BOATS
FLINDERS ISLAND	LEEDHAM WALKER PTY. LTD. WHITEMARK PH. WHITEMARK 592010 A/H 592028	ISLANDER 18' LOA SPEED 33 KTS.
KING ISLAND	KING ISLAND SCHEELITE Ph. LYMWOOD 611200	18' LOA SPEED 7 Kts.
	MARINE BOARD CURRIE PH. CURRIE 621455 A/H 621493	20' LOA SPEED 6 KTS
HOBART	HOBART MARINE BOARD FRANKLIN WHARF 346722 A/H 437334	WYATENAH 40' LOA SPEED 9 KTS. RADIO FITTED VHF DECK SPACE 8 x 200 L. DRUMS TAWE 50' LGA SPEED 10 KTS RADIO VHF EQUIPPED WITH SPRAY BOOMS

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PUMPS

LOCATION

OPERATOR

DETAILS

BELL BAY

PORT LAUNCESTON AUTHORITY
ESPLANADE LAUNCESTON
PH. 317144
A/H EXETER 944154

PUMP OF
VARIOUS SIZES
AND CAPACITIES

DEVONPORT

MARINE BOARD OF DEVONPORT
FORMBY ROAD DEVONPORT
PH. 241951
A/H 242102

SUBMERSIBLE
PUMPS
6" - 4" - 3" - 1½"

HOBART

BP AUST LTD
SELS POINT
PH. 345811
A/H 726700

PORTABLE AIR
COMPRESSOR AND
AIR OPERATED PUMP

241059

TRAILERS (OIL SPILL)

LOCATION	OPERATOR	DETAILS
BELL BAY	MOBIL OIL	LOVELL KIT TRAILER MOUNTED INCLUDING DINGHY & OUTBOARD
LAUNCESTON	AMPOL	LOVELL KIT TRAILER MOUNTED
BURNIE	BP AUST LTD	LOVELL KIT TRAILER MOUNTED
DEVONPORT	SHELL CO	LOVELL KIT TRAILER MOUNTED INCLUDING DINGHY & OUTBOARD
HOBART	GOLDEN FLEECE	LOVELL KIT TRAILER MOUNTED INCLUDING DINGHY & OUTBOARD

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TUGS**LOCATION****OPERATOR****DETAILS**

BELL BAY

PORT LAUNCESTON AUTHORITY
 PH. 317144
 A/H EXETER 944154

"WYBIA"
 98'-LOA
 SPEED 107 KTS
 FIRE PUMP 600 GPM
 CARBO 100 x 200LT DRUMS
 "YORKTOWN"
 97'LOA
 SPEED 11 KTS
 FIRE PUMPS 150 GPM
 CARBO 100 x 200LT DRUMS

BURNIE

MARINE BOARD OF BURNIE
 PH 313444
 A/H 313493

"MYALLA"
 83' LOA
 SPEED 10 KTS
 FIRE PUMP 417 GPM
 CARBO 30 x 200LT DRUMS
 FITTED WITH FIRE FIGHTING
 MONITOR

PORT LATTA

NORTH WEST TOWAGE &
 SHIPPING PTY LTD
 C/O MARINE BOARD, CIRCULAR HEAD
 PH 581215

"SPRING COVE"
 100' LOA
 SPEED 12 KTS
 FIRE PUMP 170 GPM
 CARBO 40 x 200 LT DRUMS

DEVONPORT

MARINE BOARD OF DEVONPORT
 FORMBY ROAD DEVONPORT
 PH. 241951
 A/H 242102

GAWLER
 98' - LOA
 SPEED 11 KTS
 FIRE PUMP 600 GPM
 CARBO 80 x 200LT DRUMS
 FITTED WITH FIRE FIGHTING
 MONITOR

HOBART

HOBART TUG & LIGHTERAGE CO. PTY LTD
 PAVILION POINT HOBART
 PH. 344354
 A/H 251116

CAPE BRUNY
 CAPE FORESTER
 105' LOA
 SPEED 11 KTS
 HP 1622
 FIRE PUMP 500 GPM
 CARBO 40 x 200LT DRUMS

8.0 WASTE DISPOSAL

8.1 Types of Waste

The drilling operation creates waste products that must be processed or disposed of. Waste products fall in four general categories:

<u>Garbage</u>	<u>Hydrocarbon</u>	<u>Chemical</u>	<u>Other</u>
Kitchen Wastes	Lube oils	Breakage of	Drill
Trash	Fuel	sacked mud	cuttings
Sewage	Hydraulic lines	Additives	
(including	Floor and deck	Used mud	
laundry	washing	Acid	
wastes)	Test oils		
	Oils based muds		

8.2 Disposal Procedures

a. Garbage

1. Kitchen Wastes

Soft kitchen wastes are processed through a garburetor and discharged to the rig sewer system. This leads to

a common drain line extending down the barge structural framing for final discharge below water level.

2. Trash

All trash, whether combustible or non-combustible, will be deposited in special metal containers on the rig. These containers will be shuttled back and forth to shore by the supply boats as required for disposal of the trash on shore. Disposal of trash or garbage directly overboard is prohibited. Signs to this effect have been placed at conspicuous locations on the rig.

3. Sewage

All human waste and normal sewage from the toilets, washrooms, laundry and galley will be disposed of through the sanitation facilities which lead to the common sewer drain system extending down the barge structural framing for discharge below water level.

b. Hydrocarbons

1. Lube Oil

A closed collection and 300-gallon storage system to accommodate waste lube oils from the main engines and

from the fuel oil settling tank bottoms is provided. Lube oils from the auxiliary engines and other gear or crankcase lubricants will be manually placed in the waste oil storage facilities through a valved funnel built into the storage tank. Waste oils will then be transferred to barrels and returned to shore for disposal, or burned through the test burner.

All waste lube oils and greases from the supply boat engines and machinery will be collected in barrels or other suitable closed metal containers and returned to shore for disposal.

Disposal of waste oil to the sea from any source is prohibited.

2. Fuel Oils

Fuel oil is transported, transferred and stored in closed systems. Extreme caution will be exercised to avoid spillage when connecting and disconnecting transfer hoses, and during the transfer operations. A man will be posted on the rig and one on the boat to detect any leakages during transfer. Transfer operations will be halted immediately if any leak occurs and will not resume until the leak has been repaired.

Transfer pumps will be shut off and the pressure released before disconnecting the transfer hoses. The hoses will be drained into tanks on the boat and hose ends will be plugged securely when the transfer operation is complete.

3. Hydraulic Lines

Hydraulic lines will be regularly inspected and repaired or replaced as necessary to maintain an "as new" condition. Used hydraulic fluids will be carried to shore in a fire-proof container for disposal.

4. Floor and Deck Washings

Deck hydrocarbon spills shall be absorbed and the used absorbent transported to shore in fire-proof containers for disposal. Deck washings shall be carefully conducted and supervised to prevent hydrocarbons from being washed overboard.

5. Test Oils

A Baker "non-liquid-fallout" burner has been installed on the rig in preparation for flowing any well for test purposes. Produced liquids and gases will be routed to

this burner in a closed system for combustion after separation and metering.

6. Oil Based Muds

Any and all oil based muds will be stored and transferred to boat bulk tanks for shipment to the shore for disposal.

c. Chemicals

1. Mud Additives Breakage

All bagged materials, such as bentonite, mud additives and so forth, will be palletized and banded for transport to prevent breakage. These materials (except caustic soda) are non-toxic. Spillage would not present environmental problems. Precautions will be used however to avoid spillage.

2. Used Muds

Used muds will be disposed of overboard if free of oil. Local temporary water discoloration will result but no environmental condition will arise from such disposal. Mud containing oil will be shipped to the shore for disposal.

3. Acid

Acids required for production testing will be transported to the drilling unit in special containers. Excess acid returned to surface after treatment will be gathered in a special tank and transferred to shore for disposal.

d. Other

Drill Cuttings

Drill cuttings known to be free from oil will be disposed of overboard unless required for geological purposes. This material consists of rock fragments and will not present any environmental problems. Drill cuttings obtained if an oil system is used will be washed with detergent to eradicate the oil clinging to the cuttings. The clean cuttings may then be discharged overboard if not required for geological purposes.

9.0 OIL SPILLS CONTINGENCY PLAN

9.1 General

Accidental spills may occur. The handling of such spills could require the immediate coordination of efforts of many intra-company departments and, perhaps, contractors and/or outside agencies.

Major oil spills generate complex technical, legal and public relations problems. Prior planning can avoid or minimize such difficulties.

The Oil Spills Contingency Plan will assist the Company to respond quickly and effectively to problems presented by accidental spills if they occur. The plan will help the Company prevent or minimize damage to property, wild-life, or ecology from such a spill.

Within the Oil Spills Contingency Plan there are descriptions of the duties that must be discharged when oil is spilled. Key personnel are provided with procedures for handling such spills effectively.

Some procedures are essential, others are suggested. Their application will vary depending upon the spill conditions.

9.2 Company Organization

a. Task Force:

An Amoco Australia offshore Emergency Task Force (OETF) has been formed to co-ordinate the many Company efforts in case of a major spill:

This task force, designated in advance, is constituted so that its members can devote their time to handling any major spills or other emergencies. They have prior clearance for necessary travel and expenses that they may incur when the OETF is called upon for assistance. The OETF members will provide the Operations Manager with counsel in their areas of expertise as needed during the period of routine operations.

b. Advance Preparation:

Resident Manager - Amoco Australia is responsible for:

- (1) Advance assignment of personnel who might be needed in the event of a spill.
- (2) Clear definition and distribution of duties of personnel in the event of a spill.
- (3) Training and orientation of personnel with advance assignments.

- (4) Arranging for travel clearance in advance of need.

Operations Manager is responsible for:

- (1) Prepare an inventory of the company's personnel and equipment for dealing with major spills.
- (2) Provide a periodic review of the company's readiness for dealing with oil spills.
- (3) Distribute technical data and training materials to personnel who will be responsible in the event of a spill.
- (4) Consult with OETF members on matters concerned with air and water conservation requiring expertise in the various areas of responsibility represented on the OETF.

9.3 Alert Procedure

This Contingency Plan becomes effective:

Immediately upon observance of an oil spill near a company installation of any kind which could affect aquatic or other life in inland waters, coastal waters or the open sea, or which could involve other properties, shorelines, or surrounding land.

The responsibility for the notification of an oil spill rests with:

Any company or contractor employee observing an oil spill. The employee must immediately notify his Drilling Superintendent of the spill. The Drilling Superintendent will confirm the spill, its cause and basic nature, initiate containment and clean-up action if possible (as described under Action Procedure).

The Drilling Superintendent will notify the Operations Manager:

He will present all available information on the spill and, if deemed necessary following this discussion, will notify the appropriate outside agencies.

The information to be transmitted on each oil spill is outlined on the appendix forms.

9.4 Action Procedure

The Contingency Plan is self-starting:

Whenever an oil spill is reported, appropriate control, containment, removal, clean-up and public and government relations operations will begin simultaneously with the Alert Procedure previously described.

The immediate responsibility for abatement, containment, removal and clean-up operations rests initially with:

The ranking company employee on the scene. However, since the Contingency Plan provides for different degrees or types of response for different types of spills, the responsibility for these operations will automatically move to higher levels of management depending upon the size of the spill, the ability to control it and the gravity of the situation.

- a. The Drilling Superintendent (in consultation with the Operations Manager) will be responsible for all spills of a nature or size which may be handled by the affected area without involvement of outside parties, including contact with the local news media. These would be small spills where control, containment, removal and any necessary clean-up can be handled promptly and effectively.
- b. The Operations Manager will be responsible for medium spills of which the size or nature indicates that they may escape beyond the bounds or the control capabilities of the local area, requiring assistance from other areas, outside clean-up services as may be available, or other members of a co-operative group - where such co-operatives are established.

- c. The Resident Manager will be responsible for organizing company efforts to deal with extremely large spills where the possibility exists of hazard to health or public welfare, extensive contamination of large water areas, shorelines or beaches, or other catastrophic consequences. Spills under this category may require total company effort and possibly outside services. It is anticipated that the Amoco Production Company, Production Department (International) Environmental Coordination, will serve in an advisory capacity to the Resident Manager, in the event of major oil spill emergency.

9.5 Specific Responsibilities

a. Overall Operations - Operations Manager

W. C. Cowan

Office: (002) 720677

Responsibilities:

1. Routine - Periodic review of readiness to deal with spills and blowouts.
2. Emergency - Receive all spill reports directly.

- Ensure directions for handling spills which do not involve outside parties.
- Consult with Resident Manager on action to be taken.
- Notify the appropriate agencies of the situation and the corrective action taken or planned.
- When control and clean-up of small spills can be handled promptly, issue any necessary statements to news media.
- Issue follow-up reports as required.

b. Drilling Engineer

R. Walla

Office: (002) 720677

Responsibilities:

- Initiate immediate clean-up operations if possible.
- Record pertinent information on spill report form.
- Notify Operations Manager immediately, providing all pertinent information on spill (spill report form) and action being taken.

9.6 Spill Reporting Directory

All spills must be reported immediately by the Drilling Foreman or Drilling Superintendent to:

W. C. Cowan
Operations Manager
Hobart, Tasmania

Phone: (Office) - (002) 720677

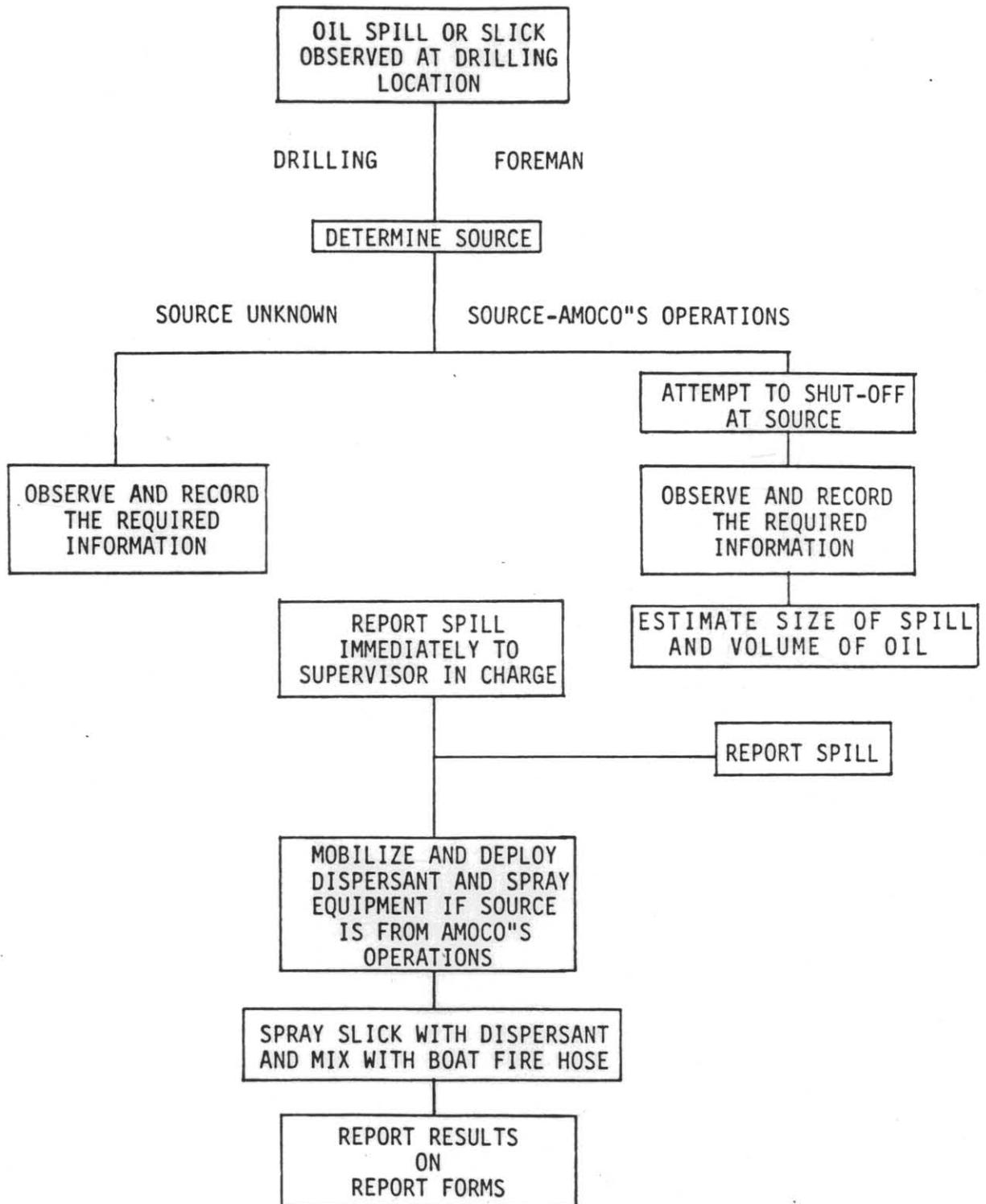
or in his absence to:

R. Walla
Drilling Engineer
Hobart, Tasmania

Phone: (Office) - (002) 720677

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The Operations Manager will, as necessary, notify Amoco Australia's Resident Manager, phone: (office) 02-957-4500 or (A/H) 02-960-3214 and the Local Industry Controller Port of Hobart, Tasmania, phone: 780-333 (A/H) 493-046 or 284-834 (A/H) 443-679.

9.7 a. (1) Oil Spill Action Chart

9.8 Clean-up Procedures

a. Oil spill at sea

(1) Oil Spill Action Chart

(2) Clean-up Techniques

The various methods for oil spill containment and clean-up, in order of effectiveness are:

- (i) Disperse slick with a chemical to speed degradation;
- (ii) Contain the oil within a boom and pick up with a skimming device;
- (iii) Burn the oil on the water if not hazardous to the drilling rig. Effective with significant quantities of fresh oil only.

(3) Clean-up Procedures

(i) Minor Deck Spills

Minor deck spills on board the rig or workboats consisting of fuel, lubricants or crude will be

absorbed and transported to shore for disposal as described in the disposal procedures section. No hydrocarbons are to be washed from the deck or other areas and permitted to enter the sea.

(ii) Minor Ocean Spills

Minor ocean spills may occur (1) as the result of deck washings containing oil entering the sea, (2) during fuel transfer operations from the workboats to the rig and (3) small quantities of crude oil may enter the water during burner lighting and adjustment operations associated with well tests. Care will be exercised to prevent such occurrence from happening.

If small quantities of hydrocarbons enter the water, a chemical dispersant can be employed. Mixing agitators will be employed in conjunction with the boat's fire fighting pump and hoses to apply a mixture of dispersant and sea water to the slick. Agitation from the fire hose stream in conjunction with wave action will cause the dispersant to break the oil up into small biodegradable particles.

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The metering control on the eductor should be set to mix 10 to 20 percent of dispersant with the water stream from the fire pump. Approximately one gallon of dispersant will be required for each barrel of oil to be dispersed. For small spills of several barrels, chemical application should be interrupted after a few gallons of dispersant have been applied.

Agitation with the fire hose should be continued for several minutes before applying additional dispersant.

The appended graphs will estimate the amount of oil in the spill and therefore determine the amount of dispersant to apply at what concentration.

(iii) Major Ocean Spills

Major spills are generally associated with emergency conditions such as an uncontrolled kick or blowout. If some oil has entered the well bore in addition to gas while a kick was encountered, a moderate amount of oil may enter the water as a result of liquid fallout from the flare lines. This oil should be dispersed as described in the section above for minor spills. If a blowout

does occur the workboats will be employed in removing the rig from the site, in preventing damage to property and in preventing injury to personnel. Workboats may then be designated to assist in dispersing the oil slick. Burning may be attempted if safety requirements and the sea state permit. Every effort will be made to prevent oil slicks from encroaching onto coastal areas.

Sea and weather conditions may prevent the use of the skimming and containment booms.

The Amoco Australian oil spill contingency plan goes into effect immediately if there is a major oil spill into the ocean. The contingency plan rapidly mobilizes men, equipment and materials to effectively control and correct the situation. The expertise and resources of the Standard of Indiana organization are available if needed. The oil spill contingency plan is outlined in this section.

b. Oil on Beaches

(1) Sand Beaches

NOTE: Detergents should never be used on sand beaches as it will cause the oil to sink further into the sand.

(i) Sawdust

Sawdust is an absorbent material that is readily available locally. The sawdust should be applied as a mulch on sand beaches before the oil reaches the beach. It can then be picked up using mechanical devices, such as harvesting equipment or front end loaders and disposed of by burning. The remaining oil can be removed by additional application of sawdust with the residue removed by scraping and burying.

The application of sawdust will still be beneficial if oil has already reached the beach and it will still aid in the clean-up. It will not be quite as efficient as if it was applied beforehand.

(ii) Remove layer of oil-soaked sand and dispose of it in a pit.

The sand-oil mixture is removed by scraping it into windrows, picking it up with a front end loader and hauling it away by a dump truck.

This method is not effective if the sand layer is very thin.

- (iii) The burning of oil on a sand beach has limited effectiveness and leaves a tar deposit. This method should not be used unless the oil deposit is thick.

(2) Rock or Boulder Beaches

(i) Detergents

Rock beaches can be effectively cleaned with detergents but the possible ecological effect must be considered prior to such application.

The detergent is sprayed on the beach with waves and tides providing the washing action.

(ii) Steaming

Rocky beaches may be steamed as an alternative to using detergents. Oil is returned to the water and skimmed off or soaked up in absorbent.

(iii) Burning

Military type flame throwers have been used to burn off the coating of oil on rocks and boulders. The military would probably have to provide this service.

(iv) Natural Clean-up Through Wave Action

Wave action may be permitted to remove the oil if the beach area is not being used for recreation. This has the least damaging effect on sea life if the oil deposit is thin and does not endanger bird life.

c. Third Party or Mystery Spills

(1) Third Party Spills

If an oil spill occurs as a result of the activities of another party in Amoco's area of operations, Amoco will make available, on request, the use of our lease boats with spray equipment and chemicals providing our drilling operations are not hampered.

(2) Mystery Spills

If an oil spill of unknown origin is located by Amoco personnel, the Operations Superintendent will be advised and he will notify the Hobart office.

9.9 Clean-up Report

a. Spill Report (see Appendix)

- all forms to be marked "Confidential. Not for Public Release."
- to be prepared by field office and submitted in duplicate to Hobart.
- one copy of the Spill Report shall be submitted to the appropriate Governmental agency.

9.10 Public Relations

a. An effective public relations response to an oil spill of any size and other pollution emergencies is to:

1. Show the Company's ability and willingness to respond to the emergency.
2. Reduce speculation about future effects of the spill.

3. Minimize liability for the spill by advance knowledge of what to say and what not to say.
 4. Reassure the public that all appropriate corrective actions are being taken.
- b. NO STATEMENTS regarding a spill WILL BE MADE by any company employee except as follows:
1. Immediately following a spill, the ranking Company official at the scene shall be responsible for issuing simple statements of fact and no others.
 2. A permanent Company spokesman will be chosen as soon as possible after a spill by the Company official in charge in consultation with Company headquarters.
 3. All statements regarding a major spill are to be cleared through the Company official in charge and the Offshore Emergency Task Force will determine the accuracy of the facts.
- c. A public relations representative on the scene will:
1. Arrange for monitoring press, radio and TV coverage and forward reports to his supervisor.

2. Set up communications facilities for news media, if necessary.
 3. Assist with arrangements to get local reporters to the scene of the spill or back to public communications facilities. The PR representative should not charter planes or boats for news media, and should not assume liability for any such charges unless specifically instructed by his PR supervisor or Company management.
 4. Provide briefings to press and/or government officials as required.
 5. Forward all written statements to his PR supervisor and his headquarters.
 6. Transmit all verbal statements given to media "as reconstructed" to his PR supervisor and his headquarters as soon as practical.
- d. The press statements should give:

The name of the installation involved, the time of the accident and any other facts that are not in dispute.

The steps the Company had taken to contain, control or handle the spill if the facts are not in dispute.

The statement should state explicitly that it is the Company's policy to prevent pollution of the sea, coastline, or inland waters - whatever is appropriate - and to minimize danger to the ecology. The statement(s) should also include the following information:

1. That containment and clean-up experts are (on)/(being called to) the scene to supervise the operations.
2. Type of product spilled - light or heavy oil? Other?
3. Has spill been controlled? How?
4. How large is spill? Quantity, distribution, etc.
5. How is spill moving, and what factors can affect its movement? These would include wind, current, tides, etc.
6. What clean-up measures have been taken and planned? Describe this fully - types of vessels, sprays, equipment and manpower.

Do not include dollar costs or estimates or other monetary equivalent.

7. Describe special efforts taken to protect property and wildlife.

e. No statements shall be made regarding the following, except by Company headquarters or with clearance of Company headquarters:

1. Liability for spill.
2. Speculation regarding cause of spill. Never speculate about the cause of a major spill. An extended inquiry will be needed to determine the reason, and liability could be affected by erroneous statements.
3. Estimates of damage expressed in dollars or other monetary equivalent.
4. Estimates of how long it will take to clean up a spill.
5. Estimates of clean-up and containment costs.
6. Promises that property, ecology, or anything else will be restored to normal.
7. Statements about the appropriateness of government response to the oil spill.

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f. If incorrect statements or unfounded speculations have been published, use the following as a guide:

1. First, provide the source with correct information. Make accurate the precise facts available to the press, government, or scientists. Arrange for representatives to visit the spill to confirm Company estimates as to size and damage to installations or environment, if necessary.
2. Ask the source for amendments of statements believed to be erroneous. Do not refute erroneous public statements if it can be avoided.
3. Do not refute technical or scientific statements unless you use a comparable technical or scientific source to back up any statement you make. Say that we are investigating, but be firm about factual statements in defence of the Company.

10.0

NATIONAL PLAN
TO COMBAT POLLUTION OF THE SEA BY OIL,
OPERATIONS AND PROCEDURES MANUAL,
MARCH, 1985,

241090

TASMANIA SUPPLEMENT

241091

February 14, 1985

NOTE:

At the time of printing this Contingency Plan the March, 1985 revised manual of the National Plan to Combat Pollution of the Sea by Oil, Operations and Procedure Manual, Tasmania Supplement, was due to be issued. Upon receiving the revised manual we will ensure that all operating personnel receive a copy to incorporate into the existing Contingency Plan. A copy of the 1982 Operations and Procedure Manual will be attached until receipt of the subject revisions.

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STOREMAN - RELEASE OF STORES

HOBART (STD Area Code 002)

<u>Name</u>	<u>Designation</u>	<u>O.H.</u>	<u>A.H.</u>
B.J. Brooks	Supervisor, Stores & Transport	205224	443785
R.N. Kirwan	Storeholder	205253	343616
R. Clark	Regional Director	205221	729552

AUTHORISING RELEASING OFFICERS

J. Hartley	205304	296848
M.E. Brahan	205309	486380
R.J. Montgomery	306041	442034
F.G. Christie	346722	253900

AMENDMENTS

The Tasmanian Supplement was approved by the Tasmanian Cabinet on 12th October, 1976 as the basis for operation under the National Plan to Combat Pollution of the Sea by Oil. The original issue is updated to October 1977. Amendments will be issued from time to time either as amendments to be made in manuscript or as replacement pages bearing the date of issue.

All users of the Supplement are requested to advise of the need for amendments to the State Oil Pollution Control Officer, 161 Davey Street, Hobart, 7000, and to record amendments made in the copy held.

MANUSCRIPTS AMENDMENTS

Amendment List No.	Amendment entered by	Date

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REPLACEMENT PAGES

Together with each issue of replacement pages, a replacement will be supplied for this page listing the date of issue of current amendments.

INTRODUCTION

This supplement is intended to complement the National Plan, Operations Manual but at the same time be a complete manual for Tasmania and Tasmanian conditions.

Recognising the threat to the coastal environment and possible hazards to human life following an oil spillage, this plan details a pattern of co-ordinated and integrated responses to pollution incidents.

The basic concept of the State Plan is that oil pollution incidents are of three varieties:

- a) Minor incidents within the capacity of a Marine Board on any harbour or waters around Tasmania, will be dealt with by the respective Marine Board.
- b) Any incident which a Marine Board considers to be beyond its capacity, will refer the matter to the State Oil Pollution Committee for appropriate action, using facilities provided by the Commonwealth if required.
- c) All incidents on the high seas, and in other waters which are considered by the State Oil Pollution Committee or the (Tasmanian) Cabinet Oil Spills Committee to be beyond State resources, will be referred to the Commonwealth, which will accept the responsibility.

In this supplement primary responsibility for the control of oil pollution within territorial and inland waters rests with the Department of the Environment and the State Oil Pollution Control Officer appointed under the Plan will be a member of the staff of that Department. However, it is recognised that the appropriate authority to take executive action at the scene of the incident will be a Marine Board Officer who will act as the Operations Controller.

It is further recognised that should the oil come ashore, it will be necessary for the On Scene Co-ordinator, to have at his disposal, appropriate labour and equipment, capable of cleaning up the spill.

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The rapid spread of freshly-spilt oil and the speed with which it may reach the shore, together with the formation of thick lumps by evaporation of light components, and the possible development of oil-in-water emulsions, are all factors which establish that, from the moment of release spilt oil becomes progressively more difficult to deal with. Realisation of this is essential in selecting remedial techniques, and the speed of action assumes an importance which overrides almost all other considerations.

Insofar as waterborne operations are concerned, work done in the first 24 hours will probably be far more effective than work in any subsequent period. The lighter fractions of the spilt oil may be lost through evaporation within only an hour or two of the spill occurring; also the older spills are generally resistant to treatment with dispersants. If this early opportunity is lost, waterborne cleaning-up operations have little prospect of conferring protection to the foreshores, although clearing of shipping channels will still be possible to a limited degree.

The object of the State Plan is to develop an effective organisation to work with the National Plan to deal promptly and efficiently with any oil spill in the Tasmanian Region and relies upon the co-operation of all participants in order to be successful. Constant training and simulation exercises will be necessary to develop the skills required for this important task.

This Plan will be reviewed and updated as necessary.

TASMANIAN REGIONAL SUPPLEMENT
OIL POLLUTION OPERATIONS MANUAL
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13. Regional Distribution of Facilities
(in chartlet form)

14. Current and Tidal Stream Information

1. DEFINITIONS
- 1.1 'Accounts Officer' - means the officer appointed to be responsible to the State Committee for administration duties and certification of accounts during an oil spill clean up where these costs are to be reimbursed as indicated in the National Plan.
- 1.2 'Advance Operations Centre' (A.O.C.) - means a location in close proximity to an oil spillage from which an Operations Controller directs pollution combat operations.
- 1.3 'Australian Coastal Surveillance Centre' (A.C.S.C.) - means the centre operated by Transport Australia in Canberra and manned continuously for the conduct of marine operations.
- 1.4 'Authorised Releasing Officer' (A.R.O.) - means a person who may authorise the release of equipment or materials from a Stockpile Depot on behalf of the Commonwealth Government Authority or a State Authority.
- 1.5 'Central Office' (C.O.) - means the Central Administration of the Department of Transport at Melbourne.
- 1.6 'Commonwealth Government Authority' - means Transport Australia or an officer nominated to act on behalf of that Department.
- 1.7 'Director of Emergency Services' - means the officer appointed under Section 20 of the Emergency Service Act 1976 or his delegate who will be responsible to the Chairman of the State Committee for the co-ordination of all resources, facilities and administrative services.
- 1.8 'Assistant Operations Controller (Land)' - means the person responsible for controlling the operations to combat oil pollution on land under the direction of the Operations Controller.
- 1.9 'Major Oil Pollution Incident' - means an incident considered to be beyond the capacity and resources of the individual Marine Board to control.
- 1.10 'Minor Oil Pollution Incident' - means an incident considered to be within the capacity and resources of the individual Marine Board to control.

- 1.11 'National Plan' - means the "National Plan to Combat Pollution of the Sea by Oil".
- 1.12 'On Scene Co ordinator' - means the person appointed by the Responsible Authority to take direct charge of operations to combat a pollution incident (See 2.3 and 8.4).
- 1.13 'Operations Controller' - means the Harbour Master of the port concerned and is the person responsible for the control of labour and materials allocated for the general clean up operations as directed by the On Scene Co-ordinator.
- 1.14 Operations Manual - means the manual produced by Transport Australia which is supplemented by the Tasmanian Regional Supplement.
- 1.15 'P.I.E.C.E.' - means the Petroleum Industry Environmental Conservation Executive.
- 1.16 'Pollution Incident' - means an actual potential or suspected oil discharge which, in the opinion of the Commonwealth Government or State Authority, is polluting or may pollute the coast of Australia, its reefs or their adjacent waters.
- 1.17 'Assistant Director' (A.D.) - means the officer who is performing the duties of the Assistant Director, Commonwealth Department of Transport, Tasmania Branch.
- 1.18 'Regional Industry Controller' - means the officer nominated to act on behalf of the P.I.E.C.E. having overall responsibility for that organisation in Tasmania.
- 1.19 'Responsible Authority' - means the Commonwealth Government Authority or State Authority responsible for instituting, controlling and co-ordinating operations to combat a pollution incident.
- 1.20 'State Authority' - means the authority responsible for the control fo the incident (as in Sections 2.1.1 and 2.1.2).

- 1.21 'State Committee' - a Committee comprising the persons shown in para. 8.2.5 responsible for deciding the strategy and allocating the resources to combat oil pollution other than when classified as minor. The Committee is also the authority for amending the State Plan and Action Plan and arranging collective training under the Plan. In an incident the Chairman of this Committee is the Responsible Authority.
- 1.22 'State Oil Pollution Control Officer' (S.O.P.C.O.) - means the officer appointed by the Public Service Board in accordance with the Public Service Act of 1973. In an incident he is responsible for providing technical advice on clean up procedures and techniques to the State Committee and also to the On Scene Co-ordinator. He is appointed to the State Oil Pollution Committee as the Executive Officer and in this position is the Field Liaison Officer during an oil spill incident. In normal circumstances as an officer with the Department of the Environment he is responsible for the initiating and co-ordinating oil pollution training within the State and for preparatory work in connection with State Action Plans.
- 1.23 'Storeman' - means an officer of the Commonwealth Government who has responsibility for the receipt, custody and release of stores.
- 1.24 'Stockpile' - means all dispersant materials and their containers, pump assemblies, spray booms and fittings and ancillary equipment for use in combating pollution incidents.
- 1.25 'Territorial Waters' - A clearly defined area of water adjacent to the coastline of Tasmania - this term is subject to review depending on the advice given to Attorneys General by the Seabed and Maritime Committee of legal advisers.

2. DIVISION OF RESPONSIBILITY

- 2.1 This plan provides for three divisions of responsibility in Tasmania and the Authority having prime responsibility for each division is as follows:
- 2.1.1 If the pollution is within the capacity of a Marine Board to handle, it will deal with the matter using Commonwealth or State resources to assist if called for.
- 2.1.2 If the incident is considered by the Marine Board to be beyond its capacity it will refer the matter to the State Oil Pollution Committee, which will take the necessary action using assistance from the Commonwealth if called for.
- 2.1.3 All incidents on the High Seas. In all other waters, when the State Oil Pollution Committee, or the (Tasmanian) Cabinet Oil Spills Committee decides that the incident is beyond the capacity of the State, it will refer it to the Commonwealth Government which would accept responsibility.
- 2.2 Notwithstanding anything contained in paragraph 2.1, the Commonwealth Government Authority or State Authority first being informed of a pollution incident shall pass all relevant information to the Responsible Authority. Furthermore, the divisions of responsibility given in paragraph 2.1 may be varied by mutual consent.
- 2.3 In any pollution incident the On Scene Co-ordinator is the officer nominated in Section 8 as the On Scene Co-ordinator of the Responsible Authority. The nominated On Scene Co-ordinator of the other Authority (i.e. State or Commonwealth Government) will assist him.
- 2.3.1 Where a pollution incident involves the area of responsibility of more than one Marine Board the Responsible Authority shall appoint one of the nominated officers as On Scene Co-ordinator after consultation with the Marine Boards.

3. ACTION PLAN - REPORTING OF INCIDENTS

Where an oil spill incident occurs in Territorial Waters, and/or Inland Waters, a report must be made to the appropriate Marine Board, but where the incident occurs on the High Seas, this report should be to the Commonwealth Government Authority.

The report should state:

- (a) The location of the spill.
- (b) The source of the spill (if ascertainable).
- (c) Whether the oil is still flowing or not.
- (d) The colour of the spill.
- (e) Whether it smells like petrol.
- (f) The approximate area covered by the spill.
- (g) The weather conditions in the area, including wind direction.
- (h) The name and address of the informant.
 - (i) Time
 - (ii) Date
 - (iii) Place
- (i) Brief description of incident and condition of ship and other vessels in the vicinity.

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4.

ACTION PLAN

Minor Oil Pollution Incident in Territorial Waters
and/or Inland Waters

- 4.1 Incidents in Territorial waters and/or Inland waters shall be reported in the first instance to the State Oil Pollution Control Officer, phone 306041 (A.H. 442034) or in his absence to the Chief Environmental Officer, phone 306574 (A.H. 725887).

5.

ACTION PLANMajor Incident in Territorial and/or Inland Waters5.1 Stage 1

The State Oil Pollution Control Officer of the Department of the Environment - telephone number - 30 6041 and home 44 2034, or in his absence, the Chief Environmental Officer telephone 30 6574 and home 72 5887 is to be advised immediately by the first authority to learn of the incident and he will immediately take steps to verify the report. Upon confirmation that the incident is likely to be beyond the resources of the local Marine Board to handle, he will contact the Duty Operator Headquarters State Emergency Service (30 3030 or 30 2848 all hours) requesting that the Deputy Director of Emergency Service be advised of the situation. The State Oil Pollution Control Officer will also advise the Chairman and members of the State Committee and alert the appropriate Operations Controller and Land Operations Supervisor.

5.2 Stage 2

The State Committee will meet as soon as practicable at the State Emergency Services building at Melville Street, Hobart, and the Director of Environmental Control will assume the Chair. Under the co-ordination of the Chairman the members will establish the availability of resources and materials likely to be needed to combat the pollution.

5.3 Stage 3

On receipt by the Chairman of details of the situation from air reconnaissance, the Committee will consider the strategy to be adopted in combating pollution, taking into account the influence of other factors which may be present such as safety of life and salvage.

- 5.3.1 If action is required the Committee will then make an outline plan to combat the pollution and allocate resources and materials.

The Plan must include:

- the establishment of an advanced operations centre.
- the use or restriction of dispersants in the designated area.
- the estimation of materials and equipment required to combat the spill.
- the number and types of vessels to be used and the requirements for land transport.
- liaison with the media and arrangements for Press releases.
- the nature and extent of out-of-State assistance required.
- labour, accommodation and food.
- operational and administrative communication.
- traffic priority and control of the general public in the area.
- financial records and control.
- maintenance of records in respect to decisions and the incident narrative.
- co-ordinating instructions relating to relative priorities in respect to other aspects of the incident.

5.3.2 Appropriate members of the Committee will take the necessary executive action within their area of responsibility to implement the decisions of the Committee.

5.3.3 Wherever practical, the On Scene Co-ordinator shall participate in preparing the Outline Plan. On all occasions he will be briefed by the State Committee directly or by telephone.

5.3.4 The Committee will make adequate arrangements to meet periodically during the incident to consider progress and proposed alterations to the strategy or the plan.

Individual Committee Members will ensure that the Chairman is able to contact them during the incident.

5.4 Stage 4

- 5.4.1 The On Scene Co-ordinator will assume control of all operations. He will advise the Chairman upon arrival at the scene and initiate clean-up operations in accordance with the Committee decisions and advise on the measures to be adopted. He will report to the Chairman the nature and extent of the pollution and advise if further equipment or materials are required, the extent to which these can be met from local sources and advise also the results of Stage 3 action, pointing out any difficulties being experienced.
- 5.4.2 The Chairman may arrange for the despatch of oil samples to Melbourne by chartered aircraft and/or Hobart for local analysis.
- 5.4.3 The Chairman will arrange for any further air observations considered necessary.
- 5.4.4 Liaison will be maintained by the Chairman and the On Scene Co-ordinator with other authorities and police during the entire period of operations.

5.5 Stage 5

- 5.5.1 It is assumed that the polluted area has been treated and the clean-up operations completed at this stage.
- 5.5.2 The On Scene Co-ordinator, in co-operation with the Assistant Operations Controller (Land), will complete the necessary stores and financial procedures in respect of equipment and resources utilised and arrange for replenishment where necessary. This will be carried out in liaison with the Chairman.
- 5.5.3 Upon completion of the operation, reports are to be submitted to the Chairman by the On Scene Co-ordinator and Assistant Operations Controller (Land), including any recommendations for dealing with future incidents.
- 5.5.4 Members of the Committee will submit operations reports to the Chairman dealing with the aspects under their jurisdiction.

6.

ACTION PLANOil Pollution Incident on the High Seas

- 6.1 A major incident on the High Seas which is unlikely to involve Territorial Waters will be dealt with by the Commonwealth Government.
- 6.2 Where an incident on the High Seas also involves, or is likely to involve, pollution of Territorial Waters the Commonwealth Government Authority will alert the State Oil Pollution Control Officer, who will then take the action detailed as Stage 1 at para 5.1.
- 6.2.1 When the Committee meets at Stage 2 (para 5.2) it will first decide whether the State or Commonwealth Government is to be the Responsible Authority. If it decides the former then the procedures of para 5 will apply. If it decides that the Commonwealth Government is to be the Responsible Authority, then the Assistant Director as defined in para 1.14 is to assume the Committee Chair and proceed as in paragraph 5 in the stead of the Chairman, i.e. where "Chairman" and "Operations Controller" appears in paragraph 5 this shall be read as Commonwealth Government Regional Authority and Commonwealth Government Operations Controller respectively.
- 6.2.2 Where the Commonwealth Government is the Responsible Authority the Assistant Director will carry out his responsibilities under this plan by working in conjunction with the normal Chairman.

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7. ACTION PLAN - REVIEW OF INCIDENT REPORTS

The Committee will meet to review the incident reports and evaluate the success of the plan with the aim of possible review of procedures for any future incidents, and also to take any necessary follow-up administrative action required.

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9. TASMANIAN ORGANISATIONAL CHART - P.I.E.C.E.

REGIONAL INDUSTRY CONTROLLER

STATE GOVERNMENT

- 1. J.S. McKenna, BP
345811 (AH 726700)
- 2. L. Acreman, Mobil
284661 (AH 343232)

- 1. State Co-ordinator
Capt. F.G. Christie
Hobart 346722 (AH 253900)
- 2. Deputy-Capt. J. Lucas
Hobart 346722 (AH 251600)

LOCAL	INDUSTRY	CONTROLLERS	AND DEPUTIES
<u>BELL BAY</u>	<u>BURNIE & PORT LATTA</u>	<u>DEVONPORT</u>	<u>HOBART</u>
1. T. Glass, Mobil 821131 (AH 822048)	1. J. Buchanan BP 314744 (AH 311786)	1. C. Windley Shell 241531 (AH 244585)	1. T. Wylie Caltex 780333 (AH 493046)
2. D. Westerman BP 821540 (AH 314423)	2. P. Hack, Mobil 313186 (AH 315187)	2. E. Overmeevan Shell 241531 (AH 241539)	2. R. Dix Shell 284834 (AH 443679)
<u>LAUNCESTON</u>	<u>KING ISLAND</u> (Naracoopa)		<u>FLINDERS ISLAND</u> (Lady Barron)
1. T. Mathers, Ampol 318244 (AH 944529)	1. I. Button Lymwood 621155		G.T. Barrett, BP (Agent) 593541 (AH) 593511
2. J. Cunningham Ampol 318244 (AH 944133)	2. King Is. Scheelite Company Staff (AH 261) Lymwood		

10. AVAILABILITY OF VESSELS
- 10.1 Fishing Vessels
- 10.1.1 A list of fishing vessels 16 metres in length and over is shown in Annex 1.
- 10.2 Port Authority Vessels
- 10.2.1 Hobart Marine Board Telephone 34 6722 AH. Capt. F.G Christie 253900
- 10.2.1.1 See Annex 2.
- 10.2.1.2 Craft suitable for use in local inshore waters.
See Annex 2.
- 10.2.2 Launceston Port of Launceston Authority Telephone 821222 AH. Capt. R.E.N. Barber Telephone 821460.
See Annex 2.
- 10.2.3 Devonport - Marine Board Telephone 241951 AH. Capt. W.J. Stuart 241805.
See Annex 2.
- 10.2.4 Burnie - Marine Board Telephone 31 3444 A.H. Capt. M.C. Strachan 313493
See Annex 2.
- 10.2.5 Port Latta - Savage River Mining Co. Pty. Ltd., Telephone 434104 A.H. Capt. M. Jordan Tel. 423125.
See Annex 2.
- 10.3 State Government Marine Vessels
- 10.3.1 Tasmanian Fisheries Development Authority - Fishery Research Vessels
- 10.3.2 Based Hobart - See Annex 2.
- 10.3.3 Tasmania Police - See Annex 2.

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- 10.4 Other Vessels - A number of tugs are operated by the Hobart Tug Co. These are shown in Annex 2.
- 10.4.1 Four 49' x 28' flat top dumb barges capacity 200 tons (6 tanks) and one 45' x 22' crane barge fitted 30 tons winch - no pumps or spray equipment fitted.
- 10.4.2 In addition, 14 paper barges (dumb type) ranging in length from 100' to 138' and 250 tons to 500 tons are in use in the River Derwent but are normally engaged in the carriage of paper in the river trade.
- 10.4.3 Contact - Derwent Tug Co. Pty Ltd, Hobart -
Telephone 344354
A.H. Mr B. Smart 251116
- 10.4.4 Based Burnie

See Annex 2 for further information. Contact -
Tasmanian Marine Services, Bass Highway.
P.O. Box 215, Somerset, Tasmania.
Telephone 004-351556.

A.H. Mr V. Smith 004-351441
Mr B. Smith 002-437563

11. AVAILABILITY OF AIRCRAFT

11.1 Fixed Wing Aircraft

11.1.1 Southern Tasmania

- 11.1.1.1 Benders Spreading Services, Hobart
Telephone Hobart 280041
A.H. Hobart 232078 Mr A.W. Hawkins
A.H. Hobart 252476 Mr R.T. Bender
A.H. Hobart 477414 Mr R. Bolton, Chief Pilot

Type loading and location are dependent upon availability of aircraft.

- 11.1.1.2 Tasair Pty. Ltd., Hobart
Telephone Hobart 485088
A.H. Hobart 252378 Mr P.C. Tanner
A.H. Hobart 444485 Mr J. Pugh

Type loading and location are dependent upon availability of aircraft.

- 11.1.1.3 Air Tasmanian Pty. Ltd., Hobart.

at Hobart Airport.

Telephone Hobart 485030
A.H. Hobart 436370 - Mr M. Hunt
A.H. Queenstown - 711032 or 771669 - Jim Young
Electrical

Aircraft based at Hobart

Type and loading is dependent upon availability of aircraft.

11.1.2 Northern Tasmanian

- 11.1.2.1 Tasmanian Aero Club, Launceston

Telephone Launceston 918330 or 918107
A.H. Launceston 911222 Mr P.H.P. Roberts.

2 Cherokee 151.

1 Cherokee 140 - Carries 3 Passengers) All single
1 Cherokee 6 - Carries 6 Passengers) engine
aircraft.

1 Citabria

All aircraft based at Launceston.

Suitable for spotting only.

11.1.2.2 Reg. Munro, Launceston Airport

Telephone - Launceston 918242
A.H. Launceston 442232 Mr R. Munro

1 Cessna 207 - carries 6 passengers - single
engine aircraft

1 Bittern Norman Islander - carries 9 passengers
- twin engine aircraft (fully instrumented)

Aircraft based at Launceston. Suitable for
spotting only.

11.1.3 North West Tasmania Including King Island

11.1.3.1 Astral Airways Pty. Ltd.

Telephone - Devonport 278907
Devonport A/H 282148 Mr D. Jerry
Wynyard 422205 A/H Mr T. Chalk 423287.

Type and loading are dependent upon availability
of aircraft.

11.2 Helicopters

11.2.1 Hookway Aviation are permanently established in
Tasmania at Cambridge Airport (Telephone 485130).
Type and loading are dependent upon availability
of aircraft.

11.2.2 The Hydro-Electric Commission periodically
charters helicopters. Details available through
Air Transport Group Hobart Airport.

241116

11.2.3 Contact Hydro-Electric Commission

Hobart Tel. 304801
Mr J. Wythes 304801
A.H. 439758

These types suitable only for spotting purposes.

12. AVAILABILITY OF EQUIPMENT

12.1 Detergents and Dispersants available in Tasmania

12.1.1 Estimated Average Stocks

These stocks are subject to considerable variation as a result of fluctuation in consumption and replenishment.

12.1.2 Hobart

Transport Australia - Stockpile Depot,
Pitcairn St
Glenorchy

Equipment 500 tons Dispersant BP AB
4 pump sets
and dispersal equipment

Marine Board Gamlotox - 5x200 litres
Murray St. Pier

Tel. 34 6722
A.H. Capt. F.G. Christie 25 3900

Shell Co. Linsitel 165 g
Selfs Point 7 x 200 l

Tel. 28 4834
A.H. Mr R. Dix 44 3679

Applied Chemicals Applied 8440 205 l
83 Sunderland St, Moonah 839 23 l

Tel. 72 4824
A.H. Mr P. Wilson 28 0484

Turco Aust. Pty. Ltd. Turco T. 4918A 8 x 25 l
10 Gepp Pde. Moonah Slick Mulso

Tel. 727673
A.H. Mr P. Bryan 44 3393

241118

B.P. Aust. Ltd. BP 1100X 2 x 44 g
47 Liverpool St.

Tel. 34 5811
A.H. Mr J.S. McKenna 72 6700

Golden Fleece Pty. Ltd. Turco 4918A 2 x 44 g
Selfs Point. Slick remover

Linsitel 200 1
Tel. 28 0211 40 1
A.H. 43 7525

Special Dispersant
for heavy oil
1 x 200 1

Gamlen Chemicals Pty. Ltd. Gamlen
C/- Bells Asbestos Gamldox 200 1
11 Main Rd. Moonah Gamlotox
Oil Spill Remover

Tel. 72 4744
A.H. Mr G. Lowe 72 8962

Tel. 23 7336
A.H. Mr T. Swift 25 2591
A.H. Mr G. Spence 72 6560

12.1.3 Launceston

Turco Aust. Pty. Ltd. Slick mulso 200 1
11 Gleadon St.

Tel. 31 2897
A.H. Mr W. Cochraine 44 3193

Applied Chemicals Pty. Applied 839 250 g
Ltd.
47 York St.

Tel. 44 4873
A.H. Mr L. Reardon 44 4873

I.C.I. Australia ltd
2 Canal St. Launceston

Tel. 31 9633
A.H. 72 1186 (Hobart)

241120

Shell Co. Linsitel 150 g
Oil Terminal 44s x 5s

Tel. 24 1531
A.H. Mr C. Windley 24 4585

Caltex Oil Turco T4918A 2 x 44 g
Oil Terminal Slick remover

Tel. 24 1471
A.H. Mr A. Williams

Gamlen Products Pty. Gamedox 400 l
Ltd. Gamlotox 400 l
32 Don Road

A.H. Mr B. Medwin 25 1353

12.1.6

Burnie

Marine Board Gamlen WBX 5 x 44 g
Marine Terrace Gamlen PBX 5 x 44 g

Tel. 31 3444
A.H. Capt. M. Strachan 31 3493

Turco Aust. Pty. Ltd. Turco T4918A 10 x 44 g
C/- Frank Hammond Slick remover
Pty. Ltd.
River St. Wivenhoe.

Tel. 31 3155
A.H. Mr J. Meredith 31 4424

BP Australia Ltd. BP 1100X 180 g
River Street, BP 10002 44s x 5s
Wivenhoe.

Tel. 31 4744
A.H. Mr J. Buchanan 31 1786

Applied Chemical Pty. Applied 839 5 x 5 g
Ltd.
C/- F.H. Stephens,
Contact Launceston Office
Mr L. Reardon
Tel. 44 4873
A.H. 44 4873

12.1.7 Port Latta

Savage River Mining Co. Turco T4918A 10 x 44 g
Gamlen 10 x 44 g

Tel. 43 4104

A.H. Capt. M. Jordan 42 3125

12.1.8 Flinders Island

BP Australia Ltd. N I L
Lady Barron

Tel. 59 3541

A.H. Mr G. Barrett 59 3511

12.2 Equipment and Facilities available in Tasmania
Pumping and Spraying Units12.2.1 Port Latta

Reference para. 10.2.5 - the equipment listed on board 'S.R.M. 35'.

12.2.2 Port of Launceston Authority

2 type S.7 Swathematic pumping units fitted with 3 jet/spray heads and a portable diesel unit, total weight 100 lbs. and designed for use on small craft. Cuts a swathe of 55 feet wide and at a speed of 5 knots, consumption of 5 galls/5,000 square yards and at output of 540 galls/hour.

One unit is located at Bell Bay and one at Beauty Point.

Also a 6 knapsack spray units for use with small craft located at Bell Bay and 1 high pressure C.5 hp Maruyama portable spray pump unit at same location.

12.2.3 Devonport

2 knapsack spray units for use with small craft.

12.3 Boom EquipmentHobart

The Hobart Marine Board have a 300 feet long floating boom. Contact Capt. F. Christie or Capt. J. Lucas. The Hydro Electric Commission have a 45 metres long Gamlen Oil containment boom usually located at Bell Bay. It is in 3 x 15 m lengths, each length contained in a 6' x 3' x 2' crate and weighing 150 lbs. Boom height above the water is 7 inches and depth below water is 9 inches.

<u>Contact</u>	<u>Office</u>	<u>Home</u>
Mr S. Sherman	(003)82 1377	(003)31 8932
Mr J. Clark	30 4415	28 3749

12.4 Absorbent Materials (Extract from PIECE Plan)Launceston

Straw & Hay - 150 Bales -
Roberts, Stewart, 15 St. John Street,
Launceston. Tel. 31 2244 A.H. 31 1740

Sawdust - 8 - 10 cwts
Tas. Board Mills,
Killafaddy.
Tel. 39 1406 A.H. 31 3340

Sawdust - 10 tons
J. & T. Gunn,
Brisbane Street, Launceston.
Tel. 22251 A.H. 44 3072

Straw and Hay - 1,000 bales - Jan, 2,000 Feb.
Farmers and Graziers,
Wellington Street, Launceston.
Tel. 31 2222 A.H. 31 4534

Burnie

Straw - 200-300 bales
Tas. Producers Selling Agency,
Marine Terrace, Burnie.
Tel. 31 2011 A.H. 31 1524

241123

Sawdust - Misc. Sources
C. & H. Wood,
River Street, Wivenhoe
Tel. 31 1688 A.H. 31 1670

Stanley

Straw - 40 bales
Circular Head Produce Company,
Alexander/Wharf Road,
Tel. Stanley 4 A.H. 58 3132

Sawdust - substantial -
Kauri Timber,
Wharf Road, Stanley.
Tel. Stanley 60 A.H. 52 1135

Devonport

Straw - Varies
C. Windley,
Shell Devonport.

Sawdust - Varies -
Riversdale Timbers, Devonport
Tel. 24 1896 A.H. 24 2468

Sawdust
Kauri Timber, Devonport
Tel. 24 1981 A.H. 24 2719

Flinders Island

Hay - Available through
G. Barrett, BP Agent,
Lady Barron.

Hobart

Straw and Hay - 100 bales
Roberts Stewart,
1 Macquarie Street, Hobart.
Tel. 23 7631 A.H. 44 2377

Straw and Hay - 100 bales
A.G. Webster,
60 Liverpool Street, Hobart,
Tel. 34 2211

Sawdust - 8 tons
 Crisp and Gunn,
 79 Melville Street, Hobart
 Tel. 34 3711 A.H. 44 1862

Sawdust - 4 tons
 Kemp and Denning,
 103 Melville Street, Hobart.
 Tel. 34 3311

King Island

Straw and Hay,
 King Island Dairy Products,
 Currie.
 Tel. Currie 41, A.H. 151

Sawdust
 Marine Board,
 Currie.
 Tel. Currie 4 A.H. 114

12.5

Mechanical Land Equipment (Extract from PIECE Plan)

Bell Bay

Road Graders) Earth & Allied, Bell Bay.
 Front End Loaders) Tel. 82 1688 A.H. 94 8130
 Back Hoes) A.J. & J. Harris, George Town
 Tip Trucks) Tel. 82 1291 (continuous)

Launceston

Front End Loaders, Tip Trucks, Bulldozers.
 Woodfield and French,
 Lindsay Street, Launceston.
 Tel. 31 5403 A.H. 31 5403 or 26 2516

Mr G.C. Sulzberger,
 7 Brisbane Street, Launceston.
 Tel. 31 5403 A.H. 31 5403 or 44 2616

4 Drotts (Woodfield and French only)
 Graders (Mr G.C. Sulzberger only).

All the above vehicles are radio-controlled from base.

Burnie

Loaders, Bulldozers, Tip Trucks.
Ray Jones Pty. Ltd.,
16 Mace Street, Burnie.
L.G. Holloway Transport,
Bass Highway, Wivenhoe.
Tel. 31 2788 A.H. Tewkesbury 5, or
Ridgley 35 7366.

3 graders
(Ray Jones Pty. Ltd. - only)
Tel. 31 1744 A.H. 31 4826

Stanley

Front End Loaders, Tip Trucks.
J.N. Smith, Church Street, Stanley.
Tel. Stanley 58
J.J. Johnson, Main Road, Stanley.
Tel. Stanley 14.

Devonport

Trucks, Dozers, Front End Loaders, Back Hoes.
Lindsay King Pty. Ltd., Devonport.
Tel. 24 2956 A.H. 24 2956

Miscellaneous Equipment - P.W.D.
Wesley Vale Tel. 28 4095
East Devonport Tel. 27 8497 or Ulverstone 1386.

Flinders Island

Graders, Tip Trucks, Front End Loader.
Flinders Island Council, Whitemark.
Tel. Whitemark 9 or 61 A.H. Whitemark 41.

Tractors, Trucks, Crane, Land Rover.
L. Walker,
Tel. Whitemark 87 A.H. Whitemark 33 or 70.

Hobart

Graders, Dozers, Front End Loaders, Harman Shovel,
Traxcavators, Tip Truck.
G. Jennings Pty. Ltd., 67A Derwent Avenue,
Lindisfarne.
Tel. 43 9555 or 34 4508

241126

Tip Trucks
C.R. Johnson,
2 East Risdon Road,
Bellerive.
Tel. 44 1868.

King Island

Graders, Dozers, Front End Loaders, Trucks
King Island Scheelite.
Tel. Lymwood 231.

SUMMARY OF FACILITIES AVAILABLE (TASMINIA)

	(i) Tugs	(ii) Launches	(iii) Barges/ Lighters	(iv) Floating Oil Booms	(v) Oil Dispersant	(vi) Absorbent Materials	(vii) Shore Services	(viii) Aviation Services	(ix) Diving Salvage Service
a) HOBART	X	X	X	X	X	X	X	X	X
b) DEVONPORT	X	X	X		X	X	X	X	X
c) BURNIE	X	X	X		X	X	X	X	X
d) PORT LATTA	X	X			X	X	X		X
e) BELL BAY/ LAUNCESTON	X	X	X		X	X	X	X	X
f) KING ISLAND		X				X	X	X	X
g) FLINDERS ISLAND		X				X	X		

X = Available

NOTE: (i) Of the facilities available under items (i), (ii), (iii), and (viii) only launches TAWE in Hobart and SRM 35 at Port Latta have existing equipment, specifically set up for spraying oil dispersant.

(ii) The spraying equipment held by the Port of Launceston Authority can be fitted to any launch at very short notice.

14. TASMANIAN CURRENTS AND TIDAL STREAMS

14.1 There is a fairly well defined seasonal pattern in surface water circulation around the coast of Tasmania, i.e. a winter/summer reversal in current patterns.

14.2 Summer:

A general W/NW current flow in Bass Strait and a Northerly sea on the E. Coast extending out to about the meridian of 150° East Longitude, cut side of which a predominantly Southerly flow is experienced probably due to effect of the East Australian Current turning east and forming the anti-clockwise circulation in the Tasman Sea. On the West coast current generally flows N/N.W.

14.3 Autumn/Winter/Early Spring:

Generally an Easterly flow through Bass Strait which branches S/SE along West coast of Tasmania and continues anti-clockwise around the South and East coasts.

14.4 General:

Southern Ocean Current predominates to the West of Tasmania across the Bight but is subject to wind effects, rate is reportedly not exceeding 1 knot but probably of the order of 1/2 knots through narrow straits such as Hunter Passage and Banks Strait.

In bays and inlets, particularly on South and East coasts there appears to be a general set inwards with possibly counter currents running close inshore of the main current flow.

14.5 References:

Australia Pilot Vol. 11, 1969.
Australian Fisheries Leaflet No. 3 1971,
C.S.I.R.O.
Australian Journal of Marine and Freshwater
Research 1968 C.S.I.R.O.

241129

Hydrology of S.E. Australian Waters; Bass Strait
and N.S.W. Tuna Fishing Area 1960, C.S.I.R.O.
External water masses of the Tasman and Coral Sea
1959, C.S.I.R.O.
Australian Journal of Marine and Freshwater
Research 1962, C.S.I.R.O.

241130

ANNEX 1

TASMANIAN SUPPLEMENTVESSELS 16M IN LENTH AND OVER

<u>NAME</u>	<u>LENGTH</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>OWNERS NAME AND ADDRESS</u>
ALRED NOBLE	27.1m	WOOD	K.W. TUCKER P.O. BOX 90, ST. HELENS
ALIDA	16.18m	WOOD	D. HIGGS TRIABUNNA TAS.
ALLANWOOD	16m	WOOD	B.J. O'BRIEN 80 KNOCKLOFTY TCE HOBART
ALMA V	17.16m	STEEL	J.R. FLACK C/- P.O. PORT ARTHUR
BARCAROLLE	17.10m	STEEL	S. FUGLSANG LADY BARRON FLINDERS ISLAND
BARRALEE	17.74m	WOOD	M.C. MUIR WOODBIDGE
BEAVER	16.76m	WOOD	T.E. IWITAIAROA BICHENO TAS
BIRNGANA	18.21m	WOOD	G.K. DOYLE 48 CORRANGA DRIVE CHIGWELL
COWRIEBAY	51.8m	STEEL	J.A. HURSEY ALEXANDER TERRACE STANLEY
BERAKSEA	18m	WOOD	L.A. & D.R. McQUEEN 19 TIERS RD SNUG
CARAID	17.37m	WOOD	G.G. AIREY P.O. BOX 417 SANDY BAY TAS

241131

<u>NAME</u>	<u>LENGTH</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>OWNERS NAME AND ADDRESS</u>
CHALLENGER	21m	STEEL	T.F.D.A. G.P.O. BOX 619F HOBART
CLEMENTINE	16.88m	STEEL	T.J. WARDLAW & W.D. OLIVER P.O. BOX 77 SMITHTON TAS
CINDY HARDY	23.77m	WOOD	V.M. HARDY STANLEY
CONCORDE	17.80m	STEEL	LYENNA PTY LTD LADY BARRON FLINDERS ISLAND
DARYL R	19.86m	STEEL	RICHEY FISHING CO P.O. BOX 564 DEVONPORT
DELL RICHEY	24.43m	STEEL	RICHEY FISHING CO P.O. BOX 564 DEVONPORT
DERWENT PRIDE	16.76m	WOOD	D.D. BODSWORTH C/- P.O. STRAHAN
FIANNE	17.91m	STEEL	FIANNE PTY LTD 8 LORD STREET SANDY BAY
FLORENCE MAY ANN	17.68m	STEEL	R. ATKINS MARGATE
FLYING CLOUD	17.07m	WOOD	D. RODMAN ORFORD TAS
GAY GLENN	19.96m	WOOD	G.H. GREGG 48 MAWHERA AVENUE SANDY BAY
DERWENT VENTURE	23.59m	STEEL	DERWENT FISHING CO 30 DAVEY STREET HOBART
JACQUELINE II	16.87m	STEEL	W.M. PIKE 1 PERSEUS STREET ST. HELENS
HELIAN	22.89m	WOOD	A.B. DIVERSTRUST NO.1 GROVE HUON TAS

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3.

<u>NAME</u>	<u>LENGTH</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>OWNERS NAME AND ADDRESS</u>
HUON HUNTER	16.00m	WOOD	P. PITT 711 MAIN ROAD BERRIEDALE
HUON STAR	16.67m	STEEL	M. LEHNER BICHENO TAS
JAMES JONES	17.68m	WOOD	L.A. ROBERTS 1 LYNDEN ROAD TAROONA
JAPARA	18.90m	STEEL	R & G WISBY 36 BEACH ROAD SNUG
JEAN NICHOLLS	17.07m	WOOD	M.N. LANE 44 FAIRFIELD ROAD LINDISFARNE
JULIE BURGESS	19.51m	WOOD	R.J. BURGESS WACKWORTH HOUSE EAST DEVONPORT
KAREN EL	18.23m	WPPD	G. CASHION 34A CIMITIERE STREET LAUNCESTON
KATHLEEN DEL MAR	17.07m	WOOD	G. TURNER DOVER
KERRAWYN	16.15m	WOOD	A.D. & D.E. YOUNG DUNALLEY
KERRISMAR	18.3m	STEEL	C.M. CAMPBELL DUNALLEY TAS
LA GOLONDRINA	17.19m	WOOD	MRS A.E. SHEA BRIDPORT
LEIGH ANN	17.02m	STEEL	W.G. ABBOTT P.O. BOX 102 ST. HELENS
KIELLA	16.03m	STEEL	K.A.J. BARNETT ELIZABETH STREET BRIDPORT
KINGS PRIDE	17.22m	FERRO/CONCRETE	D.W. & S. KING LOT 1 GRAHAM'S ROAD MT. RUMNEY

<u>NAME</u>	<u>LENGTH</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>OWNERS NAME AND ADDRESS</u>
LA LUCY	16.88m	STEEL	J.T. & C. BOCK P.O. BOX 18, ST. HELENS
MARACOOON	21.14m	STEEL	M.F. & A.M. MARRIOTT P.O. BOX 22 DOVER
LOCH LOMOND	19.08m	WOOD	N.F. LADE WLATERS STREET BRIDPORT
MARGARET PEARL	17.68m	WOOD	G. WOOLLEY & G. WHAYMAN C/- P.O. BOX 71 BELLERIVE
MENRAE	18.14m	STEEL	J.D. CLINTON BRIDPORT
MINNAMURRA II	16.69m	STEEL	M. & A.M. PIKE ST. HELENS
MOLLYNDA	16.53m	WOOD	R.H. & V.A. NORTHROPE P.O. BOX 319 LAKES ENTRANCE, VIC
NOEL'S PRIDE	16.27m	WOOD	McKENZIE FISHING CO P/L R.D. 610 BEACONSFIELD TAS
OCEANAIRE	16.7m	STEEL	M.S. & A.M. PIKE P.O. BOX 81 ST. HELENS
OTTER	16.76m	WOOD	N. MURPHY 12 SYME STREET SOUTH HOBART
PANIA	17.07m	WOOD	A.W. BURDON DOVER
PETUNA	19.81m	STEEL	P.G. & U.M. ROCKLIFF BRIDPORT
PETUNA ENDEAVOUR	23.83m	STEEL	P. ROCKLIFFE BRIDPORT TAS
QUO VADIS	17.62m	STEEL	D.J. & J.F. BEHRENS 7 CHURCH STREET BELLERIVE
REEMERE	24.78m	WOOD	T.F. FRIEND 55 BARRACK STREET HOBART

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5.

<u>NAME</u>	<u>LENGTH</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>OWNERS NAME AND ADDRESS</u>
ODIN I	22.75m	STEEL	R. LOWDEN 2 PLUMBERS ROAD SOUTHPORT.
OKATEAH	17.22m	WOOD	R. DAHMS 44 REATTA ROAD TREVALLYN
RONNELL	16.35m	WOOD	TURNER & WOOLLEY 89 GRAVELLY BEACH ROAD BLACKWALL
SAXON PROGRESS	32.16m	STEEL	J. HURSEY ALEXANDER TERRACE STANLEY
SOLUNA	17.88m	STEEL	M.H. BECK P.O. MIDDLETON TAS
ROBYN K	17.65m	TIMBER	G. KRAUSE 200 POMONA ROAD LAUNCESTON
SOUTHLANDER	17.13m	STEEL	F.J. CLARK 18 GUARMBY AVENUE SANDY BAY TAS
STORM BAY	16.15m	WOOD	P. BEVAN SEABREEZE AVENUE PORT SORELL
TACOMA	20.12m	WOOD	W. BAKER 13 SEAVIEW AVENUE TAROONA
TALAROOK	22.89m	WOOD	L.D. DALE DOVER
TASMANIAN ENTERPRISE	24.99m	STEEL	CUTHBERTSTON ENTERPRISES PTY LTD 73 ILLAWARRA ROAD BLACKMANS BAY
BERMARU	30.17m	IRON	S.C. BAKER 8 SHACKLETON STREET WARRANE
TERRALINNA	21.95m	WOOD	K.S. WILLIAMSON 21 FLOREAT CRESCENT TREVALLYN

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6.

<u>NAME</u>	<u>LENGTH</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>OWNERS NAME AND ADDRESS</u>
UNA H	16.03m	WOOD	D.J. & A.M. HARWOOD TRIABUNNA
WALRUS	22.89m	WOOD	NEPTUNE SERVICES P/L 6 GILBERT PLACE BELLERIVE
WAUBS BAY	18.26m	STEEL	A.O., D.F. & M.J. WHITE BICHENO
WESTERLEY	16.28m	WOOD	P.A. MALONE STRAHAN
WESTWIND	16.82m	STEEL	P.B. BAILEY P.O. BOX 37 ST. HELENS
WHODUNNIT	17.04m	WOOD	D.J. SHEA BRIDPORT
WILLIAM FLAIR	17.22m	WOOD	P.N. BUSK STEWARD STREET PORT WELSHPOOL, VIC
YOOHA	20.30m	WOOD	V.C. CARELESS STRATHBLANE

ANNEX 2TASMANIAN SUPPLEMENTPORT AUTHORITY VESSELS

Hobart Marine Board Phone 34 6722
A/H Capt. F.G. Christie 25 3900

No craft is suitable for use at sea.

The following vessels may be used in inshore matters.

"KULANDA" - 120 feet twin screw steel landing barge, speed 8 knots, endurance approx. 6 days, radio equipment, N.F. & VHF fitted 1 x 10 ton cargo handling derrick only but easily be adapted.

"TAWE" - 15.24m single screen steel launch, speed 8 knots, endurance 700 miles. Radio equipment VHF, and SSB. May be fitted with spray booms. Limited to waters under the jurisdiction of the Navigation and Survey Authority of Tasmanian and within the limits of the Port of Hobart.

Port of Launceston Authority Phone 82 1222
A/H Capt. R.E.N. Barber
82 1460

"WYBIA" - 100 ft steel tug, speed 11 knots, range 12 days, fitted with 2 x 400 galls. foam tanks and dual purpose firm monitor. No cargo handling gear. Radar and radio equipped (VHF & H.F.).

"YORKTOWN" - 100 ft steel tug based at Bell Bay; radar equipped and radio (V.H.F. only), no cargo handling gear. Speed 10 1/2 knots, range 15 days.

"POLPERRO" - 112' x 24' general purpose flat top dumb barge, capable of carrying equipment up to about 100 tons.

"NO. 2" - 80' x 25' flat top dumb anchor barge of similar capacity.

"SILTPUMP" - 80' x 25' flat top general purpose dumb barge of similar capacity.

241137

"PRIESTMAN" - 71' x 25' flat top dredging dumb barge of similar capacity.

N.B. Four 155' x 27' Hopper barges (dumb) are located in River Tamar fitted with hoppers but have limited deck space only.

"CARRINGTON" - 52' general purpose vessel, speed 10 knots, range 4 days, fitted with V.H.F. only, no cargo handling gear fitted or spraying equipment but two Portable S.7 Swathomatic Units can be used (see paragraph 7.2.2 for further details).

Devonport - Marine Board Phone 24 1951
A/H Capt. W.J. Stuart 24 1805

"GAWLER" - 99 ft single screw tug, speed 10 knots, endurance approx. 10 days. Radio and radar equipped, H.F. & V.H.F. and R/T fitted. No cargo handling gear, but fitted with fire fighting monitor and 800 gallon foam tank.

Burnie - Marine Board Phone 31 3444
A/H Capt. M.C. Strachan 31 3493

"MYALLA" - 83 ft twin screw steel tug, speed 10 knots, endurance 180 hours. Radio equipped, H.F. & V.H.F. Fitted with fire fighting monitor unit and 600 gallon foam capacity; and additional 800 gallon foam tank.

"MIOWERA" - 46 ft general purpose vessel, speed 9 knots, range 4 days; fitted with VHF only, no cargo handling gear or spray equipment.

"L. 27" - 40' x 20' genral purpose dumb barge.

Port Latta - Savage River Mining Co Pty Ltd Phone 43 4104
A/H Capt. M. Jordan 42 3125

"S.R.M. 35" - 42 ft steel work boat onwed by Savage River Mines, available all times. Speed 3 knots. Radio equipped VHF only. Fitted with 2 x 132 gallon tanks of chemical solvent "BP 1100 X" and 12 ft booms each having spray nozzles and diesel pumps capable of spraying 15 galls/min.

"S.R.M. 22" - Similar type boat but not fitted for combating oil pollution.

241128

State Government Marine Vessels

**Tasmanian Fisheries Development Authority - Fishery
Research Vessels**

Based Hobart

"CHALLENGER" - 70' steel vessel. Equipped for trawling. Speed 11 knots, range 12 days. Radar and R.D.F. satellite navigator. VHF and HF radios. Deep sea trawl winches and boom.

"D'ENTRECASTEAUX" - 50' fibreglass vessel. Speed 20 knots, range 450 miles. Equipped with 14' aluminium runabout and hydraulic winch. Radar and R.D.F., V.H.F. and H.F. radios.

"R.H. SCOTT" - 42' fibreglass patrol vessel. Speed 16 knots, range 325 miles. Equipped with 14' aluminium runabout and hydraulic winch. Radar and RDF, VHF and HF radios.

Based Woodbridge (On loan to Marine Study Centre)

"PENGHANA" - 45' wooden vessel, speed 9 knots, range 700 miles, fitted with 1/4 ton derrick and hydraulic winch.

Contact Tasmanian Fisheries Development Authority,
Hobart Phone 30 9011 (Hobart)

A/H Mr A.J. Harrison 47 9589
Mr M.R. Massie 47 9688

Tasmania Police

Based Hobart

"VIGILANT" - 52' wooden twin screw rescue vessel, speed 12 knots, range 600 miles. Radar and radio equipped, HF & VHF. Fitted with 1 ton derrick.

Contact Police Headquarters, Hobart
Phone 38 1101

A/H Inspector M.E. Massie 44 2852
Sgt. G.H. Galloway 48 6763

Other VesselsBased Hobart

"CAPE BRUNY" - 98' steel tug, speed 10 knots, range 150 miles, fitted with VHF only, no cargo handling gear.

"CAPE FORESTIER" - 95' steel tug, speed 12 knots, range 21 days, fitted with radar and radio VHF and HF. No cargo handling gear.

"YORKSYME" - 89' steel tug, speed 10 knots, range 5 days, VHF and HF fitted.

"CAPE PERON" - 75' steel tug, speed 8 knots, range 21 days, no cargo handling gear or foam fitted, radar and radio equipped (VHF/HF).

"MAYDENA" - 66' steel tug, speed 10 knots, range 6 days, and 1/2 ton derrick.

"BOYER" - 75' steel tug, speed 9 knots, range 10 days, no radio fitted.

"CAPE RAOUL" - 98' steel tug, speed 11 knots, range 14 days, VHF/HF radio fitted.

Four 49' x 28' flat top dumb barges capacity 200 tons (6 tanks) and one 45' x 22' crane barge fitted 30 tons winch - no pumps or spray equipment fitted.

In addition, 14 paper barges (dumb type) ranging in length from 100' to 138' and 250 tons to 500 tons are in use in the River Derwent but are normally engaged in the carriage of paper in the river trade.

Contact Derwent Tug Co Pty Ltd, Hobart
Phone 34 4354

A/H Mr B. Smart 25 1116

Based Burnie

"ROGER ROUGIER" - presently laid up Stanley.

Contact Tasmanian Marine Services, Bass Highway
PO Box 215, Somerset, Tasmania
Phone 004 35 1556

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A/H Mr V. Smith 004 35 1441
Mr B. Smith 002 43 7573

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11.0 APPENDIX

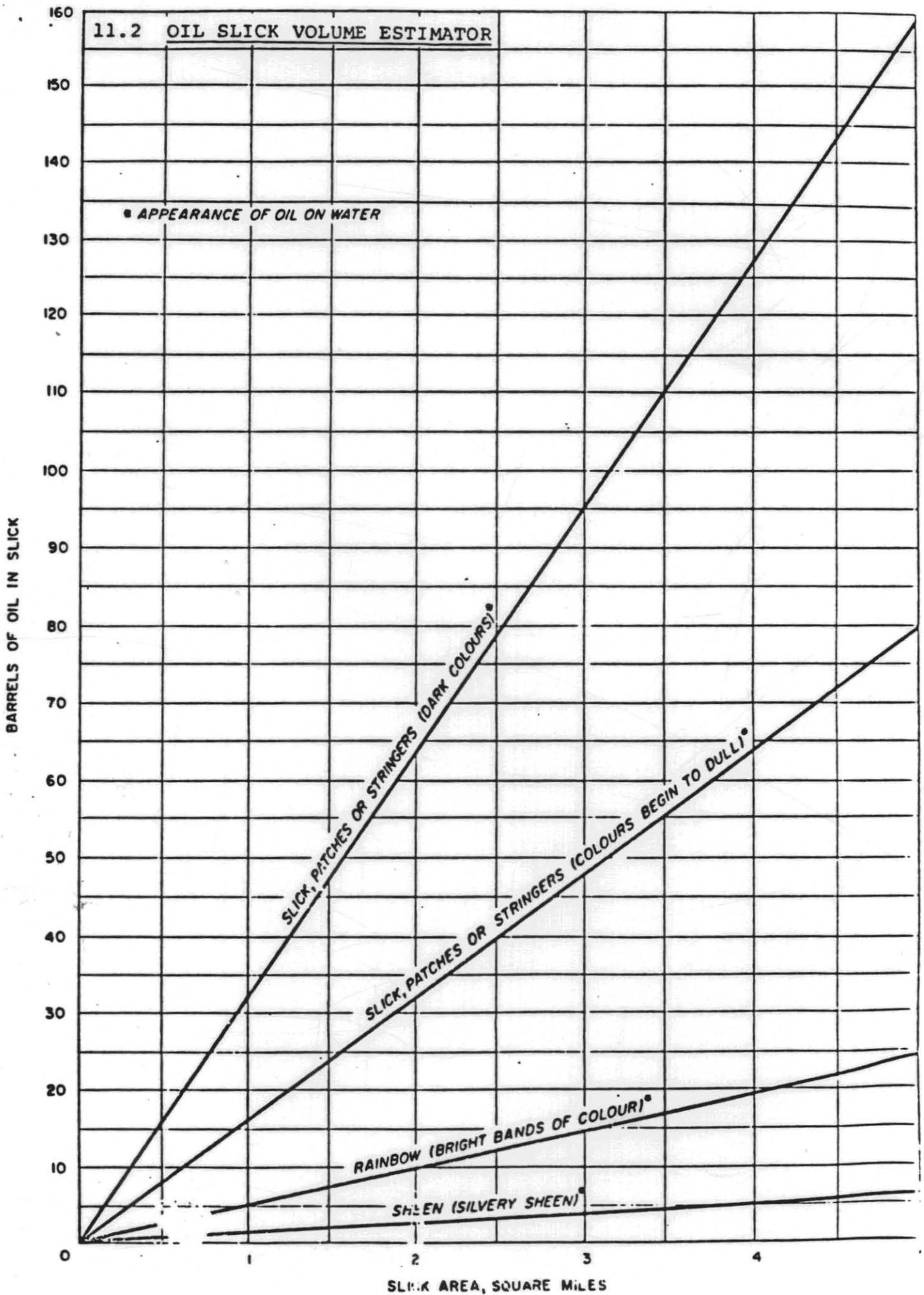
HAK/mh
LR/217/R(83)

11.1 Oil Spill Terminology

General agreement has been reached between U.S. Oil Companies and the Coast Guard on terminology to describe the amount of oil in pollution reports. It is requested that the agreed terminology be used in company correspondence. The terms are as follows:

- | | |
|----------------|---|
| Sheen | - a silvery gloss of oil on the water, a very light amount of oil. |
| Rainbow | - Bright bands of colour visible on the water, enough oil to reflect light. More oil than in a sheen, but less than in a slick. |
| Slick | - heavy concentration of oil with definite brown or black colour, covering the surface of the water. |
| Patches | - circular shapes of oil with definite boundaries. |
| Stringers | - shapes of oil that are longer than wide, frequently, but not necessarily, sinuous in appearance. |
| Light and Dark | - used only to describe the colouring of brown slicks. |

11.2 OIL SLICK VOLUME ESTIMATOR

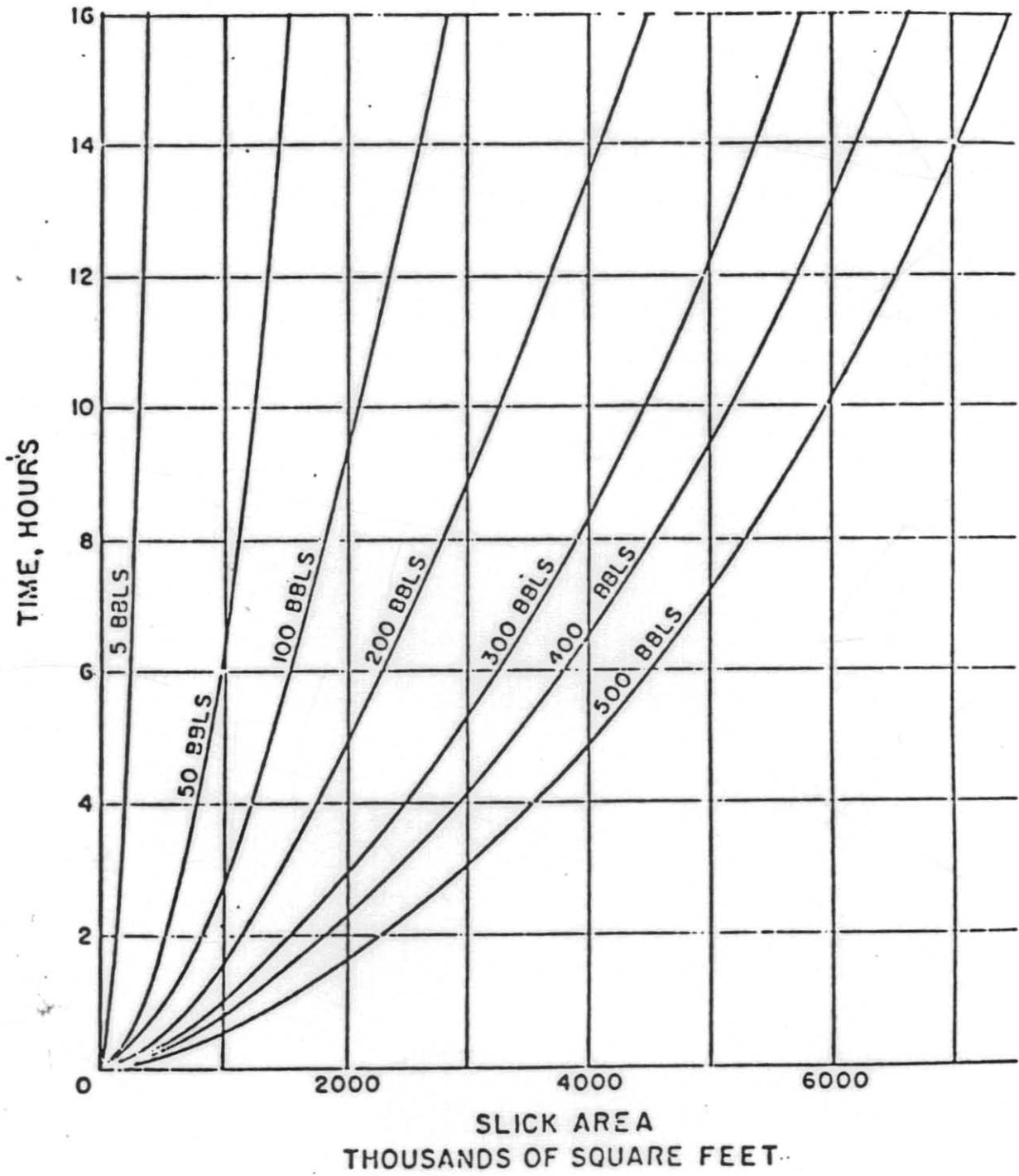


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5 cm

11.3 OIL SLICK SPREAD WITH TIME

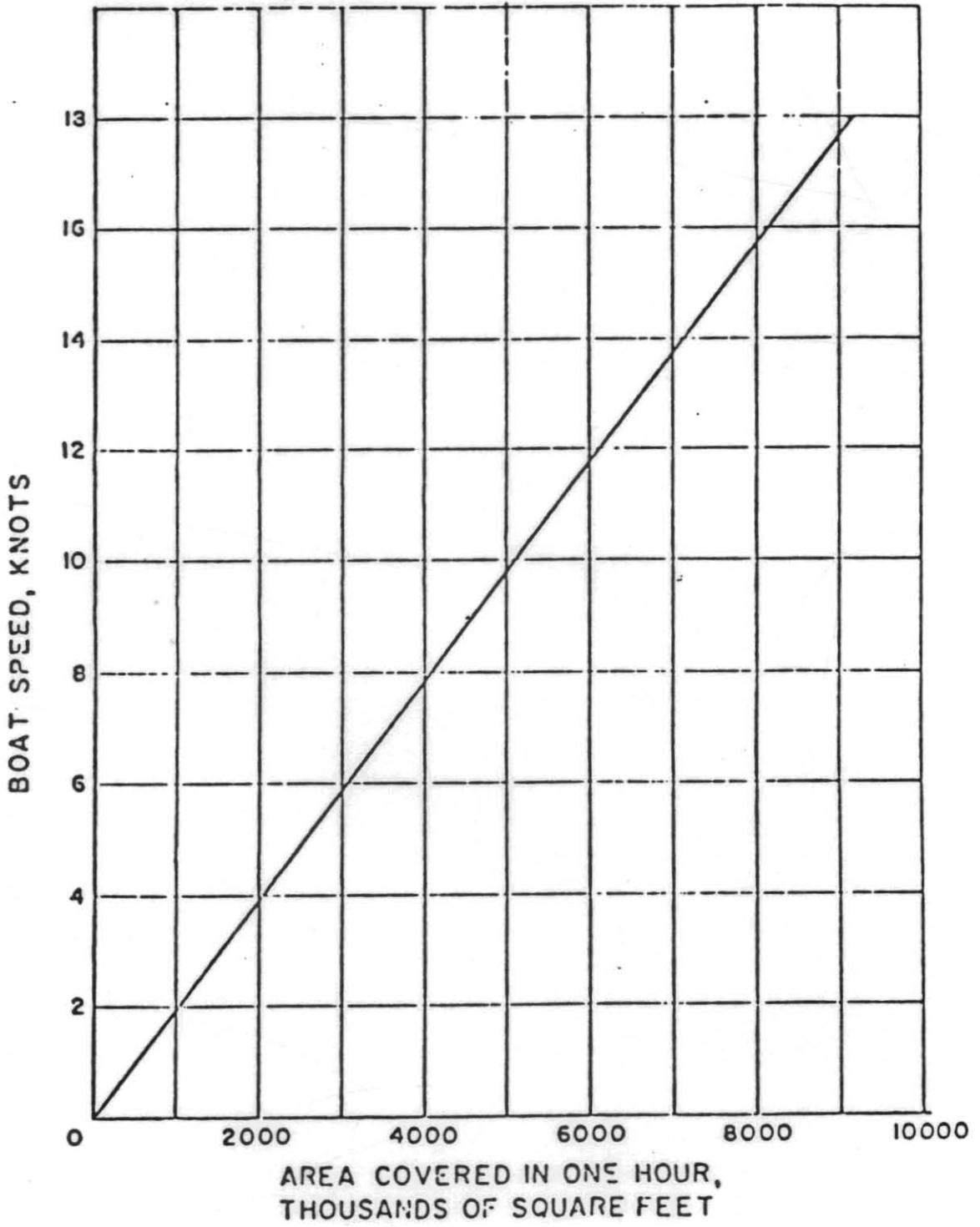
241144



5 cm

11.4 CHEMICAL DISPERSANT COVERAGE WITH BOAT SPRAY RIG

241145



5 cm

11.5 Notice of Company Spill

To be prepared by Drilling Foreman on the rig and information forwarded by radio or facsimile to the Supervisor in Charge or Area Foreman as soon as possible after spill is observed.

Rig _____ Well _____
 Location _____ Date _____
 Time spill occurred _____
 Type of spill _____
 Volume of spill _____
 Cause of spill _____

Rate of leak (if it has not been stopped) _____

Steps taken to control source of spill _____

Estimated size of slick
 Area _____ Thickness _____
 Weather Conditions
 Wind speed _____ Direction _____
 Wave height _____ Direction _____
 Temperature _____
 Direction slick is moving _____ Speed _____
 Support vessels on location _____

Steps taken or planned to disperse slick _____

Results _____

Reported to _____ Date _____ Time _____
 By _____ (Signature) _____

11.6 Notice of Outside Spill

To be prepared by Drilling Foreman on the rig and information forwarded by radio to Supervisor in Charge (Drilling Superintendent, Operations Manager).

Rig _____ Well _____

Location _____ Date _____

Time spill or slick observed _____

Type of spill or slick if known _____

Source if known _____

Estimated size of slick _____

Area _____ Thickness _____

Weather conditions:

Wind speed _____ Direction _____

Wave height _____ Direction _____

Temperature _____

Direction slick is moving _____ Speed _____

Reported to _____ Date _____ Time _____

By _____ (Signature)

11.7 Spill Report

Crude Oil, Gas Well Liquid or Petroleum Products

Date _____

(Use additional sheets if necessary for completeness)

1. Field _____ 2. Location (Lease, tank farm, etc.) _____

3. State _____ 4. Country _____

5. Description of facility from which liquid hydrocarbon loss occurred: _____

6. Type of hydrocarbon spilled: _____

7. Date and time of spill: _____

8. Date and time spill discovered: _____

9. Date and time spill reported to any outside agency: _____

10. Total quantity spilled: _____

11. Quantity recovered: _____

12. Did spill affect any body of water? _____

13. If yes, describe and name (canal, small stream, drainage ditch, river, coastal water, etc.) _____

14. Description of effects of spill (size of any slick formed, effect on fish, wildlife, vegetation, etc.) _____

15. Cause of spill: _____

16. Explain containment and cleanup measures taken (including equipment and material used): _____

17. How successful were these efforts? _____

18. Did representative of outside agencies visit the scene? _____

19. If so, which agencies? _____

20. Did any take an active role in containment and/or clean-up action or planning? _____

21. If so, which agencies? _____

22. Estimated total clean-up cost (excluding value of unrecovered oil):

23. Additional remarks and recommendations (include any pertinent comments on public relations observations): _____

Signed _____
(Supervisor in Charge)