



NRA

NATIONAL RIVERS AUTHORITY - ANGLIAN REGION - INTERNAL MEMO

Rivers Authority Information Centre 100 Accession No. ACTL
--

FAX	URGENT	ROUTINE	COURIER
-----	--------	---------	---------

TO: SEE DISTRIBUTION LIST

FROM: A.HUNTER BLAIR
REGIONAL CO-ORDINATOR
KINGFISHER HOUSE

YOUR FILE REF:

MY FILE REF: DW/JM/E.2.7

DATE: 6/11/1992

SUBJECT: EXERCISE EREBUS - DEBRIEFING

Please find enclosed a copy of the action notes for your information and action as appropriate, following the Exercise Erebus - Debriefing.

A.HUNTER BLAIR
REGIONAL CO-ORDINATOR



DISTRIBUTION LIST

- DR.K.BOND
- R. DAVIDSON
- T.LEWIS
- C.MASON
- M.PEARSON
- B.HARBOTT
- D.KING
- W.FORBES
- D.TESTER
- M.CHILD
- A.HUNTER BLAIR
- R.DAVEY
- A.HARRIS
- D.WRIGHTSON
- M.JESSEP
- N.LOW
- C.FLANDERS
- D.WARREN
- B.EMPSON
- H.LEVERSEDGE
- A.BARNDEN
- D.SAYERS
- A.BOYD
- D.CAULKETT
- LIBRARY

- DIRECTOR OF OPERATIONS
- NATIONAL EMERGENCIES CO-ORDINATOR
- N.R.A. THAMES REGION
- REGIONAL GENERAL MANAGER
- REGIONAL MANAGER ENV.
- ENVIRONMENTAL MANAGER (C)
- ENVIRONMENTAL MANAGER (E)
- ENVIRONMENTAL MANAGER (N)
- REGIONAL DUTY OFFICER
- PUBLIC RELATIONS MANAGER
- REGIONAL CO-ORDINATOR
- SENIOR PLANNER EMERGENCIES)
- EMERGENCIES OFFICER
- TECHNICIAN EMERGENCY PLANNING
- ANALYTICAL SERVICES MANAGER
- PRINCIPAL CHEMIST
- SENIOR ENGINEER - STRATEGY
- PRODUCTIVITY SERVICES MANAGER
- SENIOR ENGINEER FLOOD DEFENCE CAPITAL
- PUBLIC RELATIONS
- REGIONAL FRESHWATER OFFICER
- REGIONAL MARINE OFFICER
- N.R.A. SEVERN TRENT REGION
- CELL/NET ANALYST
- BRISTOL

NRA ANGLIAN REGION
EXERCISE EREBUS WASHUP REPORT

1. Introduction

Exercise Erebus took place on Monday 7th September 1992 commencing at 0700hrs with a Road Traffic accident, involving a bulk chemical tanker carrying Hydrochloric Acid. This had been programmed into the exercise as a false alarm.

The main part of the exercise simulated multiple fish mortalities across the Region, caused by a goods train departing Parkeston Quay, Harwich on Sunday night, travelling across the region and departing at Newark on Trent. En route a number of Chemical Drums containing Endosulphan (UN2995) were lost overboard. In addition a Bulk container split, leaking the same chemical onto the railway line and into various watercourses which resulted in the fish mortalities.

1.1 The stated aims of the exercise were as follows:-

- a) To test the adequacy of plans and procedures where a number of pollution incidents occur over a widespread area in a very short time scale.
- b) To test the logistics of dealing with widespread pollution incidents.
- c) To exercise relationships with other services.
- d) To test communications both within and without the N.R.A.
- e) To determine areas where follow up action is necessary.

2. Summary and Responsibilities

2.1 Useful lessons were learned by those taking part and the exercise aims were achieved.

2.2 The following key points are recommended for action:-

ITEM	ACTION
1	Interchangeability of equipment between Regions, Areas and Districts. It is essential that Aeration equipment etc. is compatible. During the Crowland incident it was found that hoses from one district would not fit connectors from another, although they were from the same make of Aerators. Em.Planning Head Office
2	Increase Training and Authorise Additional grades who can speak to the media especially at the site of incidents. This will allow trained staff to explain what they are doing and why without the need to either refer the press to a Senior Officer or the Public Relations Bureau. Management Team
3	When the Regional Control Room is opened, notification should be sent to all affected participants along with telephone and fax numbers giving a centralised point of contact. Procedures
4	Communications between staff in the various Area and Districts control rooms and the field workers needs to be improved. This could be done by additional use of the radio system, but also by making available more portable cell phones and issuing Alpha/Numeric Pagers for certain staff. Management Team & D.Caulkett

ITEM

ACTION

5	Staff to use the National Grid Reference system when giving incident locations when ever possible.	All
6	Incoming calls to offices to be passed direct to the most appropriate extension instead of to a general number.	Office Managers
7	Regional and Area Control Room Managers to be clearly identified to the control room staff.	RDO's
8	When an Area Control Room is opened the Regional Duty Officer is to be informed.	Procedures
9	When a region wide incident occurs, Chief Officers are to be informed immediately.	Procedures
10	When an Area Information Liaison Officer is appointed. His function is to inform the Regional Comms Centre or Regional Control Room (if open) of developments on an hourly basis routinely or immediately where circumstances dictate.	Procedures
11	It is essential that chemicals are clearly identified using the UN-Number and spell the chemical using the 'NATO' PHONETIC ALPHABET where possible.	All
12	It is desirable that the NRA and Fire Brigades are using the same version of the Harwell Chemdata and that the information is passed in the same format.	
13	The purpose of Operation Minimise to be fully explained to all staff. When it is implemented or cancelled it must be announced to all staff.	Regional Managers
14	Review the implementation of operation minimise. When an incident is developing the first indication is an increase in communications traffic at Area, District and RCC so overloading the system and increasing the time taken to deal with calls.	Procedures
15	Regional Duty Officer and RCR to be informed of requests for assistance from Area or District staff to deal with incidents.	Reg.Management
16	Additional hardware to be available in the Regional Control Room ie.Word Processor, Typewriter, Photocopier etc.	Office Manager
17	Head Office to be informed of incidents by telephone at the earliest opportunity and then confirmed by fax at a later time, thus ensuring Dir.Ops staff are aware of any serious incidents.	Procedures
18	All staff must answer telephones by giving their name. This is basic customer care.	All

ITEM

ACTION

19	During a large incident it could be beneficial to use a centralised Press Agency that could collate Press Statements from the affected parties and therefore issue an agreed and common statement.	To be considered by PR
20	All press statements issued during an incident should be copied to the Area control rooms, Regional Comms Centre, and RCR for information.	PR
21	Should the Regional Control Room be located so far away from the Regional Comms Centre during an incident? Communications via the radio system could be essential.	New radio system will address
22	It was identified during the exercise that the need for a more generalised call down list of Duty Officers is required. When the Regional Duty Officer, Chief Officer and Area Pollution Officers are not contactable.	Discussed at Management Team 26/10/92, no changes necessary
23	Fixed mobile radio sets in control rooms have been found to be disruptive to staff when being used. The fitting of a sound proof hood and a telephone type handset would reduce the noise levels considerably.	Systems
24	Faxes transfer to be available between RCC & RCR.	LAN will cater

3. General Comments

- 3.1 It is accepted that during any exercise, Exercise Syndrome plays a part with staff ie. 'It is only an Exercise therefore it doesn't matter' or 'It would never happen'. This is the most difficult problem to overcome, in trying to plan any exercise. The only way is to try and modify real occurrences. With Exercise Erebus a train leaves Parkeston Quay, Harwich twice a day and travels across the region carrying a mixed load, including Dangerous Chemicals.
- 3.2 The telephone numbers for outside participating organisations caused a few problems with them being engaged. This unfortunately was outside our control as these organisations issued the telephone numbers. To be borne in mind for future exercises.
- 3.3 The Regional Control Cupboard currently located in the boardroom at Kingfisher House needs to be relocated and increased in size, so that it will be more readily accessible and be able to store more equipment including Regional Procedures and Manuals, which can then be more easily updated.
- 3.4 Staff seconded to the various control rooms during an incident need to be kept fully briefed of the situation. This could be done by the Control Room Manager as the situation changes.
- 3.5 It is essential that as the situation changes within an area, the Regional Control Room and Regional Comms Centre are kept informed.
- 3.6 Had the incident developed into a cross regional pollution, coordination would pass to Bristol and even Central Government if the implications were serious enough.
- 3.7 Anglian Water or other Water Supply Companies must be notified of any Pollution Incident which could affect their intakes or aquifers in accordance with Procedures.

4. Conclusions

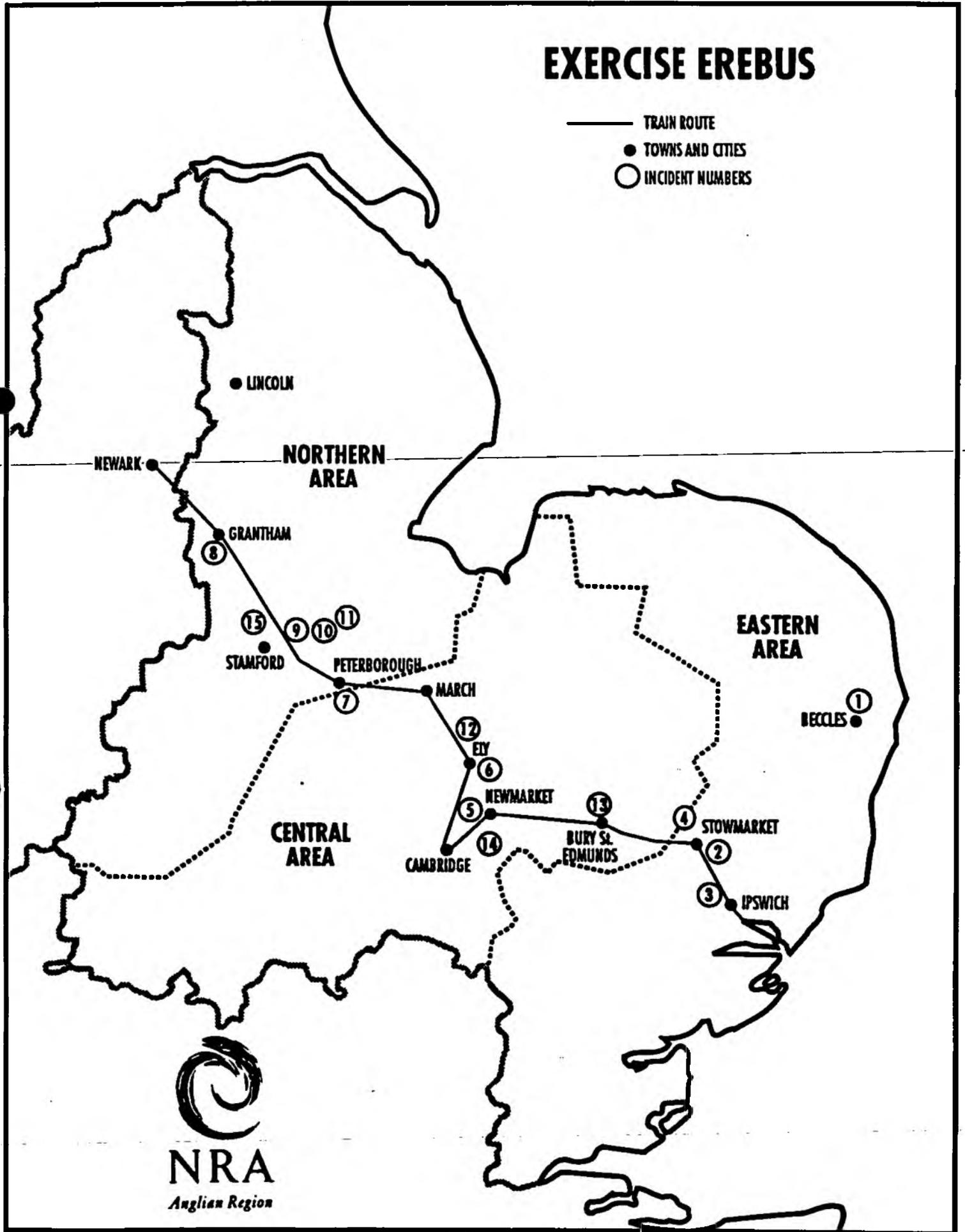
The exercise was effective in testing the response capability of the Area Environmental teams, to deal with a region wide emergency being co-ordinated from the Regional Headquarters.

This was the first time that Area and Regional Control Rooms were opened to deal with an Environmental Emergency and as such proved to be a very effective exercise. Many lessons were learned, relationships have been enhanced and procedures will be amended where necessary.

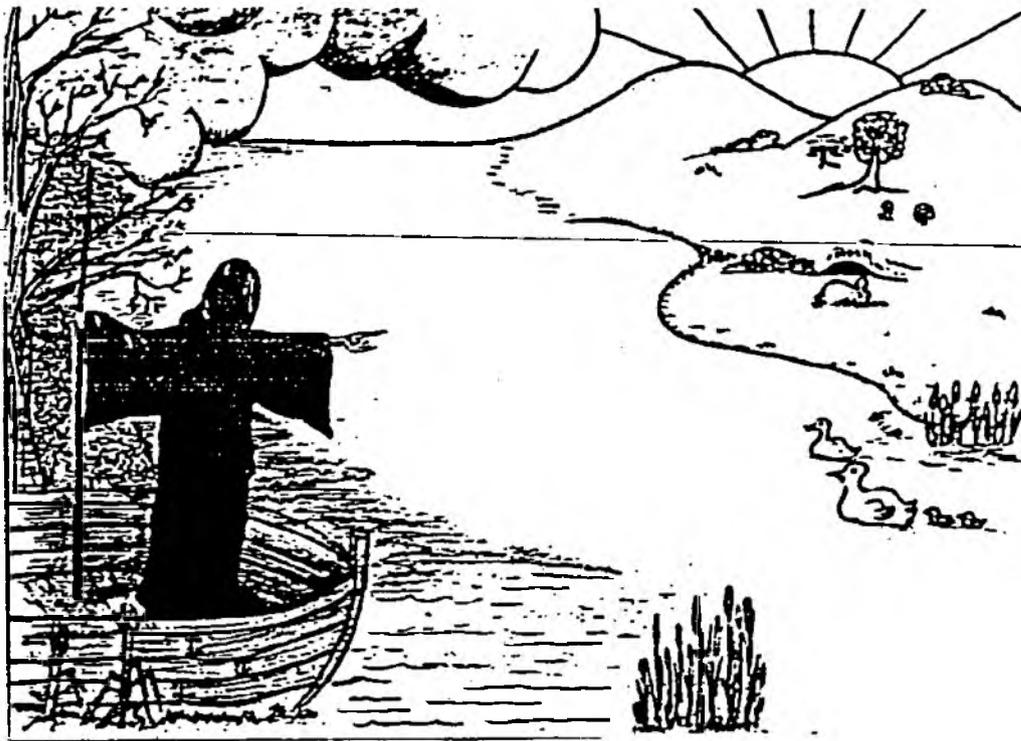
D.WRIGHTSON
TECHNICIAN EMERGENCY PLANNING

EXERCISE EREBUS

- TRAIN ROUTE
- TOWNS AND CITIES
- INCIDENT NUMBERS



EXERCISE EREBUS



EXERCISE EREBUS

CONTENTS

Section	Page No.
(i) Administration	
Distribution list	i.1
Planning programme	1.2
1. General information	
Introduction	1.1
Planning Team	1.2
Erebus	1.3
2. Exercise Aims	2.1
<hr/>	
3. Ground Rules	3.1
4. Exercise Scenario	
Scenario	4.1
Data on Endosulphan	4.2
Involvement	4.3
Key Incidents	4.4
Timetable (NRA Events)	4.6
Timetable (External Organisations)	4.7
5. Incidents	
Caller Identity	5.1
Incidents in order	5.2 - 5.32
6. Directory	
Exercise Directory	6.1
7. Press	
Simulated Press Involvement	7.1
Videoing	7.2
8. Staff Schedules	
Directing staff schedule	8.1
Observers schedule	8.2

(contd.)

EXERCISE EREBUS

9. Observers	
Observers Instructions	9.1 - 9.18
10. NRA Regional Laboratory	
Instructions to staff	10.1
11. Directives	
Directive 1.	11.1
Directive 2.	11.2
Directive 3.	11.3
12. Appendices	
Appendix A. Correspondance	A.1 - A.2
Appendix B. Endosulphan Data	B.1 - B.5
Appendix C. Average river flows	C.1
Appendix D. British Rail	D.1

EXERCISE EREBUS
DISTRIBUTION LIST

J.Flett
Cambridgeshire Constabulary
Hinchingsbrooke Park
Huntingdon
PE18 8NP

D.O.P.Sharpe
Hinchingsbrooke Cottage
Brampton Road
Huntingdon
PE18 8NA

Mr.C.Williams
P.C.P.O
Cambridgeshire County Council
Shire Hall
Castle Hill
Cambs
CB3 0AP

Sgt.E.Murfin
Lincolnshire Police
Police Headquarters
P.O.Box-999
Lincoln
LN5 8EL

S.O.I.Milnes
Fire Brigade Headquarters
South Park Avenue
Lincoln
LN5 8EL

Mr.T.Auld
Fire Service Headquarters
Colchester Road
Ipswich
IP4 4SS

Mr.C.Quayle
Suffolk County Council
St.Helen Court
County Hall
Ipswich
IP4 2JS

N.Kirby
Leicester Fire & Rescue
Anstey Frith
Leicester Road
Glenfield
Leicester
LE3 8HD

C.F.C.O.S.Tucker
Leicestershire Fire & Rescue
Anstey Frith
Leicester Road
Glenfield
Leicester
LE3 8HD

Mr.Adcock
E.P.O.
Leicester County Council
Glenfield
Leicester Road
Leicester
LE3 8HD

Mr.A.Skinner
Police Headquarters
Martlesham Heath
Ipswich
IP5 7QS

Mr.P.Abbot
British Rail
CP 21
Macmillan House
Paddington Station
London
W2 1FT

Mr.P.Hammond
Cambridge Water Company
41 Rustat Road
Cambridge
CB1 3QS

Mr.P.Laws
Anglian Water Authority
Chivers Road
Histon
Cambs

Mr.G.Little
National Rivers Authority
Severn Trent Region
Sapphire East
550 Streetsbrook Road
Solihull
B91 1QT

D.Beaumont
District E.P.O.
Suffolk Coastal District Council
Marines Street
Lowestoft
Suffolk
NR32 1JT

NRA - ANGLIAN REGION - KINGFISHER HOUSE

M.JESSEP

EXERCISE EREBUS

PLANNING PROGRAMME

1. Finalise exercise detail and produce documentation 24/06/92
2. Interorganisation meetings As required
3. Final planning meeting 08/07/92
4. Issue amended documentation As required
5. Issue preliminarily information 10/08/92
6. Exercise date 07/09/92
7. Return log sheets to NRA by 21/09/92
8. Debrief 01/10/92

	June	July	August	September	October
1. Finalise Details	████████	24/06/92			
2. Meetings	TBA				
3. Final Planning Meeting	████████	08/07/92			
4. Amended Documentation	TBA				
5. Issue Preliminary Docs.	████████████████████		10/08/92		
6. Exercise Date	████████████████████			07/09/92	
7. Return Log Sheets	████████████████████				21/09/92
8. Washup	████████████████████				01/10/92

EXERCISE EREBUS

INTRODUCTION

Exercise Erebus is a pollution exercise which will affect all areas of NRA Anglian Region.

The source of the pollution will be a British Rail freight train, travelling on a routine regular service (twice per day) from Harwich docks, leaving Anglian Region near to Newark-on-Trent.

The pollutant will be Endosulphan. This material is the active ingredient of many pesticides. It is sold under the trade name, Thiodan

Small quantities in watercourses will have a severe impact on invertebrates and fish. The impact will be greatest close to the point of entry but sufficient pollutant will be spilled to affect large stretches of watercourses and groundwater.

The nature of the pollutant will mean that surface water abstraction plants, for public water supply will be affected, as will users of water for irrigation purposes.

The BR train will enter NRA Severn-Trent Region at Newark-on-Trent and will continue to spill pollutant allowing Severn-Trent Region to join in with their own related exercise.

EXERCISE EREBUS

PLANNING TEAM

The regional planning team are:-

Andrew Hunter-Blair	NRA Anglian Regional Co-ordinator
Roy Davey	— — Senior Planner (Emergencies)
Tony Harris	— — Comms. & Emergencies Officer
Dr. M. Jessep	— — Analytical Services Manager

For other organisations producing scenarios for incidents:

Phillip Laws	Anglian Water Services Principal Engineer
Terry Auld	Suffolk Fire Service
Derek Beaumont	Suffolk DC Emergency Planning
Paul Abbott	British Rail Transport Officer
George Little	NRA Severn-Trent Comms. & Emergencies Officer
Hoechst Chemicals	

Others providing support and advice for Exercise Erebus:-

Dist. list except the above

EXERCISE EREBUS
GENERAL INFORMATION

1. EREBUS (Eh-reh-bus)

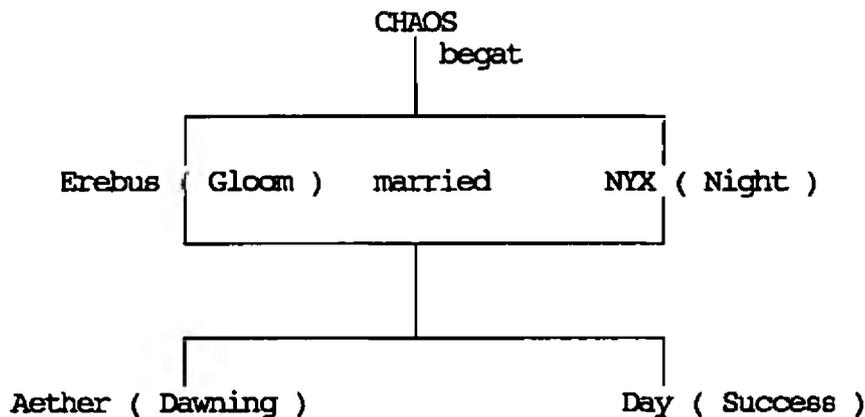
1. In early Greek cosmology, CHAOS was the primeval emptiness of the universe before things became ordered.

2. The offspring of CHAOS were EREBUS (darkness) and NYX (night). The two offspring married and their union begat AETHER (Bright Upper Air) and DAY.

3. The modern meaning of the word is derived from OVID, who saw CHAOS as the original disordered and formless mass, from which the maker of the cosmos produced the ordered universe.

4. EREBUS took on the meaning of a word to describe the gloomy region through which the dead passed on their way to HADES.

5. In major incidents/exercises, the same phases are usually evident.



EXERCISE EREBUS

EXERCISE EREBUS AIMS

The aims of the exercise are:-

To test the adequacy of plans and procedures where a number of pollution incidents occur over a widespread area in a very short time scale.

To resolve the logistics of dealing with widespread pollution incidents.

To exercise relationships with other services.

To test communications both within and without the NRA.

To determine areas where follow up action is necessary.

EXERCISE EREBUS
EXERCISE RULES

Exercise Erebus Ground Rules

1. Exercise Erebus is designed to test response to a region wide incident.
2. The exercise will take place during September 1992.
3. All NRA Anglian employees drawn into the exercise will be expected to respond fully within the constraints of these rules. This exercise will take precedence over all other work except for real emergencies.
4. Log sheets are supplied with this documentation and must be completed and returned within 10 days of the exercise by all involved in the exercise. Copy the enclosed log sheet as required.
5. The exercise allows for the investigation of incidents on site, the deployment of labour and equipment at sites specifically indicated by Umpires. Deployment of plant will not take place otherwise.
6. Umpires will be located at the site of certain incidents, to be disclosed during the exercise.
7. Where plant or other resources would have been deployed this will be included on the log sheets provided, for each instance of deployment.
8. Where shift working would be necessary, details of rosters, staff involved and transport arrangements will be included on the log sheets.
9. A number of external agencies will be actively involved in the exercise. An Exercise Directory will be issued at the start of the exercise, giving contact details for these agencies.
10. Where contact would be made with agencies not listed in the exercise directory a timed log entry must be made to that effect. Actual communication must NOT take place.
11. NRA National Head Office are fully aware of the exercise and normal emergency liaison arrangements will apply.
12. The Exercise Director is Andrew Hunter-Blair (Regional Co-ordinator). During the exercise he will be supported by strategically located umpires who will identify themselves on the day. Queries may be addressed to Umpires who in turn may refer to the Exercise Director who's decision is final.
13. In the event of a real emergency, the exercise will be cancelled by the Exercise Director.
14. Most Important - All messages relayed by any means must be prefaced and ended with the statement:

"THIS MESSAGE IS FOR EXERCISE EREBUS PURPOSES ONLY"
15. An exercise washup will be held as soon as practical following the exercise.

EXERCISE EREBUS

EXERCISE SCENARIO

At 2200 Hrs on the night of 06/09/92 a British Rail freight train carrying a mixed load left Harwich dock. Part of the load was a consignment for Hoechst (HER-K-ST) Agrochemicals consisting of Endosulphan in bulk containers and 250 litre drums, the material was packed under its trade name of " Thiodan " .

Unbeknown to all concerned, damage had occurred to one of the bulk containers which caused it to leak intermittently when under stress. This leakage had affected the restraints securing the 250 litre drums, leaving some free to move.

The train took three hours to traverse the Anglian Region during which time some of the bulk Thiodan and a number of drums were lost from the train.

The route of the train follows and crosses many watercourses with much of the lost Thiodan entering these watercourses with serious consequences.

In 3 isolated localities drums fell from the train and were left either in watercourses or on the ground close to the railway. In all cases these drums were damaged and leaking.

In addition to the main scenario, 2 further incidents will occur during Exercise Erebus.

The first of these incidents will be a road traffic accident involving a tanker apparently filled with Hydrochloric acid. Some time into this incident it will be discovered that the tanker was only carrying water.

The second incident involves the pollution of the River Welland by farm chemicals following vandalism of a trailer. The intention is to actually deploy staff and equipment at this incident and to carry out a simulated fish rescue.

*

EXERCISE EREBUS
DATA ON ENDOSULPHAN

1. Introduction

Endosulphan is the active ingredient of many pesticides and herbicides. It is in common use in many third world countries, due to its effectiveness in the eradication of Tsetse fly and other endemic pests.

In the United Kingdom, Endosulphan is less common but is used under the trade name, "Thiodan".

2. Appearance

As Thiodan, Endosulphan is dissolved in an organic solvent which may be oil based. In contact with water this formulation will form a thin emulsion, white in colour with a strong, typical pesticide smell. This emulsion will both spread across water surfaces and disperse throughout a body of water, i.e. affecting the whole width and depth of a watercourse.

3. Effects of Endosulphan

Endosulphan is toxic, particularly so to fish and many aquatic invertebrates.

At very low concentrations, 0.002 mg/kg contact with fish is fatal.

Effects are much less severe on mammals, however in high concentrations subjects will feel unwell and may suffer vomiting and other symptoms.

In humans only extremely high doses of concentrated Endosulphan are likely to be fatal.

4. Long term effects on Watercourses

Due to its extreme toxicity to fish, effects are noticeable over large stretches of water.

Endosulphan will eventually dissipate in large volumes of water below its lethal threshold.

Endosulphan will move through a watercourse as a slug gradually dissipating as it travels. The time taken to drop below lethal levels will be directly related to:

$$\frac{\text{Volume of Endosulphan}}{\text{Volume of Watercourse} \times \text{Rate of flow of Watercourse}}$$

5. Transportation

Endosulphan is normally transported in bulk. The normal method of transportation is by road, however rail transport is used. The preparation is normally a 35% concentration of Endosulphan in organic solvents and in this form it is readily soluble in water.

The containers used are commonly 250 litre drums, however bulk containers are used if required, i.e. 20 tons.

6. Selection for Exercise purposes

The effects of Endosulphan on watercourses at very low concentrations make this material an ideal choice for this exercise.

EXERCISE EREBUS

INVOLVEMENT

NRA

District, Area and Regional staff will be involved in the exercise, the scenario is such that Severn-Trent Region and National Head Office will have the opportunity to participate.

It is intended to physically deploy staff to carry out fish rescue and implement other emergency actions e.g. deployment of aeration equipment at defined sites only. The sites will be identified in the individual incident documentation.

EXTERNAL ORGANISATIONS

All external organisations will be involved in the communications aspects of the exercise i.e. acting in their normal function as reporting centres.

External organisations will determine their own level of involvement with regard to deployment of staff and resources.

All external organisations will assist by acting as initiators of calls.

Anglian Water Services and Cambridge Water Company are to be closely involved with selected incidents.

INTER-REGION

Severn-Trent NRA will provide their own scenarios for incidents in line with the exercise aims.

Yorkshire NRA are providing back up support in the form of samples. These samples will be analysed in the Anglian NRA Regional Laboratory at Peterborough.

BRITISH RAIL

British Rail will produce a fictitious train manifest and provide timings for the freight train at incident sites.

EXERCISE EREBUS

KEY INCIDENTS IN EXERCISE EREBUS

Exercise Erebus will cause pollution to a number of watercourses and of the ground across NRA Anglian and Severn Trent Regions. The following is a list of the main incidents in Anglian Region in sequence.

1. Chemical tanker crash at Beccles.

Suffolk Fire Service will report that a chemical tanker apparently carrying Hydrochloric acid has overturned on the A146 road bridge above the River Waveney.

One and a half hours later the tanker will be found to be filled with water only.

An Observer will be on site.

2. Dead fish in the River Gipping near Combs Ford.

Two reports will be received reporting dead fish. Downstream of the location is the intake for the Sproughton surface water abstraction plant.

An Observer will be on site.

3. Dead fish in the River Gipping at Gt. Blakenham. A continuation of 2 above. An Observer will be on site.

4. Contamination of road at Elmswell

Drums will fall from the train onto the A1085 road below the rail bridge..

5. Dead fish in River Cam at Fen Ditton.

Two reports of dead fish at Fen Ditton.

An Observer will be on site at Fen Ditton.

6. Dead Fish in River Ouse at Ely.

Two reports of dead fish and a smell from the River Ouse at Ely quay.

An Observer will be on site.

7. Dead fish in the River Nene at Peterborough.

Report of dead fish at the town bridge in Peterborough, from Peterborough Police, downstream of the railway bridge.

An Observer will be on site at the river Embankment.

EXERCISE EREBUS

8. Dead fish at Grantham

Report of dead fish in the River Witham at Grantham.
An Observer will be on site.

9. Dead fish at Greatford

Reports of dead fish in the River West Glen at Greatford.

Further report of dead fish in the West Glen River at Banthorpe Lodge.
An Observer will be on site at Greatford sluice.

10. Dead fish at West Deeping.

Report of dead fish in the River Welland at West Deeping.
An Observer will be on site.

11. Deployment of aeration equipment in the River Welland and fish rescue

*** Caused by separate pollution incident ***

Aeration equipment will be deployed and any other necessary actions will be carried out on the River Welland at the Crowland bridge, Grid Ref. TF 229106.

Observers will be on site.

12. Dead fish in the River Delph at Grid Ref. TL 496892.

13. Dead fish at Fornham All Saints.

Report of dead fish in the River Lark at Fornham All Saints.
An Observer on site.

14. Drum leaking at Westley Pumping Station.

CWC scenario
CWC umpire on site.

15. Drum in the river West Glen at Essendine.

Leicester CC scenario

EXERCISE EREBUS
EXERCISE EREBUS TIMETABLE OF NRA EVENTS

*****All Times Are BST***** *

Time	Incident	Initiated	Informed	Observer
0700	Incident 1. Tanker crash @ Beccles	Suffolk F&R.	NRA	Yes
0730	Incident 2. Dead fish @ Combs Ford	Mr.Smith Mr.Davis	NRA Police	Yes
0740	Incident 3. Dead fish @ Gt. Blakenham	Mr.Jones	NRA	Yes
0743	Incident 4. Drum(s) on road @ Elmswell	Suffolk F&R	NRA	Yes
0800	Incident 5. Dead fish @ Fen Ditton Fen Ditton	Mr.Briggs Mr.Ellis	NRA NRA	No Yes
0840	Incident 6. Dead fish @ Ely.	Mr.Youngman Mr.Bryant	NRA Police	No Yes
0905	Incident 7. Dead fish @ Peterborough, Town Centre	Police Mr.Clarke	NRA NRA	Yes Yes
0920	Incident 8. Dead fish @ Grantham	Mr.Mills	NRA	Yes
0925	Incident 9. Dead fish @ Greatford.	Mr.Sale Police	NRA	Yes
0945	Incident 10. Dead fish @ West Deeping .	Mrs. Graham	NRA	Yes
1000	Incident 11. Deploy equipment on River Welland.	Mr.Tip		Yes
1015	Incident 12. Dead fish in River Delph.	Mrs. Gordon	NRA	Yes
1020	Incident 13. Dead fish @ Fornham All Saints.	Mrs. Hastings Bury Police	NRA Police	Yes
1130	BR Phone Call.	BR	NRA	No

EXERCISE EREBUS
EXERCISE EREBUS TIMETABLE OF EVENTS, EXTERNAL ORGANISATIONS

*****All Times Are BST*****

Time	Incident	Initiated	Informed	Observer
0630	Incident 14. Drum at Westley Pumping Station	Cambs. Police	CWC	Yes
0930	Incident 15. Drum in the River West Glen at Essendine.	Leics. Police	NRA	No

EXERCISE EREBUSCaller Identity

This list identifies incident initiators and their contact numbers.

Incident	Character Identity	Initiator Identity	Initiator Contact Number
1	Suffolk F & R	Suffolk F & R	0473-725363
2	Mr. Smith	R. Davey	0850-603752
	Mr. Davis	A. Harris	0850-603753
3	Mr. Jones	R. Davey	0850-603752
4	Suffolk F & R	Suffolk F & R	0473-725363
5	Mr. Briggs	J. Flett	0480-456111 ext.2236
	Mr. Ellis	R. Davey	0850-603752
6	Mr. Youngman	R. Davey	0850-603752
	Mr. Bryant	J.Flett	0480-456111 ext.2236
7	P'Boro Police	J.Flett	0480-456111 ext.2236
	Mr. Clarke	A. Harris	0850-603753
8	Mr. Mills	E. Murfin	0522-558137
9	Mr. Sale	E. Murfin	0522-558137
	Stamford Police	E. Murfin	0522-558137
10	Mrs. Graham	A. Wallis	0733-371811 ext.4445
11	Mr. Tip	E. Murfin	0522-558137
12	Mrs. Gordon	A. Wallis	0733-371811 ext.4445
13	Mrs. Hastings	A. Wallis	0733-371811 ext.4445
	Bury St. Edmunds Police	A. Skinner	0473-613273
14	Cambs. Police	J. Flett	0480-456111 ext.2236
15	Leics. Police	Leics. Police	0533-482421

EXERCISE EREBUS
INCIDENT 1

Observer	A.Harris
----------	----------

A chemical road tanker crash on the A146 over the River Waveney at Beccles.
An Observer will be on site with instructions, see message 1.

Call Information

- | |
|--|
| 1. Call made to NRA by Suffolk Fire Service, reporting that a chemical tanker has crashed and is leaking its load, according to the UN code, Hydrochloric Acid. |
| 2. One hour after call 1. Call to NRA from Suffolk Fire Service, during recovery operations a section of the tank has split and an estimated 5,500 litres of Hydrochloric Acid has been lost to the river. |
| 3. Thirty minutes after call 2. Suffolk Fire Service inform NRA that the hauliers have confirmed that the tanker was loaded with water for a hydraulic test and no acid has been spilled. |

Timing

Call	Time	From	To	NRA Action
1	07:00	Suffolk Fire Service	NRA	Inform N.Essex Duty Pollution Officer
2	08:00	— —	NRA	— —
3	08:30	— —	NRA	— —

Contact Numbers

Suffolk Fire Service	0473-725363
NRA Regional Comms Centre	0733-232094

Incident Observer will be located at Grid.ref.421913
The Observer will follow the on site investigating Officer, if necessary.

**** All Messages Must Start And End With " For Exercise Erebus Purposes Only "****

EXERCISE EREBUS



EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 1. Beccles

O.S. MAP: 134

1:50,000

GRID REF: TM 421914



EXERCISE EREBUS
INCIDENT 2

Observer	A. Wright
----------	-----------

Dead fish reported in the river Gipping near Combs Ford.
An Observer will be on site.

Call Information

Call No.	Detail
1	Telephone call from Mr. Smith to NRA reporting 20 dead fish near Combs Ford.
2	Telephone call from Mr. Davis to NRA reporting Hundreds of dead fish near Combs Ford

Timing

Call	Time	From	To	NRA Action
1	07:30	Mr. Smith	NRA RCC	Contact N. Essex Pollution Duty Officer
2	07:45	Mr. Davis	NRA RCC	————— —————

Contact Numbers

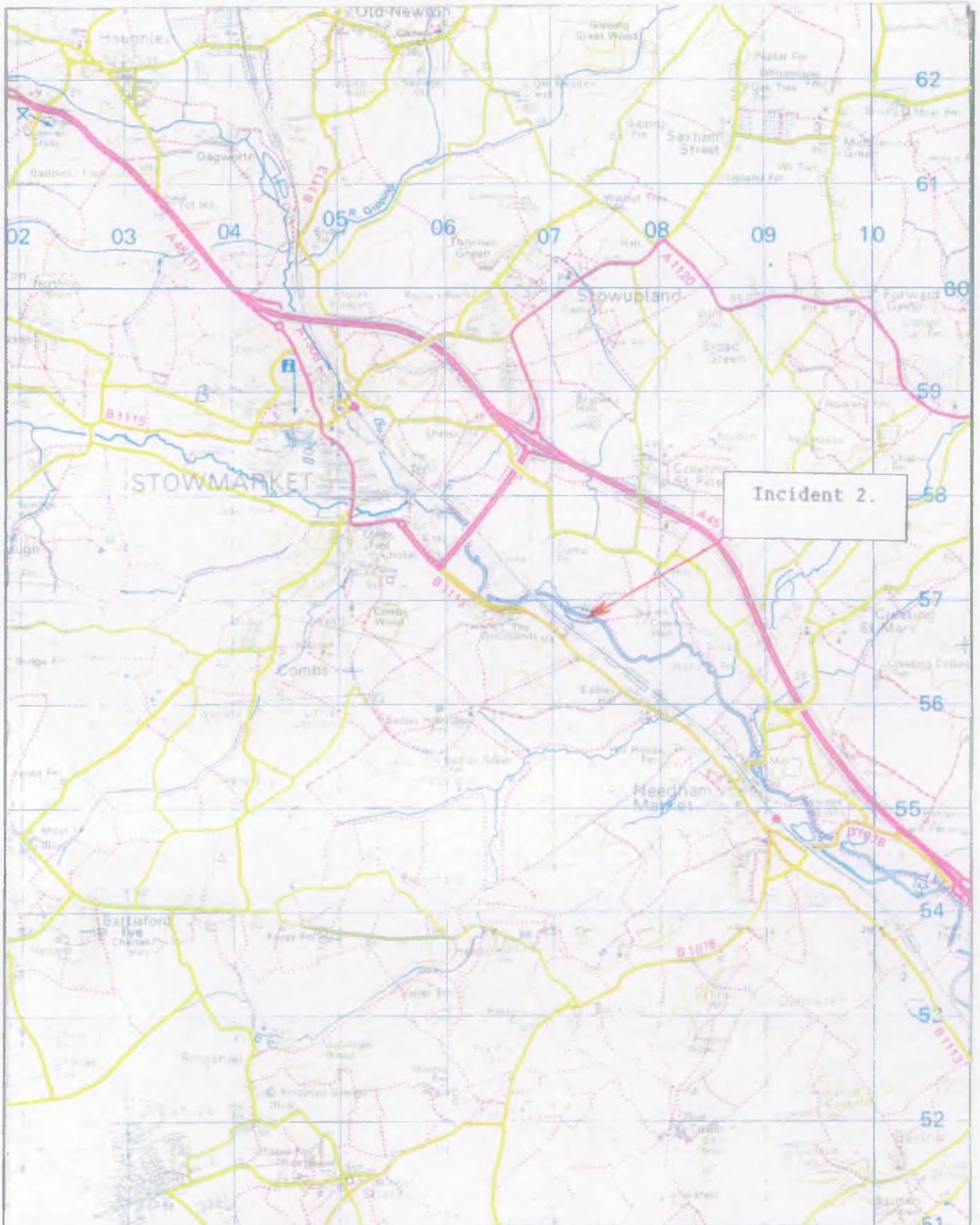
NRA Regional Communications Centre (RCC)	0345-125309
Mr. Smith	0850-603752
Mr. Davis	0850-603753

Script

Call 1.	Name: Mr. Smith Phone No.: 0850-603752 Address: 2 Back Lane, Combs Ford, Near Stowmarket, Ipswich
	" For Exercise Erebus Purposes Only " "Walking along the River Gipping near Combs Ford (near Stowmarket) When I saw about 20 dead fish, in the river, some quite big. They were on the south side of Combs Ford on the Ipswich side of the railway bridge, at the weir, near Creeting Hall. An observer is at this location, until 0845." " For Exercise Erebus purposes only "
Call 2.	Name: Mr. Davis Phone No.: 0850-603753 Address: 45 Black Drive, Combs Ford, Near Stowmarket, Ipswich
	" For Exercise Erebus Purposes Only " "Just driven up from Ipswich on the B1113 and there are hundreds of dead fish in the River Gipping, just south of Combs Ford" " For Exercise Erebus Purposes Only "

Identity of Caller 1. R. Davey
—————||————— 2. A. Harris

EXERCISE EREBUS



Incident 2.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 2. Combs Ford Nr. Stowmarket

O.S. MAP: 155

1:50,000

GRID REF: TM 070570



EXERCISE EREBUS
INCIDENT 3

Observer	C. Flanders
----------	-------------

Dead fish reported in the River Gipping at Gt. Blakenham.
An Observer will be on site.

Call Information

Call No.	Detail
1	Telephone call from Mr. Jones reporting dozens of dead fish in the river at Great Blakenham.

Timing

Call	Time	From	To	NRA Action
1	07:40	Mr. Jones	NRA RCC	Inform N. Essex Pollution Duty Officer

Contact Numbers

NRA Regional Communications Centre (RCC)	0345-125309
Mr. Jones	0850-603752

Script

Call 1.	Name: Mr. Jones Phone No.: 0850-603752 Address: 21, Brownlow Drive, Great Blakenham, Near Ipswich
	" For Exercise Erebus Purposes Only " " I thought you ought to know, there are dozens of fish floating on the surface of the River Gipping at Great Blakenham (near Ipswich) near the railway bridge, they look dead. An observer will be on site, in the carpark behind the church at GR. TM 120508 until 0850." " For Exercise Erebus Purposes Only "

Identity of Caller 1. R. Davey

EXERCISE EREBUS



EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 3. Great Blakenham

O.S.MAP: 155

1:50,000

GRID REF: TM 121509



EXERCISE EREBUS
INCIDENT 4

Observer	C. Page
----------	---------

Drums (2) of Thiodan the road at Elmswell
An Observer will be at this site.

Call Information

Call No	Detail
1	Suffolk Fire Service reporting leaking drums at Elmswell
2	Suffolk Fire Service reporting estimated quantities lost to ditch

Timing

Call	Time	From	To	NRA Action
1	0750	Suffolk F & R	NRA	_____ _____
2	0756	— —	NRA	_____ _____

Contact Numbers

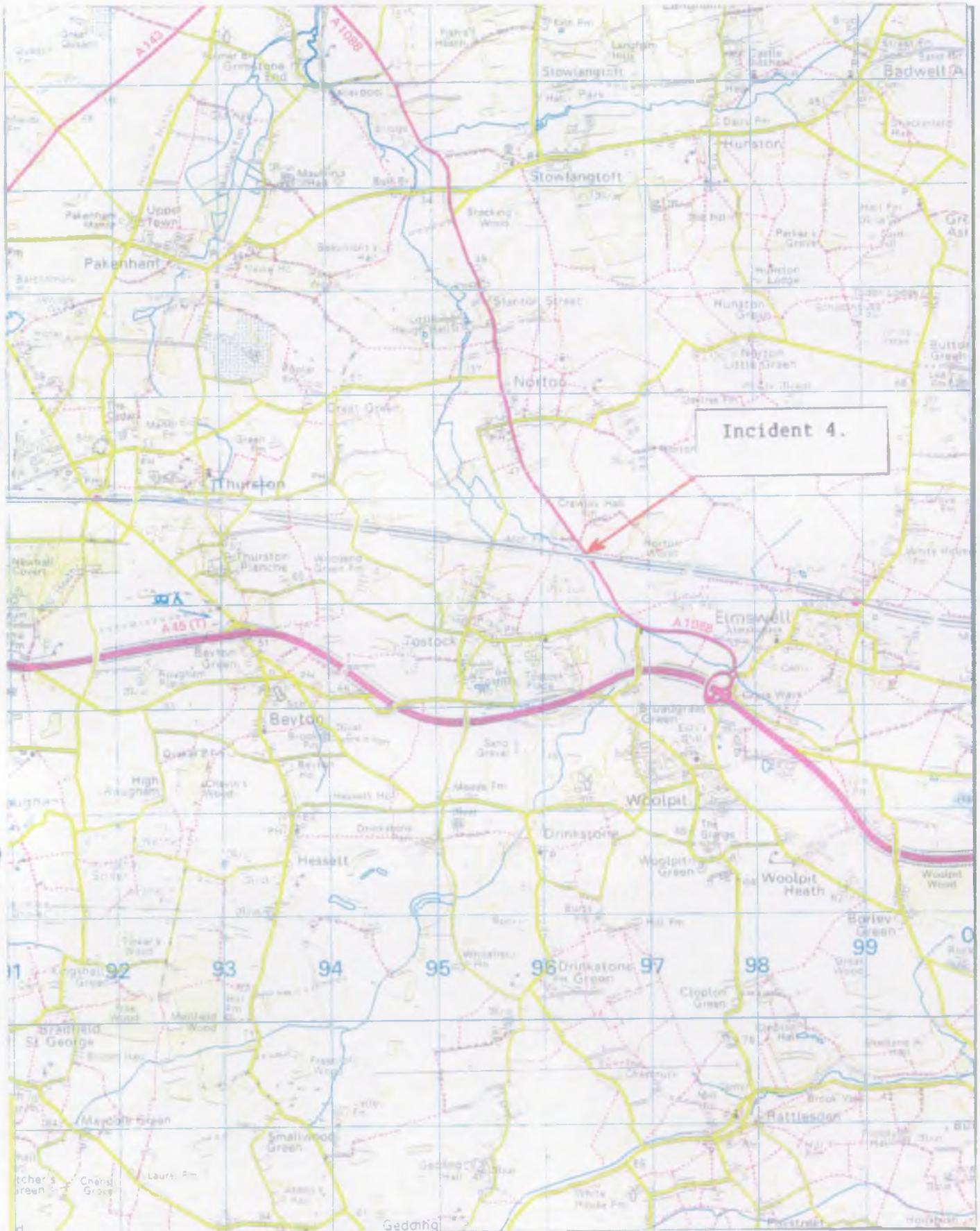
NRA Regional Communications Centre	0345-125309 & 0733-232094
Suffolk F&R	0473-725363

Script

Call 1	Name: Suffolk Fire Service Address:	Phone No.: 0473-725363
	<p>" For Exercise Erebus Purposes Only "</p> <p>" This is Suffolk Fire Service, control. Like to inform you that we are attending a chemical spillage involving 2, 250 litre drums of Thiodan, UN No. 933222, at Elmswell on the A1088. The grid ref. is TL 964645. We have ^{27/61}no details of the origin of the drums or how much has been lost. An Observer will be at this location until 0905."</p> <p>" For Exercise Erebus Purposes Only "</p>	
Call 2	Name:Suffolk Fire Service Address:	Phone No.: 0473-725363
	<p>" For Exercise Erebus Purposes Only "</p> <p>" Further to our call about the drums of chemical at Elmswell, 1 of the drums is empty and the other is approximately 3/4 full. We believe the contents of the first drum has leaked into drainage ditches by the side of the A1088."</p> <p>" For Exercise Erebus Purposes Only "</p>	

Identity of Caller 1 & 2 Suffolk F&R

EXERCISE EREBUS



EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 4. Elmwell

O.S.MAP: 155

1:50,000

GRID REF: T1 964645





EXERCISE EREBUS
INCIDENT 5

Observer	J. Handley
----------	------------

Dead fish in the River Cam at Fen Ditton.
An Observer will be site.

Call Information

Call No.	Detail
1	Telephone call from Mr. Briggs reporting a lot of dead fish in the River Cam at Fen Ditton.
2	Telephone call from Mr. Ellis reporting dead fish in the River Cam at Fen Ditton.

Timing

Call	Time	From	To	NRA Action
1	0800	Mr. Briggs	NRA RCC	Inform Ely Pollution Duty Officer
2	0810	Mr. Ellis	NRA RCC	————— —————

Contact Numbers

NRA Regional Communications Centre (RCC)	0345-125309
Mr. Briggs	0480-456111 ext.2236
Mr. Ellis	0850-603752

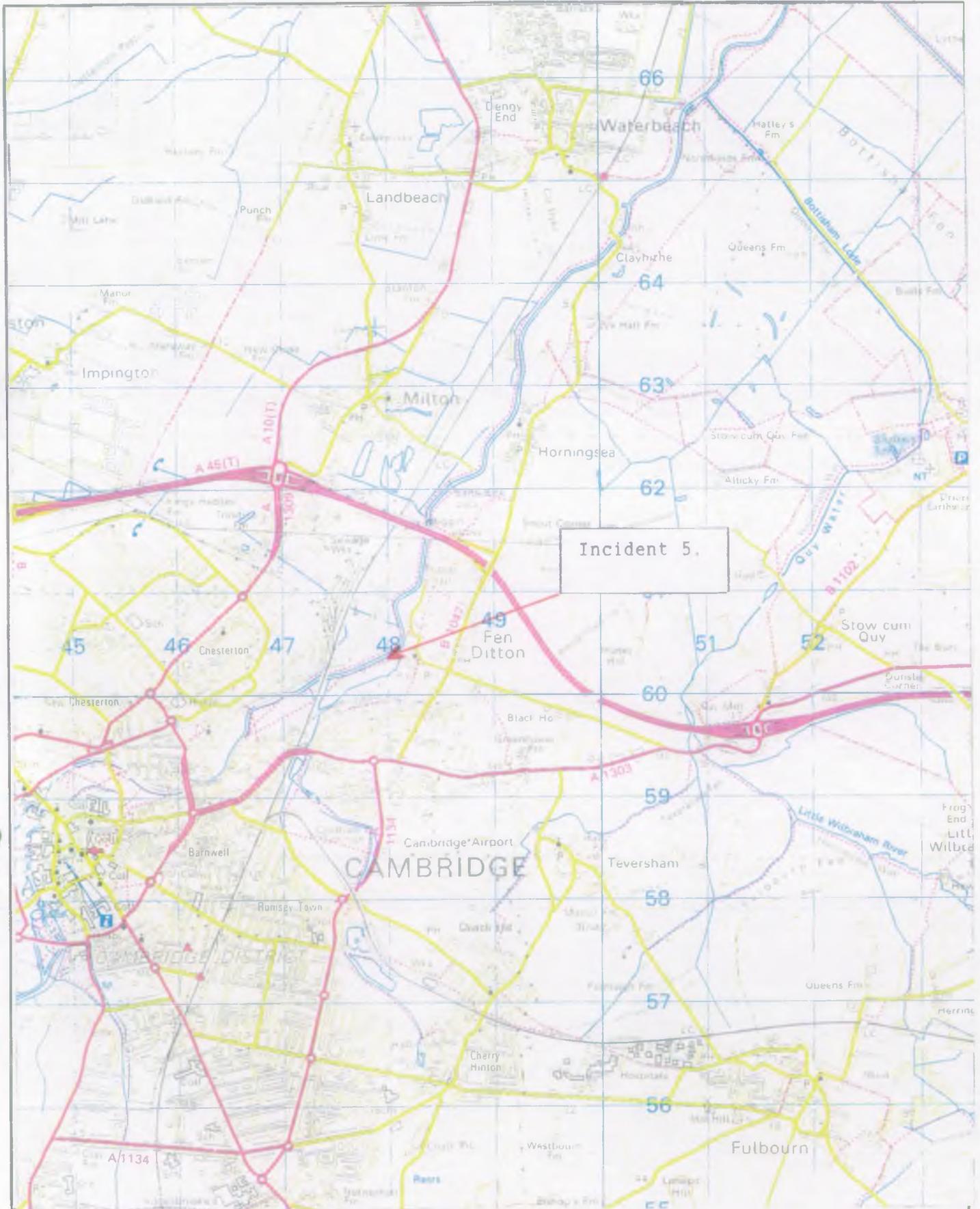
Script

Call 1	Name: Mr. Briggs Phone No.: 0480-456111 ext.2236 Address: 12 The Lane, Milton, Cambridge
	" For Exercise Erebus Purposes Only " " I want to report a lot of dead fish in the Cam near Fen Ditton On the meadows just upstream from the Plough pub. I'm going out now so you wont be able to contact me today. " For Exercise Erebus Purposes Only "
Call 2	Name: Mr. Ellis Phone No.: 0850-603752 Address: 7 High St., Clayhithe, Cambridge.
	" For Exercise Erebus Purposes Only " " I'm at the Plough Pub at Fen Ditton. Are you aware of all the dead fish here ? Must be dozens ! An observer will be at the Church in Fen Ditton until 0915" " For Exercise Erebus Purposes Only "

Identity of Caller 1 J.Flett
Identity of Caller 2 R. Davey

EXERCISE EREBUS

Dr.



Incident 5.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 5. Fen Ditton

O.S. MAP: 154

1:50,000

GRID REF: TL 481605

EXERCISE EREBUS



Incident 6.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 6. Ely

O.S. MAP: 143

1:50,000

GRID REF: TL 543793



EXERCISE EREBUS
INCIDENT 7

Observer	P. Grange
----------	-----------

Dead fish in the River Nene in Peterborough.
An Observer will be on site with a sample at the embankment.

Call Information

Call No.	Detail
1	Telephone call from Peterborough Police, reporting dead fish in the River Nene, downstream of Peterborough town bridge.
2	Telephone call from Mr. Clarke reporting many dead fish in the River Nene, at the river embankment.

Timing

Call	Time	From	To	NRA Action
1	09:05	P'boro Police	NRA RCC	Contact Spalding Office Pollution Dept.
2	09:07	Mr. Clarke	NRA	_____ _____

Contact Numbers

NRA Regional Communications Centre	0733-232094 & 0345-125309
Peterborough Police	0480-456111 ext.2236
Mr. Clarke	0850-603753

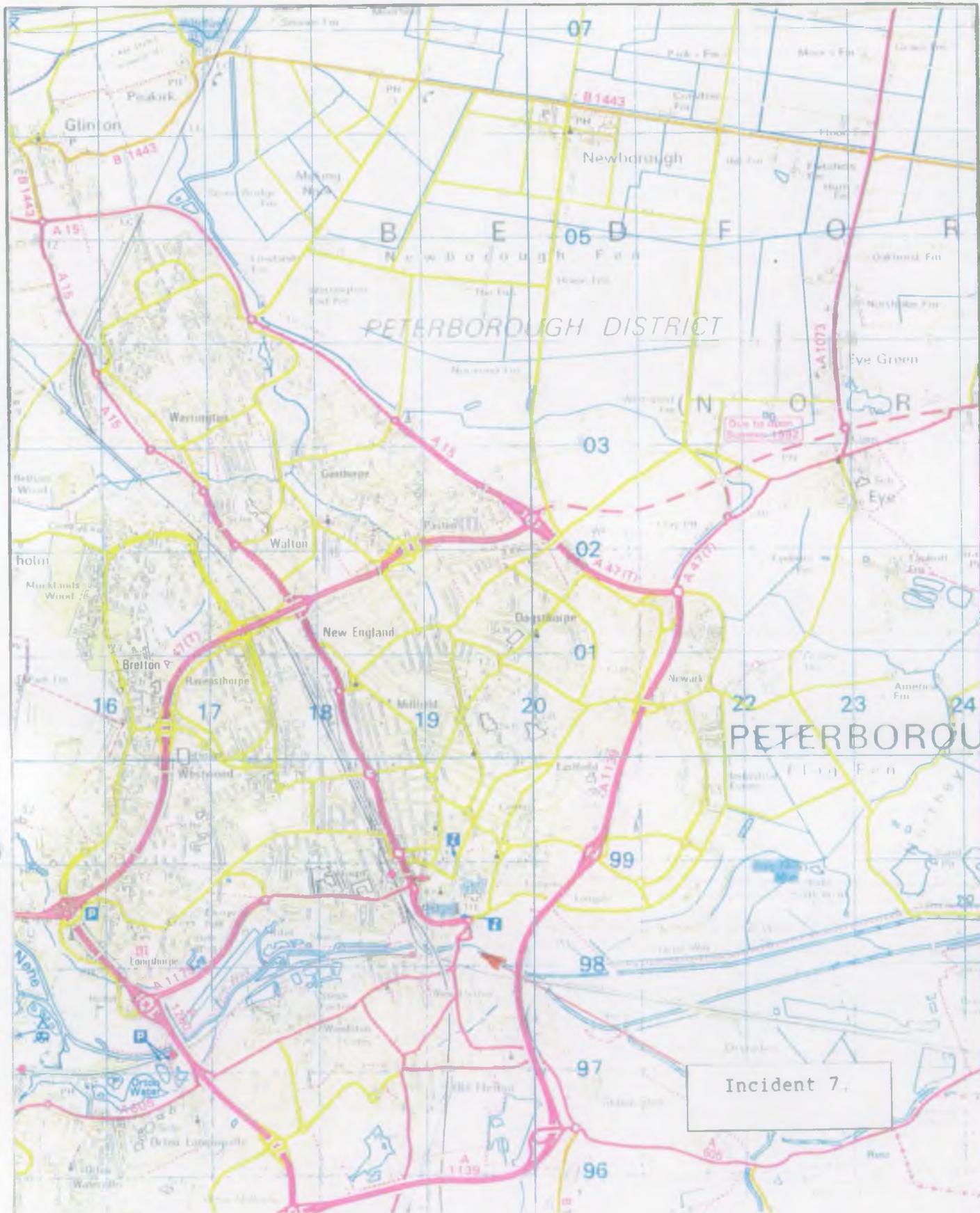
Script

Call 1	Name: Peterborough Police Phone No.: 0480-456111 ext.2236 Address: Thorpe Wood, Peterborough
	" For Exercise Erebus Purposes Only " " We have had a report from one of our foot patrols that there are a lot of dead fish floating in the River Nene near the town bridge Just downstream of the floating restaurant, by the embankment." " For Exercise Erebus Purposes Only "
Call 2	Name: Mr. Clarke Phone No.: 0850-603753 Address: 7 Mill Rd., Stanground, Peterborough.
	" For Exercise Erebus Purposes Only " " I've just seen a lot of dead fish in the river Nene, under the town bridge. There are some ducks and swans in distress down the embankment near the boat cleaning station. An observer will be at this location until 1020." " For Exercise Erebus Purposes Only "

Identity of caller 1. J.Flett
Identity of caller 2. A.Harris
5.14

EXERCISE EREBUS

N₁



EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 7. Peterborough

O.S. MAP: 142

1:50,000

GRID REF: TL 195983



EXERCISE EREBUS
INCIDENT 8

Observer	B. Empson
----------	-----------

Dead fish in the River Witham at Grantham.
An Observer will be on site.

Call Information

Call No.	Detail
1	Telephone call from Mr. Mills reporting many dead fish in the River Witham at Grantham.

Timing

Call	Time	From	To	NRA Action
1	09:20	Mr. Mills	NRA RCC	Inform Lincoln Office Pollution Dept.

Contact Numbers

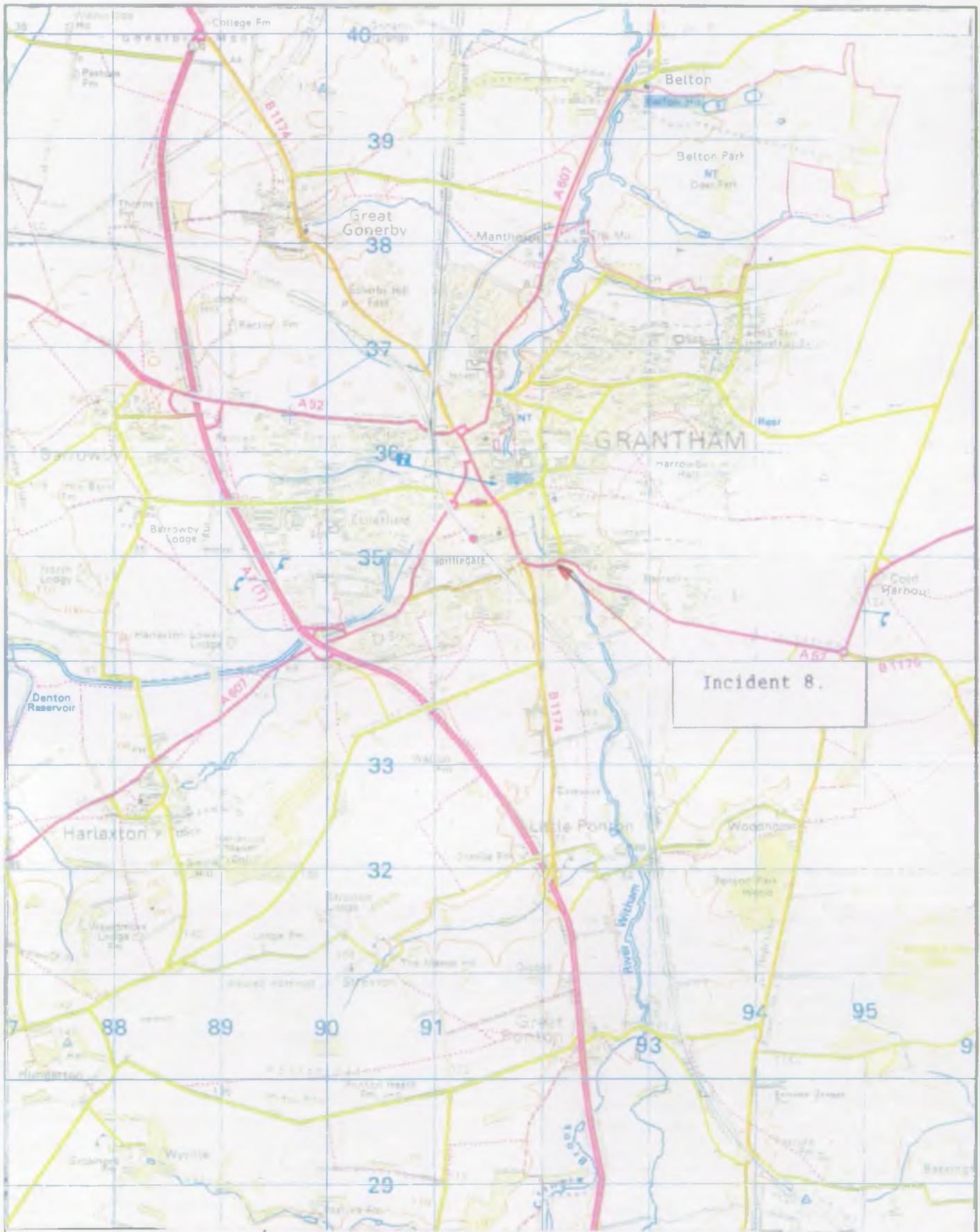
NRA Regional Communications Centre (RCC)	0345-125309
Mr. Mills	0522-558137

Script

Call 1.	Name: Mr. Mills Phone No.: 0522-558137 Address: 27 Friars Avenue, Grantham
	" For Exercise Erebus Purposes Only " " Are you aware of all the dead fish in the River Witham in Grantham. There seem to be dozens. I've seen them near to the A52 road bridge, near the junction with the Harrowby Rd." An Observer will be at this location until 1035." " For Exercise Erebus Purposes Only "

Identity of caller 1 E. Murfin

EXERCISE EREBUS



Incident 8.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 8. Grantham

O.S. MAP: 130

1:50,000

GRID REF: SK 921349



EXERCISE EREBUS
INCIDENT 9

Observer	J. Mills
----------	----------

Dead fish in the River West Glen at Greatford Sluice.
Observer will be on site with a sample.

Call Information

Call No.	Detail
1	Telephone call from Mr. Sale, reporting dead fish in River West Glen at Greatford.
2	Telephone call from local Police, reporting dead fish at Greatford.

Timing

Call	Time	From	To	NRA Action
1	09:25	Mr. Sale	NRA RCC	Inform Kettering District Pollution Dept.
2	09:40	Police	NRA RCC	————— —————

Contact Numbers

NRA Regional Communications Centre (RCC)	0345-125309 or 0733-232094
Mr. Sale	0522-558137
Stamford Police	0522-558137

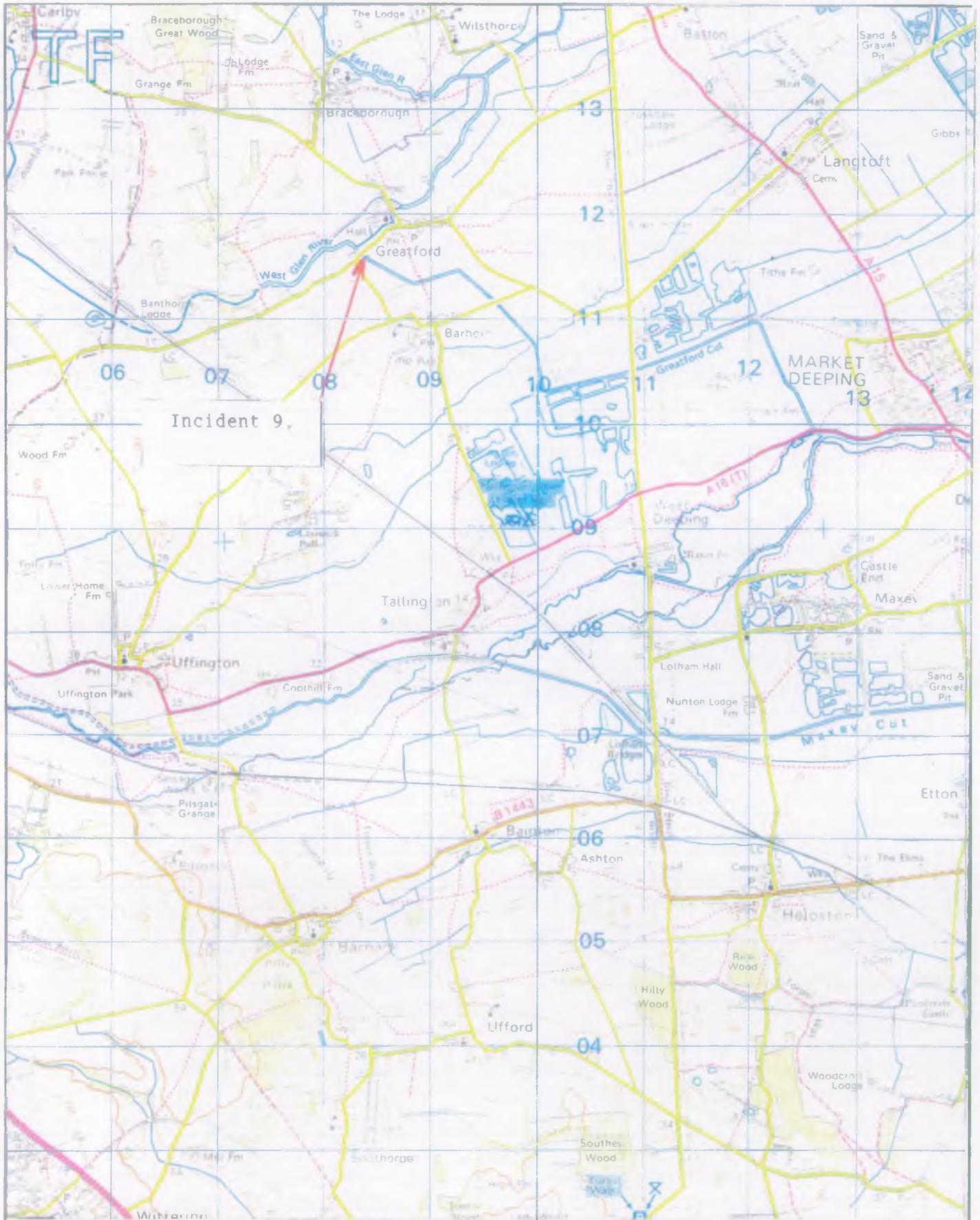
Script

Call 1	Name: Mr. Sale Phone No.: 0522-558137 Address: Underhill, Paston Lane, Essendine Nr. Stamford
	" For Exercise Erebus Purposes Only " "I've just been walking along the West Glen river, near Greatford sluice at Greatford. There are lots of dead fish. Did you know?" " For Exercise Erebus Purposes Only "
Call 2	Name: Stamford Police Phone No.: 0522-558137 Address: North St. Stamford, Lincs
	" For Exercise Erebus Purposes Only " " We've just had an anonymous caller on reporting pollution in the West Glen River at Greatford. He didn't say what pollution just that there were a lot of dead fish. An observer will be at Grid Ref. TF083117 until 1040." " For Exercise Erebus Purposes Only "

Identity of caller 1
Identity of caller 2

E. Murfin
—————||—————
5.18

EXERCISE EREBUS



Incident 9.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 9. Greatford

O.S. MAP: 130

1:50,000

GRID REF: TF 049122



EXERCISE EREBUS
INCIDENT 10

Observer	J. Barker
----------	-----------

Dead fish in River Welland at West Deeping.
Observer will be on site with a sample.

Call Information

Call No	Detail
1	Telephone call from Mrs Graham reporting a number of fish in distress in the River Welland at West Deeping.

Timing

Call	Time	From	To	NRA Action
1	09:45	Mrs.Graham	NRA RCC	Inform Spalding Office Pollution Dept.

Contact Numbers

NRA Regional Communications Centre	0345-125309
Mrs Graham	0733-371811 ext.4445

Script

Call 1	Name: Mrs Graham Phone No.: 0733-371811 ext.4445 Address: 20 Black Prince Avenue, Mkt. Deeping
	" For Exercise Erebus Purposes Only " " I was on the road bridge in West Deeping, and saw a lot of fish flapping about on the surface. The bridge is on the West Deeping to Lolham road, the old Roman road." An observer will be at Grid Ref. TF 110086 until 1050." " For Exercise Erebus Purposes Only "

Identity of caller 1

A. Wallis

EXERCISE EREBUS



Incident 10.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 10. West Deeping

O.S. MAP: 142

1:50,000

GRID REF: TF 110086



EXERCISE EREBUS
INCIDENT 11

Observer	R. Davey
----------	----------

This incident will involve the deployment of staff and equipment.
The incident will run as a mini exercise within the main exercise.

Tanker has rolled down the Deeping High Bank and into the River Welland at the bridge to Crowland adjacent to the water tower.

The tanker is filled with pig slurry and fish are in obvious distress.

Aeration equipment and booms are to be deployed and a fish rescue mounted downstream of the incident site.

An Observer will be on site with full instructions.

Call Information

Call No	Detail
1	Telephone call from Mr. Tip, farmer, reporting that a tanker of pig slurry has been accidentally lost into the River Welland at Crowland.

Timing

Call	Time	From	To	NRA Action
1	10:00	Mr. Tip	NRA Spalding Office	Aerator and booms will be deployed. Fish rescue will be mounted.

Contact Numbers

NRA Spalding District Office	0775-762123
NRA Regional Communications Centre (RCC)	0345-125309
Mr. Tip	0522-558137

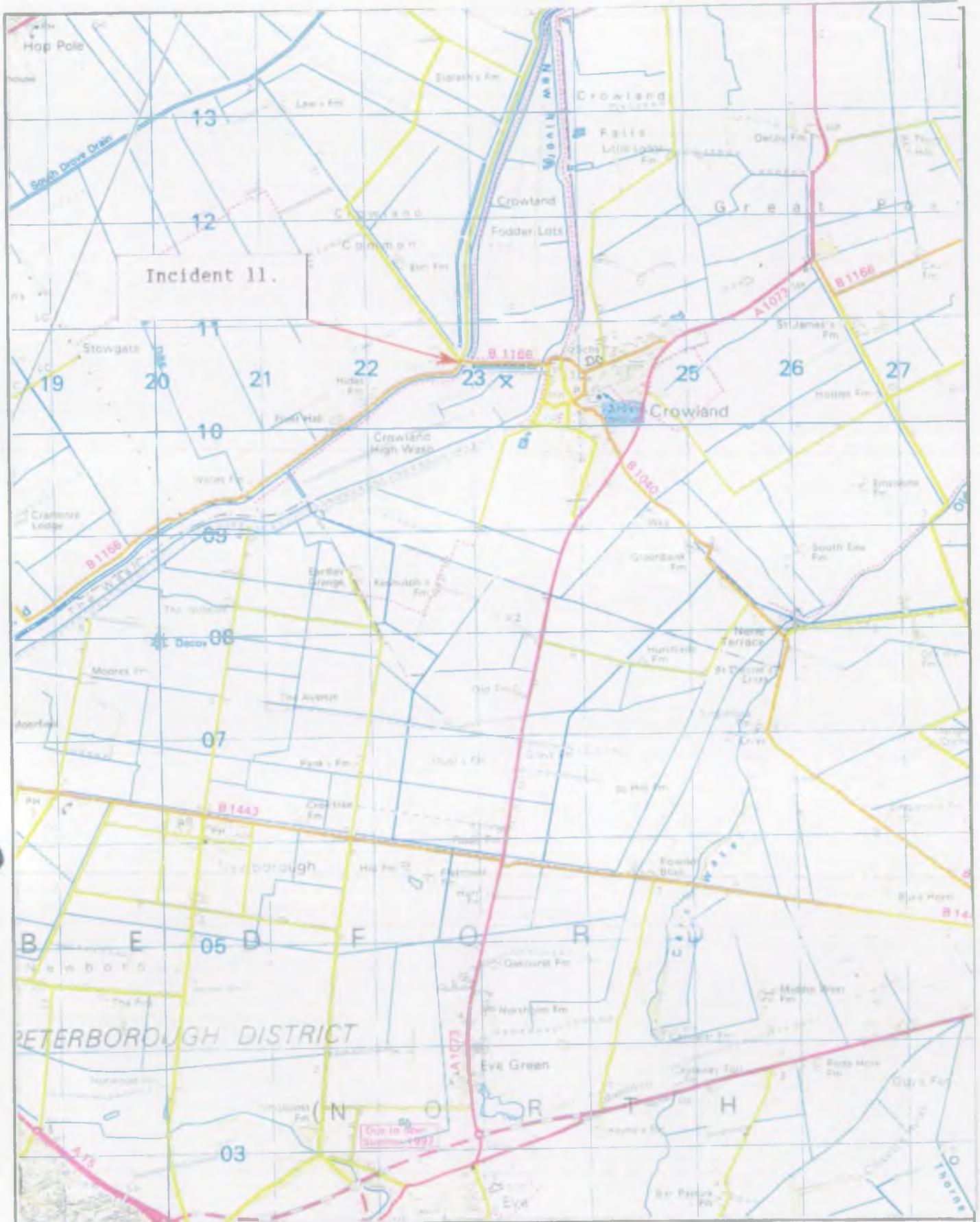
Script

Call 1	Name: Mr. Tip Phone No.: 0522-558137 Address: High Bank Farm, Deeping High Bank, Mkt. Deeping
	" For Exercise Erebus Purposes Only " " I've just lost a tanker of Pig Slurry, into the River Welland from the Deeping High Bank, that's the B1166 to Crowland, opposite the water tower, by the Bridge Inn. I can see the tanker in the water and a lot of fish on the surface near it. An Observer will be at this location." " For Exercise Erebus Purposes Only "

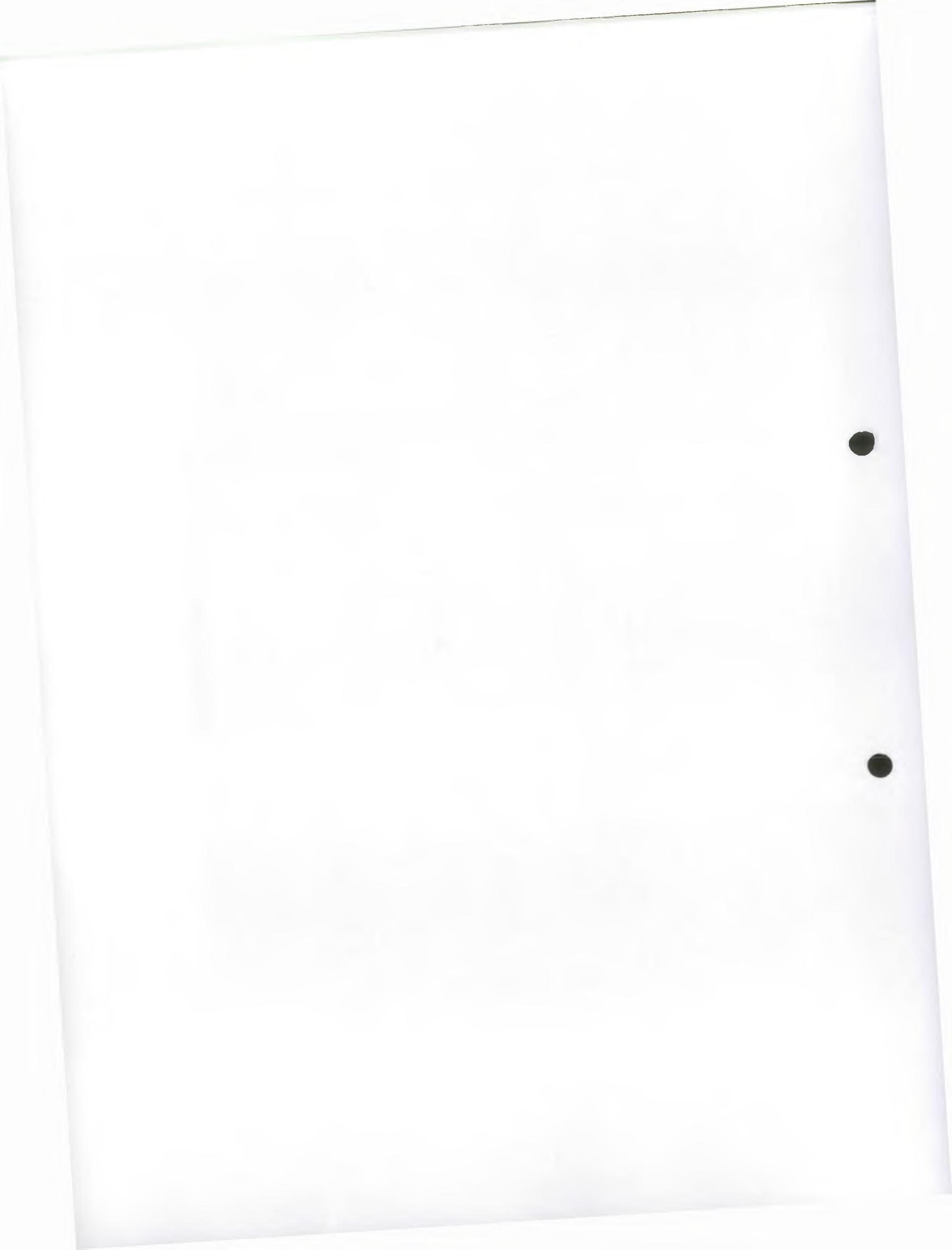
Identity of caller 1

E. Murfin
5.22

EXERCISE EREBUS



<p><u>EXERCISE EREBUS</u></p> <p>LOCATION PLAN</p>	<p><u>INCIDENT:</u> 11. Crowland</p> <p><u>O.S. MAP:</u> 142</p> <p>1:50,000</p>	<p><u>GRID REF:</u> TF 229106</p>
--	--	-----------------------------------



EXERCISE EREBUS
INCIDENT 12

Observer	C. Page
----------	---------

Dead fish in the River Delph at Grid Ref. TL 528937.
An Observer will be on site.

Call Information

Call No	Detail
1	Telephone call from Mr. Gordon Reporting dead fish in the River Delph.

Timing

Call	Time	From	To	NRA Action
1	10:15	Mr. Gordon	NRA RCC	Inform Ely District Pollution Dept.

Contact Numbers

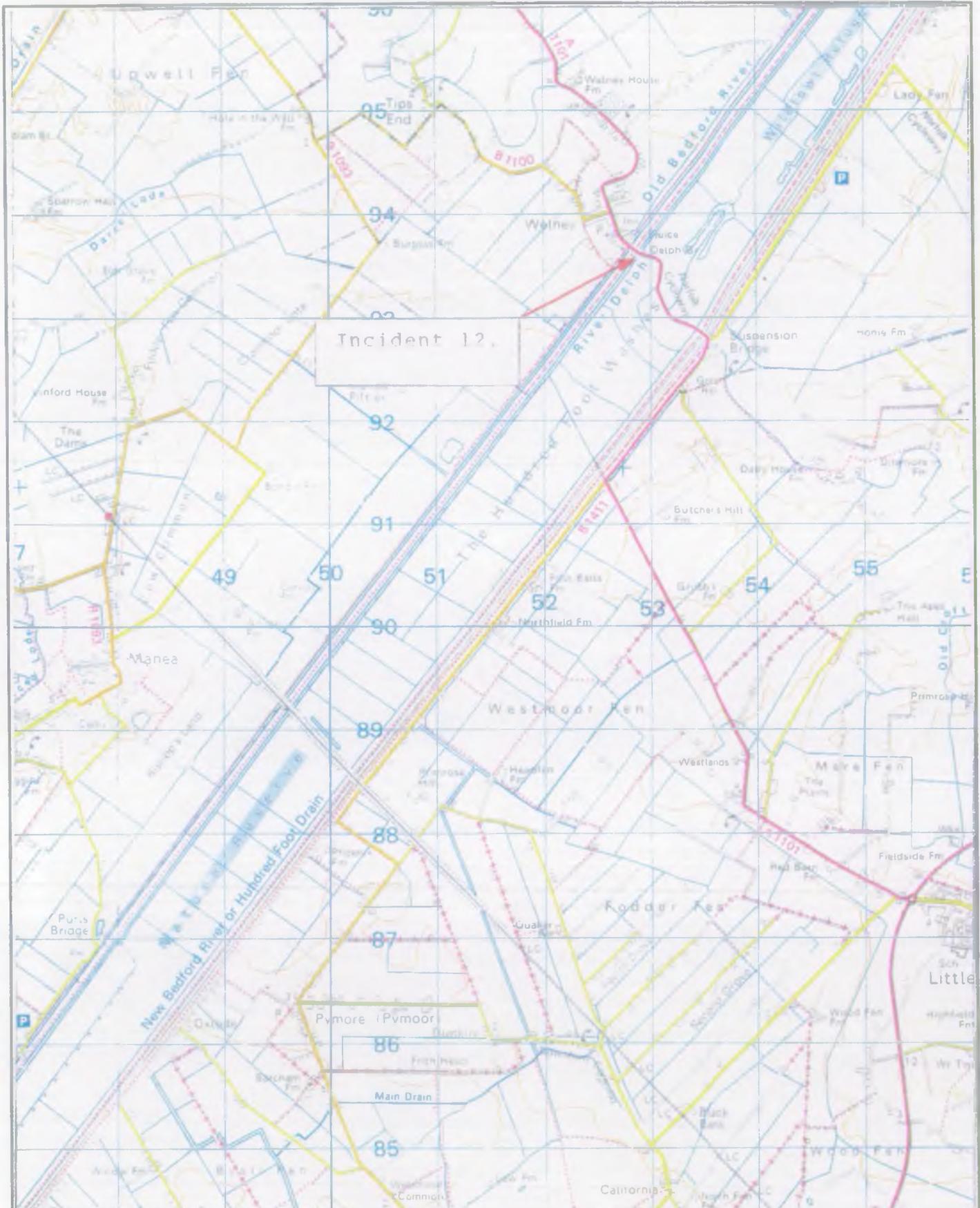
NRA Regional Communications Centre (RCC)	0345-125309
Mrs Gordon	0733-371811 ext.4445

Script

Call 1	Name: Mrs Gordon Phone No.: 0733-371811 ext.4445 Address: Rolling Stock, Ely Road, Kennett, Nr. New Market
	" For Exercise Erebus Purposes Only " "I've just passed through the nature reserve alongside the River Delph and seen dead fish in the river near Welney. An observer will be located at Grid Ref. TL 528937, near the Lamb & Flag Pub at Welney until 1030." " For Exercise Erebus Purposes Only "

Identity of caller 1 A. Wallis

EXERCISE EREBUS



EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 12. River Delph

O.S. MAP: 143

1:50,000

GRID REF: TL 528937



EXERCISE EREBUS

INCIDENT 13

Observer	A. Wright
----------	-----------

Dead fish in the River Lark at Fornham All Saints.
Observer will be on site.

Call Information

Call No	Detail
1	Telephone call from Mr. Hastings reporting many dead fish in the River Lark near Fornham All Saints.
2	Telephone call from Bury St. Edmunds Police, a Mr. Greaves has reported seeing dead fish in the River Lark.

Timing

Call	Time	From	To	NRA Action
1	10:20	Mrs Hastings	NRA RCC	Inform Ely Office Water Quality.
2	10:25	Bury Police	NRA RCC	————— —————

Contact Numbers

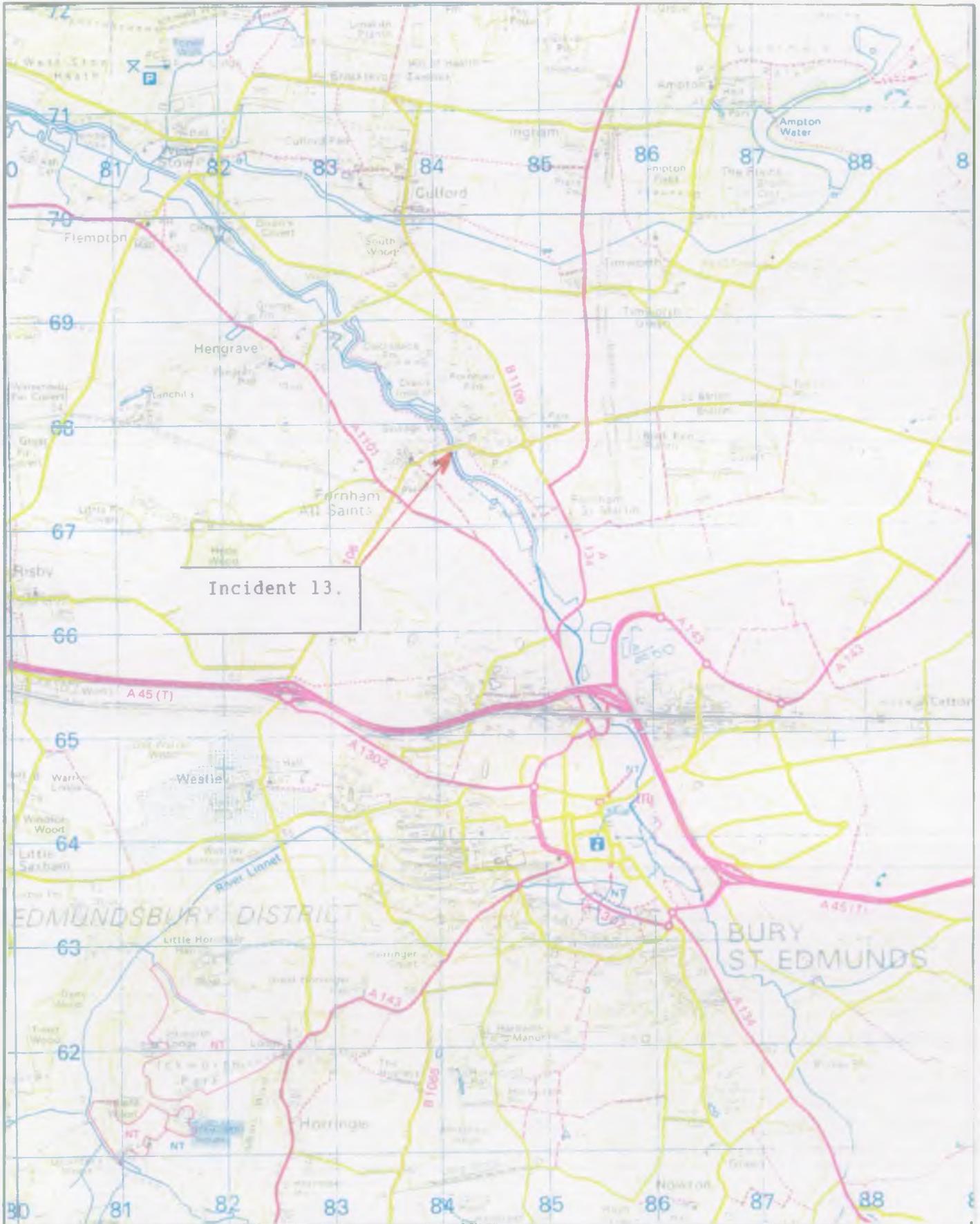
NRA Regional Communications Centre (RCC)	0733-232094 & 0345-125309
Mrs Hastings	0733-371811 ext.4445
Bury St. Edmunds Police	0473-613273

Script

Call 1	Name: Mr. Hastings Phone No.: 0733-371811 ext.4445 Address: 3 Railway Cuttings, Bury St. Edmunds
	" For Exercise Erebus Purposes Only " " There are a lot of dead fish in the river Lark near the B1106bridge in Fornham All Saints did you know?" An Observer will be located at Grid Ref. TL 841678 until 1135." " For Exercise Erebus Purposes Only "
Call 2	Name: Bury St. Edmunds Police Phone No.: 0473-613273
	" For Exercise Erebus Purposes Only " " This is Bury St. Edmunds police. We have had a report of dead fish in the River Lark at Fornham All Saints near the golf club. The reporter is a Mr. Greaves, 27 Walnut Drive, Bury St Edmunds, his phone number is 0850-603753" " For Exercise Erebus Purposes Only "

Identity of caller 1 A. Wallis
Identity of caller 2 A. Skinner
Identity of Mr. Greaves A. Harris
5.26

EXERCISE EREBUS



Incident 13.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 13. Fornham All Saints

O.S. MAP: 155

1:50,000

GRID REF: TL 841678



EXERCISE EREBUS
INCIDENT 14

Observer	CWC
----------	-----

Drum of Thiodan fractured and leaking at Westley Crossing.

Call Information

Call No.	Detail
1	Telephone call from Cambridgeshire Police HQ. control room to CWC control room, informing that a report has been received of a drum of Thiodan falling from a train and leaking onto the ground near Westley Pumping Station, Grid ref. TL 592578

Timing

Call	Time	From	To	CWC Action
1	06:30	Cambs. Police	CWC Control	

Contact Numbers

Cambridgeshire Police HQ. Control Room	0480-456111
Cambridge Water Company Control Room	0223-247357 .
NRA Regional Communications Centre	0733-232094

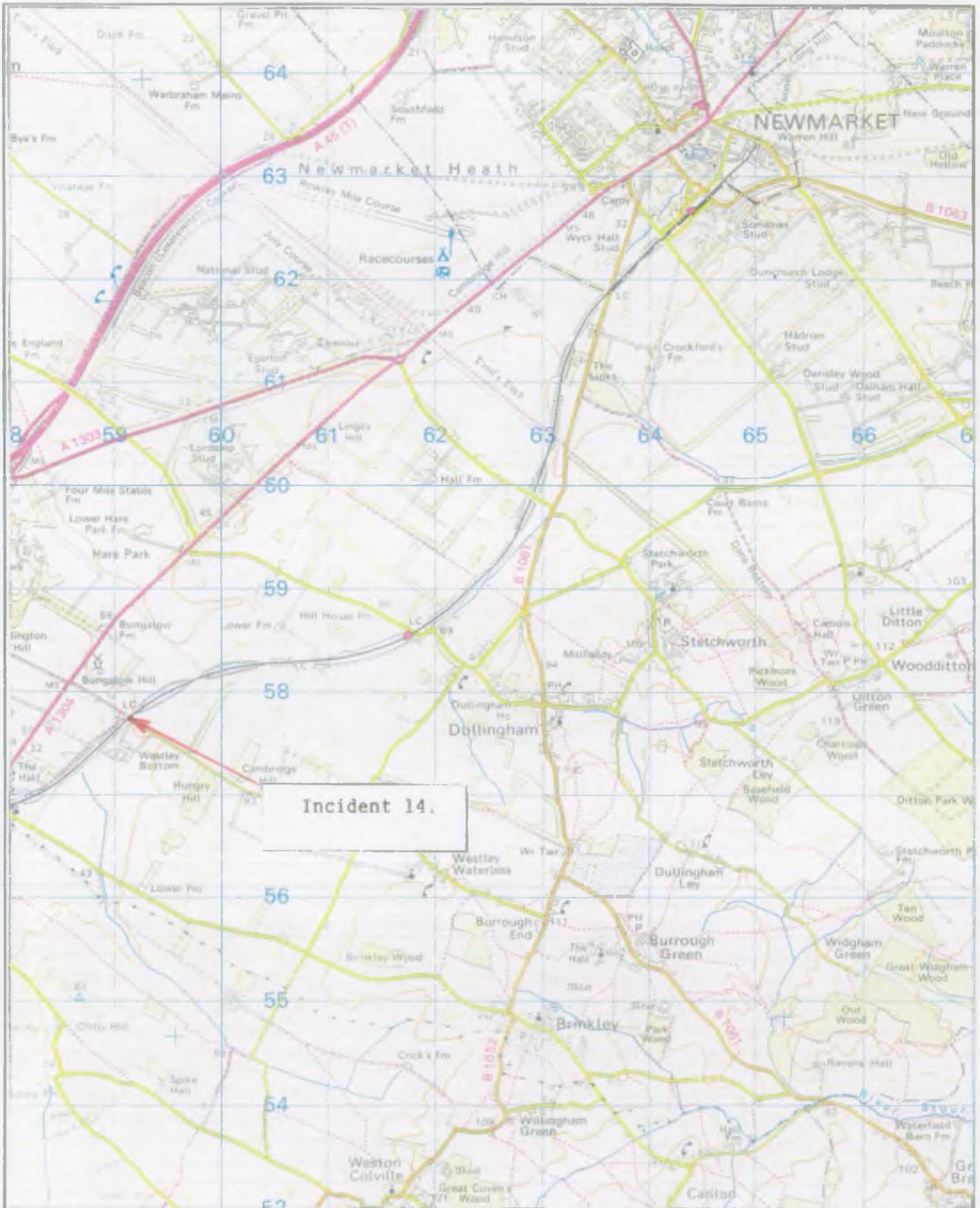
Script

Call 1	Name: Cambs. Police HQ. Phone No.: 0480-456111 Address:
	" For Exercise Erebus Purposes Only " " We have just had a report from Mr. Blake of, 30, Westley Crossing, Six Mile Bottom, saying that a drum of Thiodan has just fallen from a train at Westley Crossing. The drum is fractured and leaking. Mr. Blake is aware of the Cambridge Water Company pumping station nearby and is concerned that the water may become contaminated " " For Exercise Erebus Purposes Only. "

Identity of caller 1

CWC

EXERCISE EREBUS



Incident 14.

EXERCISE EREBUS

LOCATION PLAN

INCIDENT: 14 Westley Pumping Station

O.S.MAP: 154

1:50,000

GRID REF: TL 592578



EXERCISE EREBUS
INCIDENT 15

Observer	Leics. CC
----------	-----------

Report of a drum of Thiodan in the River West Glen at Essendine, Grid Ref. TF 050120

Call Information

Call No	Detail
1	Telephone report from Leicestershire Police to NRA of many dead fish in the River West Glen, South of Essendine. A leaking drum of Thiodan is in the river at this location.
2	Telephone report from Rutland DC Environmental Health Dept. to NRA, contents similar to 1 above.
3	Telephone report to NRA from Leicestershire F & R who are attending the incident at Essendine.

Timing

Call	Time	From	To	NRA Action
1	09:30	Leics. Police	NRA RCC	Inform Spalding District Office Pollution Dept.
2	?	Rutland DC	NRA RCC	_____ _____
3	?	Leics. F&R.	NRA RCC	_____ _____

Contact Numbers

NRA Regional Communications Centre	0733-232094
Leicestershire Police	0533-482421
Rutland DC Environmental Health Department	0572-758241
Leicestershire Fire & Rescue	0533-872241

Script

Call 1	Name: Leics. Police Phone No.: 0533-482421 Address: St. Johns, Enderby
	" For Exercise Erebus Purposes Only " " We've had a report from a member of the public, about dead fish in the West Glen near Essendine. An officer has been and had a look and it seems there is a drum in the river, about 250 litre in size which is leaking. Its got a label marked " Thiodan " and there are a lot of dead fish downstream of it. It's where the railway crosses the river, south of the village where the dismantled railway used to join, at Grid Ref. TF 050120." " For Exercise Erebus Purposes Only. "

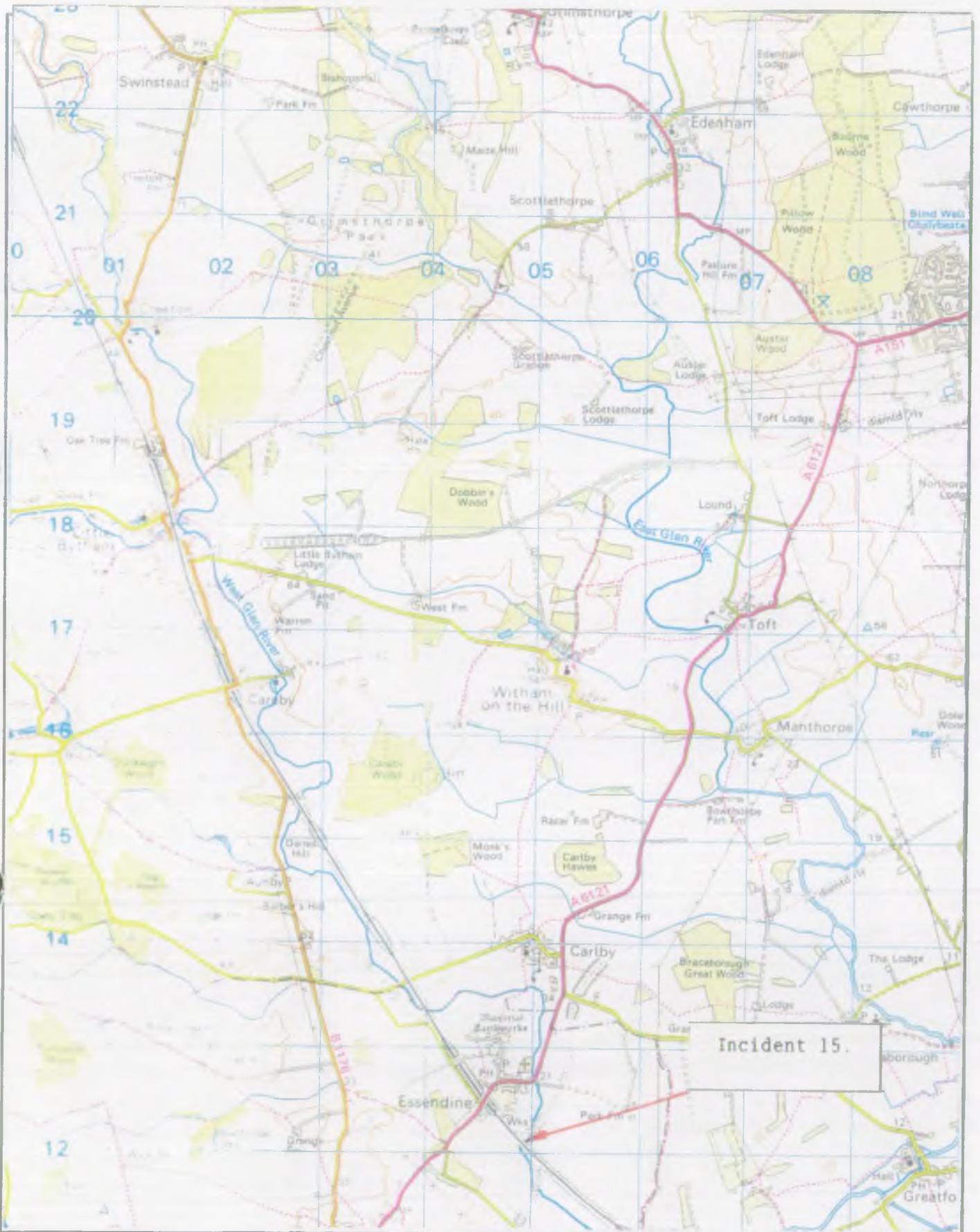
EXERCISE EREBUS

Incident 15 (Contd.)

Call 2	Name: Rutland DC Env. Health Phone No.: 0572-758241 Address: Oakham
	" For Exercise Erebus Purposes Only " Details as for Call 1, above " For Exercise Erebus Purposes Only "
Call 3	Name: Leics. F&R Phone No.: 0533-872241 Address: Glenfield, Leicester
	" For Exercise Erebus Purposes Only " " Leicestershire Fire and Rescue Service are attending a report of drum of "Thiodan" in the river West Glen, south of Essendine (Actual detail will be based on message passed to Leics. F&R by Leics. Police.) " For Exercise Erebus Purposes Only "

Identity of Caller	1.	Leicester Police	Contact No.	0533 482421
Identity of Caller	2.	Rutland Env. Health Dept	— —	0572 758241
Identity of Caller	3.	Leicester F&R	— —	0533 872241

EXERCISE EREBUS



EXERCISE EREBUS

INCIDENT: 15. Essendine

O.S. MAP: 130

LOCATION PLAN

1:50,000

GRID REF: TF 050120



EXERCISE EREBUS

EXERCISE DIRECTORY

Contact with external agencies for Exercise Erebus purposes is to made using these telephone numbers.

Anglian Water Services	Normal Contact Nos.
British Rail Liverpool St. Cambridge York	071-9229139 0223-351370 0904-629157
Cambridge Water Co.	0223-247351 Control
Cambridge County Council	0223-317628
Cambridge Fire and Rescue	0480-454651
Cambridge Police	0480-456111 Ask for Control
East Cambs. DC	0352-665555
South Cambs. DC	0223-351795
Leicestershire County Council	0523-523523 Quote Pager No. 611971, leave contact number
Leicestershire Fire and Rescue	0533-872241 Ask for Control
Leicestershire Police	0533-482421
Lincolnshire Fire and Emergency Planning	0522-533361
Lincolnshire Police	0522-532222
NRA Anglian Region	0733-371811 0733-232094 0345-125309 Any other listed number
NRA Severn-Trent	021-7112324
Rutland DC	0572-758241
Suffolk CC	0473-264145
Suffolk Coastal District Council	0394-383789 ext.2453
Suffolk Fire Service	0473-725363
Suffolk Police	0473-613273

EXERCISE EREBUS

SIMULATED PRESS INVOLVEMENT

During any event of the scale of Exercise Erebus a high level of press interest could be anticipated. This interest will be simulated by Derek Beaumont and his colleagues from Suffolk Coastal District Council.

The team will target NRA staff and premises initially in Eastern Area, at the Ipswich Office but will expand their role as the exercise develops.

The team will simulate press agencies by phoning in to regional headquarters and local offices.

The brief of this team is to act as " The Press " would on the day. It must be recognised, however, that the scale of this event would be unlikely to be apparent early on in the event. To take this into account the press interest will not start before 11:00 Hrs. on exercise day and will build up from a low level of activity.

When making enquiries of the NRA the " Press Team " must ensure that they prefix and suffix any simulated interview with

***** " For Exercise Erebus Purposes Only " *****

The NRA will supply blank video and audio cassettes as requested prior to the start of this exercise

All videos, transcripts of interviews and comments must be handed to the NRA Exercise planning team for examination as part of the washup process. Tapes belonging to non NRA organisations will be returned or replaced as a matter of course following examination.

EXERCISE EREBUS

VIDEOING OF SELECTED SITES

It is intended to video selected sites as part of Exercise Erebus. These sites will be chosen as of particular interest e.g. Incident 11 on the River Welland, where equipment will be deployed and a simulated fish rescue take place. The videos will be taken by NRA staff and may be used in the washup process.

Selected Sites.

Incident 11. River Welland.

Regional Laboratory.

Regional Control Room.

Regional Communications Centre.

Area Control Rooms.

EXERCISE EREBUSDIRECTING STAFF SCHEDULE

Reference	Name	Contact No.	Location	Role	Reporting Contacts
Exercise Director & RHQ Umpire	Andrew Hunter Blair	0860 252328	RHQ	Final Arbiter RHQ Activity	Umpires & Observers
Eastern Umpire	Clive Flanders	0473 727712	Ipswich Area Office	Monitor Activity	Exercise Director Eastern Incident Observers
Central Umpire	John Handley	0480 414581	Brampton Area Office	Monitor Activity	Exercise Director Central Incident Observers
Northern Umpire	Brian Empson	0522 513100	Lincoln Area Office	Monitor Activity	Exercise Director Northern Incident Observers
Roving Observer A	Roy Davey	0850 603752	Mobile		
Roving Observer B	Tony Harris	0850 603753	Mobile		

EXERCISE EREBUS

Observers Schedule

1. Please arrange to be on site at least 15 minutes before the incident time.
2. Observers will be supplied with detailed instructions relating to the incident being covered.
3. Observers will record all actions carried out by involved personnel on standard log sheets.
4. Observers have discretion to deal with queries as they arise, in the event of disagreement or confusion queries are to be passed to the Exercise Director.

All times are BST.

MOST IMPORTANT! Attending officers will not be able to carry out all their normal actions as the incidents are imaginary. They need to record the actions they would carry out on their log sheets. Inform the officers that they are free to return to their duties once they are finished at the incident site.

Incident Observer Schedule				
Time	Incident / Location	Observer	Report to	Observer Contact No.
0700	1. Beccles	A. Harris	A.H.B	0860-603753
0730	2. Combs Ford	A. Wright	- -	
0740	3. Gt. Blakenham	C.Flanders	- -	0473-727712
0743	4. Elmswell	C. Page	- -	
0800	5. Fen Ditton	J. Handley	- -	0480-414581
0840	6. Ely	G. Wilson	- -	
0905	7. Peterborough	P. Grange	- -	
0920	8. Grantham	B. Empson	- -	0522-513100
0925	9. Greatford	J. Mills	- -	
0945	10. West Deeping	J. Barker	- -	
1000	11. Crowland	R. Davey	- -	0850-603572
1015	12. River Delph	C. Page	- -	
1020	13. Fornham All Saints	A. Wright	- -	
0630	17. Westley PS (CWC)	CWC		
0930	15. Essendine	Leics CC		

EXERCISE EREBUS

OBSERVER INSTRUCTIONS FOR INCIDENT 1.

1. Introduction

These instructions will allow the on-site Observer to progress the incident, at predetermined intervals.

2. Implementation

The incident will take place in 3 stages :

1. Notification by Suffolk Fire Service of the incident to RCC. RCC will inform the Area Pollution Duty Officer.
2. 1 hour later, Suffolk Fire Service notify RCC that 5,500 litres of Hydrochloric acid has been lost to the River Waveney.
3. 30 minutes later the tanker is found to have been filled with water.

3. Observer action

The Observer will be at Grid ref. TM 421914(layby adjacent to the bridge), 15 minutes before the start of the incident, i.e. 07:00. The Observer will meet the attending officer and hand over Message 1. Message 1 will state that it is unsafe for NRA personnel to approach the site. Suffolk Fire Service will advise on the situation as it develops.

1 hour later the incident should escalate due to a further message from Suffolk Fire Service. If this message is not received by 08:10 the Observer will hand over Message 2, revealing the tanker has now lost an estimated 5,500 litres of Hydrochloric acid into the river.

30 minutes later the incident should be effectively closed by message 3 from Suffolk Fire Service. If this message is not received by 08:45 envelope 3 will be handed over. The message in this case will state that the tanker was only carrying water.

In the event of the on-site officer moving to a different location the observer will follow and query why location has been moved.

If the on-site officer expresses the need for a sample the Observer will indicate that a sample can be taken from the river.

EXERCISE EREBUS

*****FOR EXERCISE EREBUS PURPOSES ONLY*****

INCIDENT 1

MESSAGE 1

The Senior Fire Officer at the scene of this tanker crash has decided it is unsafe for anybody not wearing chemical suits and using breathing apparatus to approach the vehicle.

The vehicle is on its side on the A45 bridge above the River Waveney. According to all indications, UN code and company details it is carrying Hydrochloric Acid.

The load is leaking !.

The Fire Service are attempting to minimise the leak and right the vehicle, this may take some time.

The Senior Fire Officer will report on any developments that occur.

*****FOR EXERCISE EREBUS PURPOSES ONLY*****

EXERCISE EREBUS

*****FOR EXERCISE EREBUS PURPOSES ONLY*****

INCIDENT 1

MESSAGE 2

Report from the senior fire officer.

During attempts to right the tanker, 1 compartment has split. The total contents have been lost into the river, estimate loss as 5,500 litres.
Further update later.

*****FOR EXERCISE EREBUS PURPOSES ONLY*****

EXERCISE EREBUS

*****FOR EXERCISE EREBUS PURPOSES ONLY*****

INCIDENT 1

MESSAGE 3

Suffolk Fire Service have made contact with the owners of the vehicle involved in this incident. The tanker had been for a standard hydraulic test and was filled with water only.

No pollutant has entered any watercourse.

*****FOR EXERCISE EREBUS PURPOSES ONLY*****

EXERCISE EREBUS
OBSERVER INSTRUCTIONS FOR INCIDENT 2

1. Introduction

This incident involves a report of dead fish in the River Gipping near Combs Ford, near Stowmarket. A map showing the location for the Observer is enclosed.

2. Scene setting

2.1 Once contact has been made with the investigating officer the Observer must set the scene for them.

2.2 The location is adjacent to weir close to a converted mill, there are a large number of small fish floating on the surface, obviously dead. There are a number of other fish in distress.

3. Provision of Sample

If the attending officer takes samples from the river you will need to identify these samples for the laboratory by affixing an Exercise Erebus label to the sample. 10 labels are included for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 3

1. Introduction

This incident involves a report of dead fish in the River Gipping at Great Blakenham near Ipswich. A map showing the location for the Observer is enclosed. You will make contact in the car park behind the church in Great Blakenham and then go to the river downstream of the railway bridge at Grid Ref. TM 121509. This is reached by crossing the river bridge on the foot path North of the carpark and following the river.

2. Scene Setting

- 2.1 Once contact has been made with the attending officer you will need to set the scene for them.
- 2.2 The location is a picturesque scene well used by local fishermen. There are dozens of dead fish and fish in distress from the railway bridge for hundreds of yards downstream. There are many concerned anglers at this location.

3. Provision of Sample

If samples are taken from the river you will need to identify them for the Laboratory by affixing an Exercise Erebus label to the sample. 10 labels are enclosed for your use.

EXERCISE EREBUS
OBSERVER INSTRUCTIONS FOR INCIDENT 4

1. Introduction

This incident involves the loss of drums of Thiodan onto the road at Elmswell. A map showing the location for the Observer is enclosed.

2. Scene Setting

2.1 Once contact has been made with the investigating officer the Observer must set the scene for them.

2.2 The location is a railway bridge with a steep embankment on either side this embankment has many trees on it but is not protected by walls or fences. The drums (2) have rolled down the embankment, both are damaged and leaking. One drum is on the side of the road under the bridge the other is in a ditch at the bottom of the embankment on the west side of the road on the north side of the bridge.
1 drum has the trade name Thiodan written on it.

3. Provision of sample

If samples are taken the sample must be identified by affixing an Exercise Erebus label to it. 10 labels are provided for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 5

1. Introduction

This incident involves reports of dead fish in the River Cam at Fen Ditton near Cambridge. A map showing the location is enclosed. The Observer will be located at the church in Fen Ditton and then proceed with the investigating officer to the river by following the road passed the church on to meadows upstream of the Plough public house.

2. Scene Setting

2.1 Once contact has been made with the investigating officer you will need to set the scene for them.

2.2 This location is extremely picturesque the meadows have cattle on them and many people use them for walking and to fish from. The river is well used by boat traffic. The river is full of dead and dying fish and slightly milky in appearance.

3. Provision of Samples

If samples are taken you will need to identify them for the laboratory by affixing an Exercise Erebus label to the sample. 10 labels are provided for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 6

1. Introduction

This incident involves the report of dead fish in the river Ouse at Ely and a smell of chemicals from the river. A map of the location for the Observer is enclosed. You will be located on Ely Quay outside the Cutter Inn.

2. Scene Setting

2.1 Once contact has been made with the investigating officer you must set the scene for them.

2.2 Ely Quay is crowded with private boats and commercial pleasure craft offering trips on the river. There are many people around who are obviously upset by the large numbers of dead and dying fish in the river. There is a faint chemical smell from the water. Dead fish are visible for hundreds of yards, right along the quay and beyond.

3. Provision of Samples

If samples are taken you will need to identify them for the laboratory by affixing an Exercise Erebus label to the sample. 10 labels are provided for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 7

1 Introduction

This incident involves reports of dead fish in the river Nene along the embankment in Peterborough town centre. A map showing the location for the Observer is enclosed. You will be located at the boat cleaning station at Grid Ref.TL195981.

2. Scene Setting

Once contact is made with the investigating officer you must set the scene for them.

- 2.1 The embankment in Peterborough is used by many people for fishing boating and walking. There is a chinese restaurant on a boat near to the town bridge and a number of houseboats moored. The river has a large number of fish floating on the surface which appear dead. There are also a number of swans and ducks which appear in distress. A member of the Press has been here already and wants to know what the NRA are going to do.
There are dead fish as far downstream as Stanground lock.

3. Provision of samples

If samples are taken you will need to identify them for the laboratory by afixing an Exercise Erebus label to the sample. 10 labels are provide for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 8

1. Introduction

This incident involves a report of dead fish in the river Witham at Grantham. A map showing the Observers location is enclosed. The actual location is the road bridge at the junction of the A52 and Harrowby Rd.

2. Scene Setting

Once contact has been made with the investigating officer you must set the scene for them.

2.1 The river at this point is not particularly inviting looking, however it does contain good size fish. There are dead and dying fish visible on the surface of the river either side of the road bridge and further along the the river towards the town centre, adjacent to allotments.

3. Provision of Samples

In the event of samples being taken you will need to identify them for the laboratory by afixing Exercise Erebus labels. 10 labels are provide for your use.

EXERCISE EREBUS
OBSERVER INSTRUCTIONS FOR INCIDENT 9

1. Introduction

This incident involves reports of dead fish in the river West Glen at Greatford. A map of the Observer location is enclosed. You will be located at the sluice outside Greatford Hall.

2. Scene Setting

- 2.1 Once contact has been made with the investigating officer you will need to set the scene for them.
- 2.2 The river passes through the grounds of Greatford Hall. In the retained water behind the sluice there are a number of dead fish. The sluice is operating and water is in the Greatfod Cut, on the other side of the road from the sluice. Sheep near this water appear to be unwell, some have vomited.

3. Provision of Samples

If samples are taken you will need to identify them for the laboratory by affixing Exercise Erebus labels to the samples. 10 labels are supplied for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 10

1. Introduction

This incident involves reports of dead fish in the river Welland at West Deeping. A map showing the observer location is enclosed. You will be located at the first road bridge on the south of West Deeping.

2. Scene Setting

2.1 Once contact has been made with the investigating officer you will need to set the scene for them.

2.2 The river is fairly small and is heavily overgrown with weeds and waterplants in many places at this location it is clear under the road bridge and in isolated stretches. There are many dead, small fish on either side of the bridge and upstream of the bridge.

3. Provision of samples

If samples are taken you will need to identify them for the laboratory by affixing an Exercise Erebus label to the sample. 10 labels are enclosed for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 11

1. Introduction

This incident involves deployment of staff and equipment to carry out aeration of the River Welland and a simulated fish rescue at Crowland. A map of the observer location is enclosed. You will be located adjacent to the road bridge opposite the water tower at the Bridge Inn.

2. Scene Setting

2.1 Once contact has been made with the investigating officer you must set the scene for them.

2.2 This stretch of the River Welland is very heavily fished and is well known for its large hauls of Bream.

At the road bridge opposite the Bridge Inn a farmer (Mr Tip) has lost a tanker of pig slurry into the river. Fish near to the site are in obvious distress. The river is discoloured and this pollution is spreading downstream.

The dissolved Oxygen level (DO) is dropping .

2.4 You need to instruct the attending officer that the following actions will be required:

Aeration equipment, 2 units needs to be deployed.

A simulated fish rescue must be staged.

Plans for the removal of the trailer and its load need to be produced.

3. Provision of Samples

Samples will not be required from this site.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 12

1. Introduction

This incident involves reports of dead fish in the River Delph at Welney. A map showing the Observer location is enclosed. You will be located at the Lamb and Flag pub, car park adjacent at Welney, Grid Ref. TL 528937.

2. Scene Setting

2.1 Once contact has been made with the investigating officer the Observer must set the scene for them.

2.2 The river is heavily fished at this location. There are dead fish on the surface both upstream and downstream of the road bridge. There are no dead fish above the rail bridge upstream of Welney.

3. Provision of Samples

If samples are taken you must identify them for the laboratory by affixing labels to the sample. 10 labels are supplied for your use.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 13

1. Introduction

This incident involves reports of dead fish in the River Lark at Fornham All Saints. A map showing Observer location is enclosed. You will be located at the bridge over the river adjacent to the golf course.

2. Scene Setting

2.1 After contact has been made with the investigating officer you will need to set the scene for them.

2.2 The river flows through a golf course and country club after passing through Bury St. Edmunds. Public footpaths along the river are well used. Many members of the public are concerned about the large number of fish obviously in distress near the road. Along the footpath into Bury St. Edmunds there are many dead fish.

3. Provision of Samples.

If samples are taken you will need to identify them by affixing an Exercise Erebus label to the sample. 10 labels are provided for this purpose.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 14

1. The observers instructions will be supplied by CWC.

EXERCISE EREBUS
OBSERVERS INSTRUCTIONS FOR INCIDENT 15.

1. This scenario is intended to be a desk top exercise only. If an Observer is involved they will be briefed by Leicestershire County Council Emergency Planning Department.

EXERCISE EREBUS
INSTRUCTIONS FOR REGIONAL LABORATORY STAFF

1. Introduction.

During Exercise Erebus samples may be received in the laboratory for analysis. The bottles will be identifiable by a label, marked " For Exercise Erebus Purposes Only ".

2. Action on receipt of Exercise Erebus samples.

Any sample arriving in the laboratory is to be separated from the normal batch of samples before opening the bottle.

Record the date and time of receipt of the sample bottle and then telephone; Angela Wallis on extension 4445 and inform her that you have received a sample for Exercise Erebus.

Angela will contact you and provide a replacement sample for the bottle you have received, or remove the sample if not required for analysis.

This second sample is the item requiring analysis.

3. Safety and precautions

The samples which are supplied for analysis WILL BE CONTAMINATED.

You will need to carry out all your normal safety procedures when handling these materials.

EXERCISE EREBUS
NRA ANGLIAN REGION

FOR EXERCISE EREBUS PURPOSES ONLY

EXERCISE EREBUS

EXERCISE DIRECTIVE NO.1

Exercise Date/Time = Real Date/Time

The following information with respect to Exercise Erebus is issued herewith:

- Exercise Directory (1 sheet)
- Exercise Ground Rules (1 sheet)

For the attention of the following NRA personnel (or their deputies):

- Area Environmental Managers
- Area Operations Managers
- Area Duty Officers (Pollution)
- District Quality Officers
- District Engineers
- Regional Managers
- Regional Duty Officers
- H.O. Directors.

The above personnel should disseminate this directive as necessary.

Please note: NO PRIOR WARNING WILL BE GIVEN BEFORE THE START OF EXERCISE EREBUS

THIS MESSAGE IS FOR EXERCISE EREBUS PURPOSES ONLY

EXERCISE EREBUS

NRA ANGLIAN REGION

FOR EXERCISE EREBUS PURPOSES ONLY

Exercise Directive No.2

Exercise Date/Time = Real Date/Time

Exercise Conclusion

Exercise Erebus will be concluding shortly !.

You now have 1 Hour to finalise plans and to record your next steps on paper.

Record your observations and any comments in the form of a summary of your involvement during the exercise.

Return these plans and your observations/comments with your completed log sheets to Andrew Hunter Blair, Regional Co-ordinator at Regional HQ.

For the attention of the following NRA personnel (or their deputies):

- Area Environmental Managers
- Area Operations Managers
- Area Duty Officers (Pollution)
- District Quality Officers
- District Engineers
- Regional Managers
- Regional Duty Officers
- H.O. Directors.

The above personnel should disseminate this directive as necessary.

THIS MESSAGE IS FOR EXERCISE EREBUS PURPOSES ONLY

EXERCISE EREBUS
NRA ANGLIAN REGION

FOR EXERCISE EREBUS PURPOSES ONLY

EXERCISE EREBUS

EXERCISE DIRECTIVE NO.3

Exercise Date/Time = Real Date/Time

Exercise Final Stand Down.

Exercise Erebus is now complete. Thank you for your co-operation.

All NRA logs should be collated and returned to Andrew Hunter Blair, Regional Co-ordinator, Kingfisher House by 21/09/92 latest.

For the attention of the following NRA personnel (or their deputies):

- Area Environmental Managers
- Area Operations Managers
- Area Duty Officers (Pollution)
- District Quality Officers
- District Engineers
- Regional Managers
- Regional Duty Officers
- H.O. Directors.

The above personnel should disseminate this directive as necessary.

THIS MESSAGE IS FOR EXERCISE EREBUS PURPOSES ONLY

EXERCISE EREBUS
MEMORANDUM

From .Clive .Mason
.Acting RGM.....

To .All Anglian Region.....
.Staff & Manual Employees...

Subject: EXERCISE EREBUS

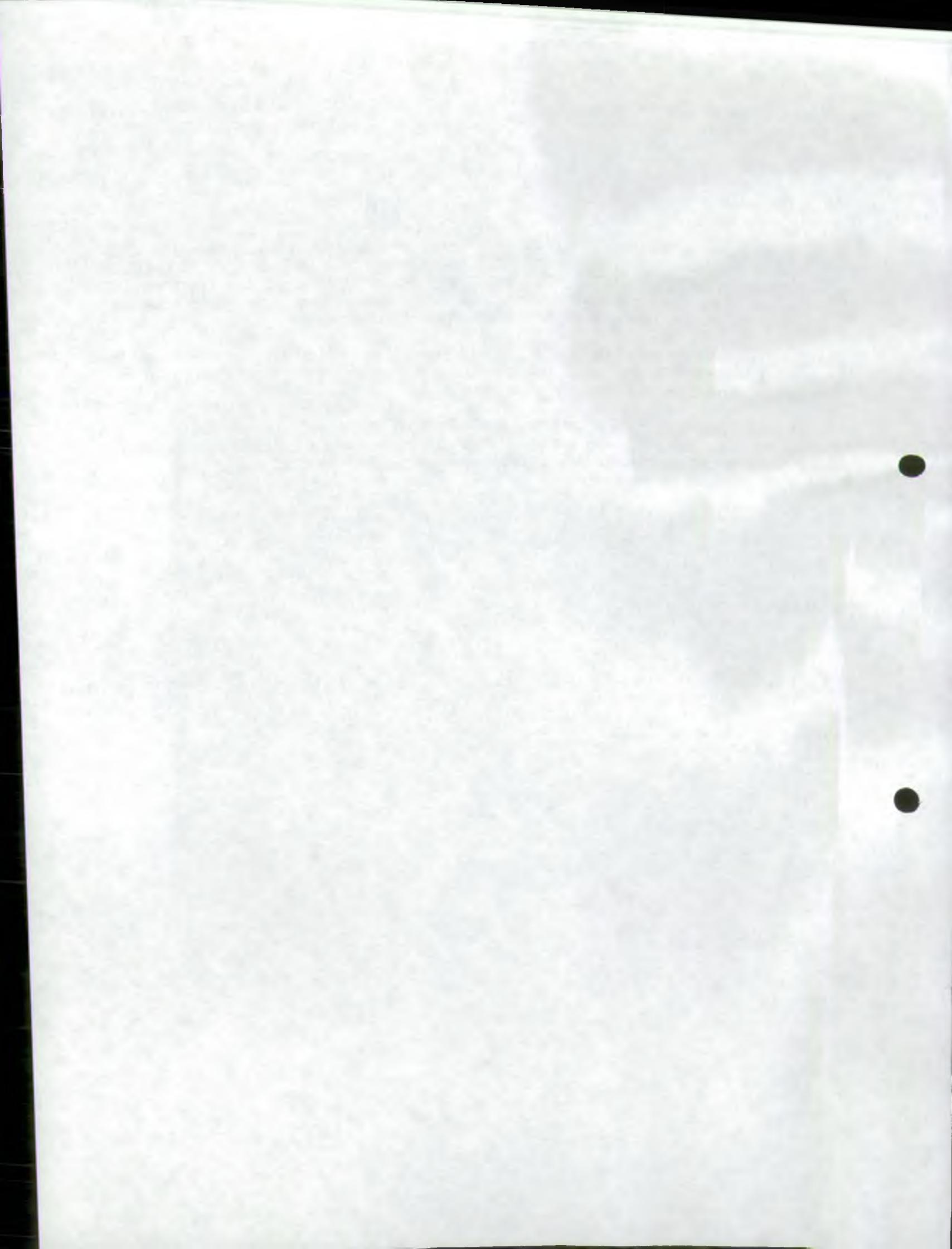
Date:

I am giving you advance notice of an emergency exercise, called Exercise Erebus, which will be held in the region during September 1992, NO PRIOR WARNING OF THE COMMENCEMENT OF THE EXERCISE WILL BE GIVEN. You may be involved in the exercise and if you are, that involvement will take precedence over any other work on which you might be engaged, subject to any real emergency work.

Further information and ground rules will be issued prior to the exercise. When you receive them please read them carefully to ensure that they are fully understood and that you comply with them.

Emergencies can happen at any time and often in the most unexpected circumstances. The only way to ensure we are prepared is to test our existing procedures and incorporate the lessons we learn for the real event.

Andrew Hunter Blair
Regional Co-ordinator



EXERCISE EREBUS

MEMORANDUM

Confidential

From..Andrew Hunter Blair.....
..Regional Co-ordinator....

To Chief Executive.....
Dr. K. Bond D.of Ops.....
Head Office Directors.....
RGM Severn-Trent.....
RGM Yorkshire.....
NEC Head Office.....

Subect: EXERCISE EREBUS

Date:

I am giving you advance notice of an emergency exercise, called Exercise Erebus which will take place in Anglian Region during September 1992, NO PRIOR WARNING OF THE COMMENCEMENT OF THE EXERCISE WILL BE GIVEN. Our staff and manuals have been instructed that if they become involved in the exercise, that involvement will take precedence over any other work, other than real emergency work.

Further information and ground rules will be issued during August. These ground rules will state, " all contact within the NRA shall be made as procedures dictate". This implies contact may be made with Head Office. It is for this reason that I am informing you of the exercise.

I will ensure that you receive a copy of the ground rules and any further information during August.

This exercise will involve contact with many other organisations in Anglian Region and with Severn-Trent Region. All the involved organisations have been included in the planning stages of this exercise.

Andrew Hunter Blair
Regional Co-ordinator

CC. C. Mason Acting RGM Anglian Region.





ORGANOCHLORINE INSECTICIDE

ACTIVE INGREDIENT(S)	Endosulfan 378 g/litre (35% w/w). Technical a.i.
MAIN SOLVENTS	Xylene.
FORMULATION TYPE	Orange/brown emulsifiable concentrate.
HAZARD SYMBOL	TOXIC.
RISK PHRASES	TOXIC if swallowed. HARMFUL in contact with skin. FLAMMABLE.

OCCUPATIONAL EXPOSURE STANDARDS

	Long-term exposure limit (8-hour TWA reference period)		Short-term exposure limit (10-minute reference period)	
	ppm	mg m ³	ppm	mg m ³
endosulfan	-	0.1	-	0.3
xylene	100	435	150	650

LEGISLATION

The COSHH Regulations and The Poisons act applies to Thiodan 35 EC. Endosulfan is a Part II Poison.

POISONING SYMPTOMS

Accidental over-exposure may result in the following symptoms: Headache, dizziness, disorientation, abdominal cramps and fainting. Convulsions and unconsciousness can occur after exposure to higher doses of this insecticide. The skin is an important route of absorption.

FIRST AID

When applying first aid always use personal protective equipment (PPE) if you are likely to be contaminated by contact with the person you are giving aid to. STOP the patient working and remove to fresh air away from the source of contamination. Keep the patient calm and warm and at REST. Keep respiratory tract clear.

Skin Contact: Remove contaminated clothing and wash affected parts of the body with soap and water thoroughly until all material has been removed, preferably in flowing water. Obtain medical aid if symptoms occur.

Eye Contact: Flush contaminated eyes with a gentle jet of clean water for 10-15 minutes and cover with a sterile dressing.

Refer for medical assessment. If a doctor is not available quickly take the patient to a hospital casualty department. Show the product leaflet or label, or at least the name of the chemical the patient has been using. At first signs of respiratory failure, start artificial respiration.

GUIDE TO PHYSICIAN

Mode of Action: Endosulfan is a central nervous system stimulant leading to convulsions. It is rapidly metabolised and its metabolites are excreted in the urine and faeces. It does not persist in the tissues to any significant extent.

Treatment: This is symptomatic and aimed at controlling convulsions and restoring and maintaining respiration. If the pesticide has been ingested, carry out gastric lavage if within 20 minutes of ingestion, with laryngoscopic control. This should be performed with 2-4 litres of water followed by saline purgatives (30 g sodium sulphate in 250 ml of water). Barbiturates (preferably phenobarbitone or pentobarbitone) or Diazepam should be given I.M. or I.V. in sufficient dosage to control restlessness or convulsions. Mechanical respiratory assistance with oxygen may be required. Maintenance of pulmonary ventilation may require intubation.

Contra-Indications: These are oily purgatives, adrenaline and other adrenergic drugs and central nervous system stimulants of all types.

See over

B.1

Hoechst 

THIODAN 35 EC ^{P. 3/3}

(PROMARK)

ORGANOCHLORINE INSECTICIDE

FIRE HAZARD

FLAMMABLE (Flashpoint = 43 °C). Use CO₂ or dry powder fire extinguishers. Wear breathing apparatus. The substance is a danger to ground water. Fires should be treated by measures which will not dilute the product and run into drains, ditches or other water courses.

SPILLAGE HAZARD

Wear appropriate PPE (see Precautions). Absorb spillage onto a dry material such as sand, sawdust or soil and place in an empty container. Seal the container and clearly label with the product name and the word 'TOXIC'. Arrange for safe disposal by a toxic waste contractor. Decontaminate floor area with a 10% solution of washing soda and then wash clean with water. Prevent washings getting into drains, ditches or other water courses.

STORAGE & PACKAGING

Individual Pack Size/Description:	1.0 litre P.E.T. bottle
Trade Outer - Number of Packs:	12
- Gross weight:	14 kg
Pallet Size:	40 x 12 x 1.0 litre
Maximum Stacking - Outers/Pallet:	4
- Pallets	2

TRANSPORT CLASSIFICATION

UN NO. 2995 IMDG CLASS: 6.1 PACKING GROUP: II
MARINE POLLUTANT

MAFF No. 02123

CAUTION. This substance is poisonous. The inhalation of its vapour, mist, spray or dust may have harmful consequences. It may also be dangerous to let it come into contact with skin or clothing.

SAFETY PRECAUTIONS

WEAR SUITABLE PROTECTIVE CLOTHING, SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION as specified below.

Opening container, diluting, mixing, filling machine, washing out sprayer, container and equipment after use and adjusting apparatus after using	Spraying any ground crop	Handling hops sprayed within the previous 4 days
A COVERALL FACESHIELD RUBBER APRON RUBBER BOOTS AND SUITABLE PROTECTIVE GLOVES*	A COVERALL FACESHIELD HOOD RUBBER BOOTS AND SUITABLE PROTECTIVE GLOVES*	SUITABLE PROTECTIVE GLOVES*

* Nitrile, Neoprene or Vicon synthetic gloves.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the inside of gloves.

TAKE OFF IMMEDIATELY all contaminated clothing.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH SPLASHES from skin or eyes immediately.

AVOID ALL CONTACT BY MOUTH.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking and after work.

DO NOT HARVEST CROPS FOR HUMAN OR ANIMAL CONSUMPTION FOR AT LEAST 3 WEEKS AFTER LAST APPLICATION.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

KEEP UNPROTECTED PERSONS OUT of treated areas for at least one day.

DANGEROUS TO LIVESTOCK. Keep all livestock out of treated areas for at least three weeks.

HARMFUL TO BEES. Do not apply at flowering stage. Keep down flowering weeds.

DANGEROUS TO FISH. Do not contaminate ponds, waterways, or ditches with chemical or used container.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place under lock and key.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.

DO NOT RE-USE THIS CONTAINER for any purpose whatsoever.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible)

For further safety advice during office hours contact:

HOECHST UK LIMITED,

AGRICULTURE DIVISION

East Winch Hall, East Winch,

King's Lynn, Norfolk, PE32 1HN

Telephone: King's Lynn (0553) 841581

For 24 hour emergency information contact:

Hoechst UK Limited

Telephone: 081-570-7712

Hoechst



January 1991

[DOC #] 21948 [E.A.C.] ***

[product name]
ENDOSULFAN FORMULATIONS
ENDOSULFAN

[S.I.N.]	[UN HAZARD]	[ADR/RID]	[TREM CARD]
2761	6.1	66	61G53c
[IMDG]	[NFPA]		
6221	***		

[protection]
-CHEMICAL PROTECTION SUIT, INCLUDING B.A.

[hazards]
-TOXIC
-CAN BE ABSORBED THROUGH SKIN
-GIVES OFF TOXIC OR IRRITANT FUMES IN A FIRE - KEEP UPWIND
-PESTICIDE
-SEVERE MARINE POLLUTANT

[form]
SOLID, BROWN, CRYSTALS, INSOLUBLE IN WATER

[precautions]
-AVOID ANY PERSONAL CONTACT
-CONTAIN SPILLAGE BY ANY MEANS AVAILABLE
-SWEEP OR SHOVEL UP SPILLED SUBSTANCE & REMOVE TO A SAFE PLACE

[fire]
-NON-FLAMMABLE

[DOC #] 21948 [E.A.C.] ***

.....
[product name]
ENDOSULFAN FORMULATIONS
ENDOSULFAN
.....

[company names include]

.....
[decontamination]

- REMOVE BULK OF MATERIAL, WASH WITH COPIOUS AMOUNTS OF WATER/DETERGENT
- INSPECT THOROUGHLY AFTER DECONTAMINATION AND BEFORE REUSE; SEEK SPECIALIST ADVICE AS NECESSARY

.....
[FIRST AID]

- Remove contaminated clothing immediately and wash affected skin with soap and water.
- Induce vomiting if a person is suspected to have swallowed the substance, but only if he is conscious.
- If substance has got into the eyes, immediately wash out with plenty of water for several minutes.
- Seek medical treatment when anyone has symptoms apparently due to inhalation, swallowing or contact with skin or eyes. Even if there are no symptoms resulting from such exposure send to a doctor.
- Persons who have inhaled the fumes produced in a fire may not show immediate symptoms, they must lie down and keep quite still and should be taken to a doctor. Patient should be kept under medical observation for at least 48 hours.

[DOC #] 21948 [E.A.C.] ***

.....
[product name]

ENDOSULFAN FORMULATIONS

ENDOSULFAN

.....
[ADR/RID]

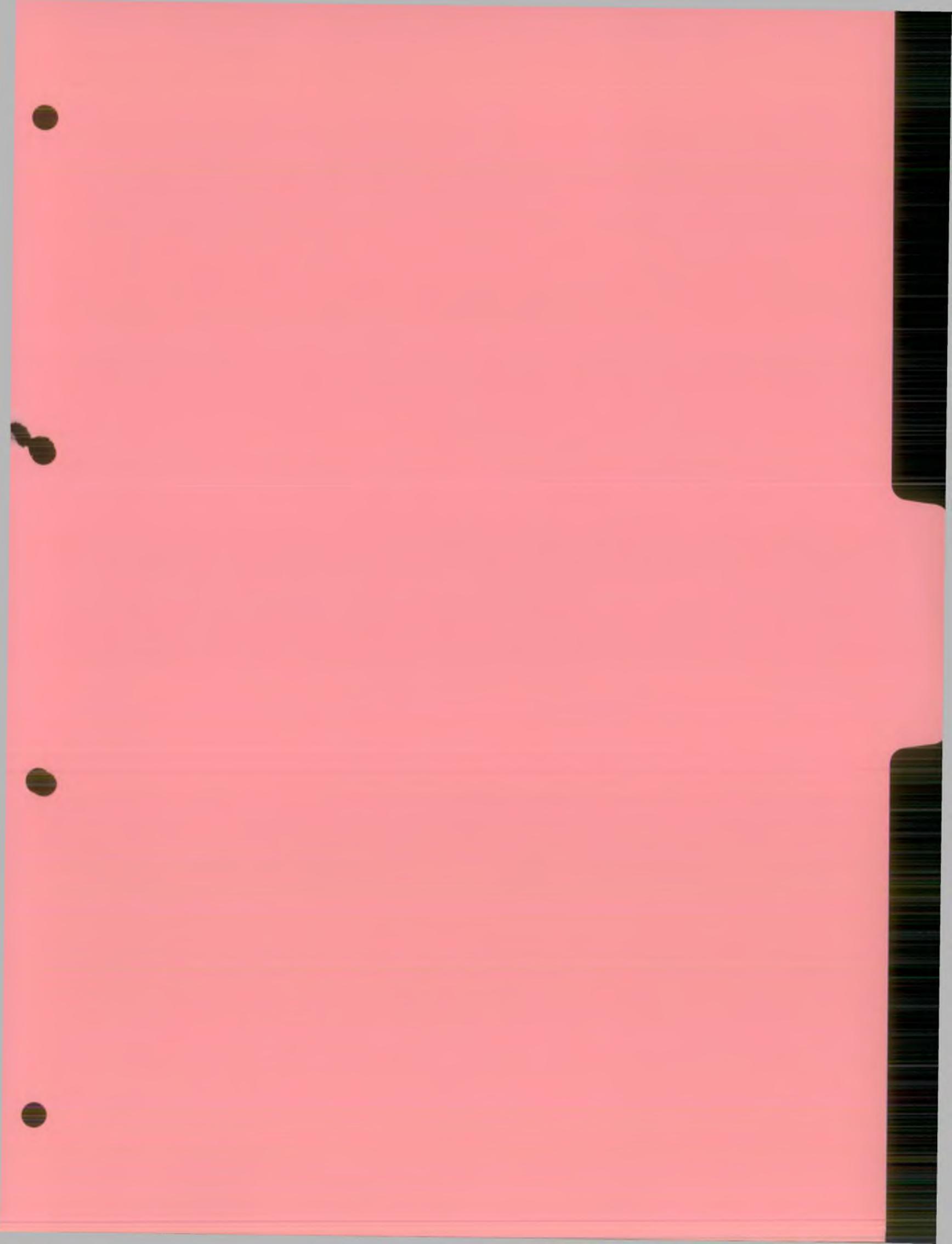
-66 HIGHLY TOXIC SUBSTANCE

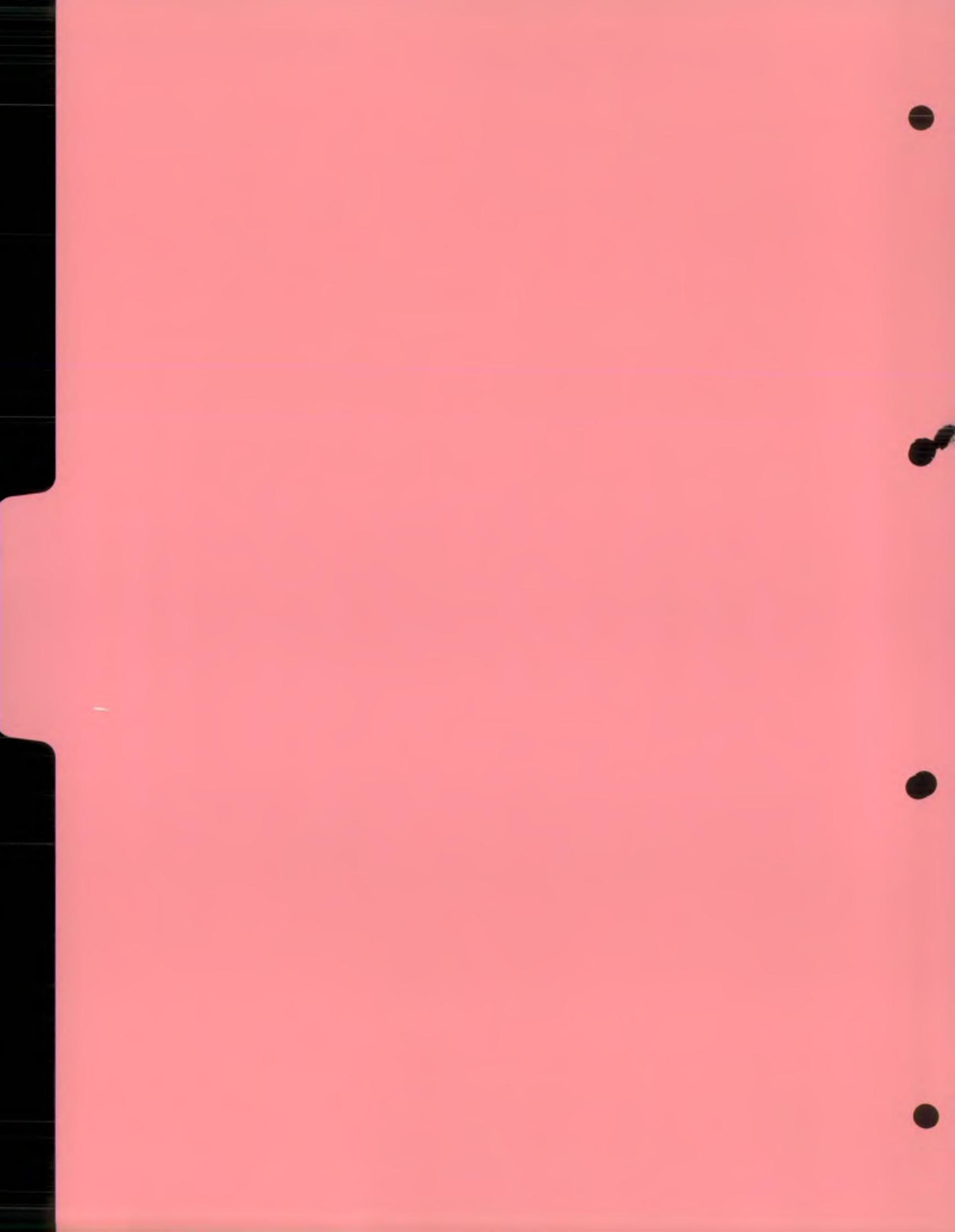
.....
[E.A.C.]

.....
[TREM CARD GROUP TEXT TITLE]

-HARMFUL SOLID SUBSTANCES AND PREPARATIONS USED AS PESTICIDES
[OTHER THAN ORGANO-PHOSPHORUS COMPOUNDS AND CARBAMATES]

.....
[NFPA]



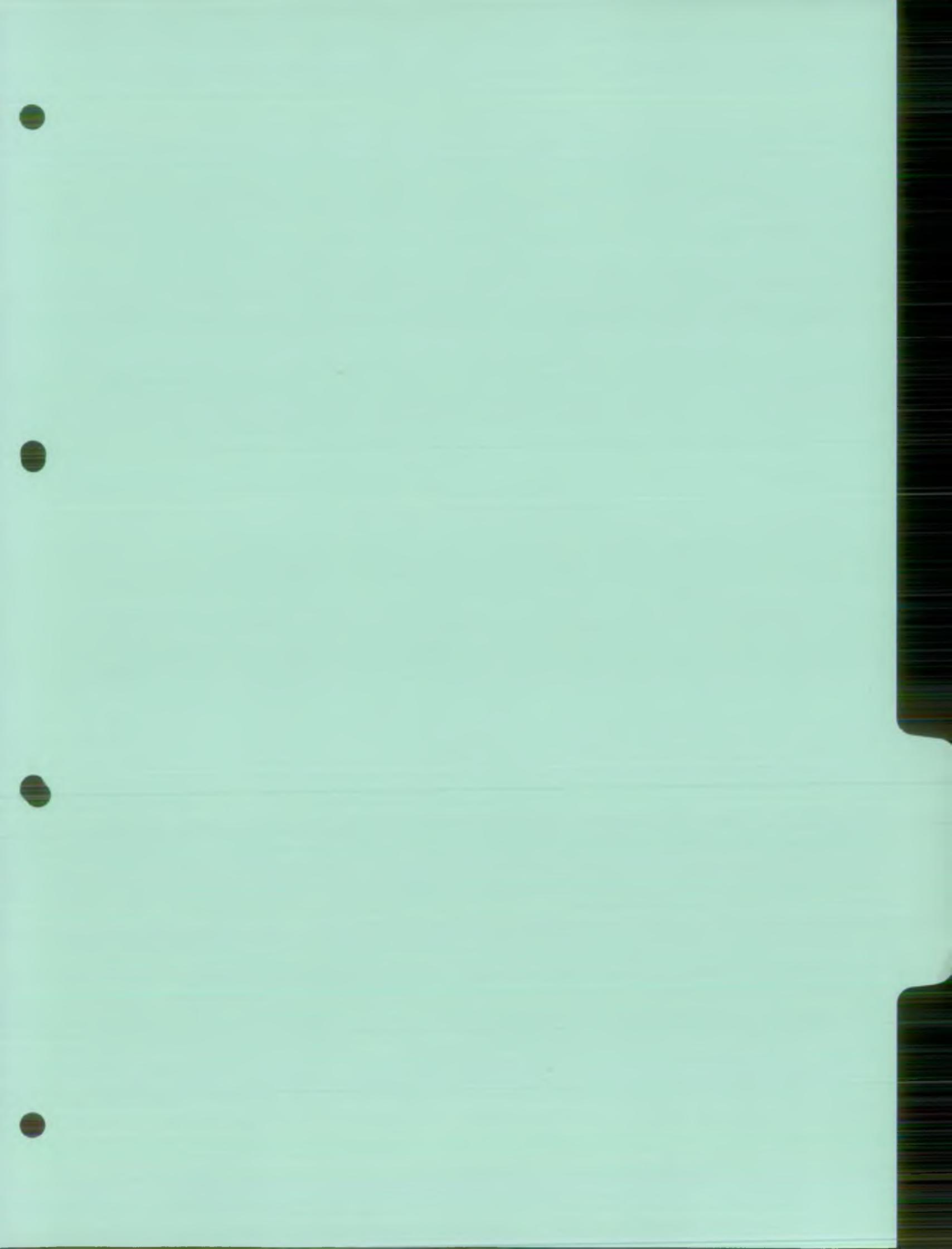


Average Discharges.

River	Location	Station	NGR	C/A	Aug mm	Aug M3/s
Gipping	Ipswich	Bramford	TM127465	298.000	3.5	.389
Gipping	Stowmarket	Stowmarket	TM058578	128.900	3.7	.178
Sapiston	Morton	Euston	TL896791	205.900	3.8	.292
Lark	Bury St Edm	Fornham St	NTL847672	110.200	3.5	.144
Kennet	Kennet	Beck Bridge	TL662733	101.800	2.8	.106
Cam	Waterbeach	Bottisham	TL508657	803.000	6.0	1.784
Nene	Peterborough	Orton	TL166972	1634.300	6.1	3.722
Welland	Mkt Deeping	Tallington	TF095078	717.400	7.6	2.036
W. Glen	Essendine	King Street	TF109106	341.900	.3	.038
Witham	Grantham	Saltersford	SK927335	126.100	8.6	.405

Discharges are calculated for the full record for each site
This is for different periods.

Aug TCHD	Sep mm	Sep M3/s	Sep TCHD	Oct mm	Oct M3/s	Oct TCHD
33.645	3.2	.368	31.787	6.2	.690	59.600
15.385	4.5	.224	19.335	8.0	.385	33.265
25.239	3.5	.278	24.022	5.2	.400	34.538
12.442	2.1	.089	7.714	5.9	.243	20.974
9.195	1.9	.075	6.447	3.3	.125	10.837
154.124	5.6	1.735	149.893	7.0	2.109	182.229
321.588	5.3	3.342	288.726	8.0	4.881	421.755
175.879	6.1	1.688	145.871	8.3	2.223	192.078
3.309	.2	.026	2.279	.7	.089	7.720
34.983	6.2	.302	26.061	8.8	.414	35.796





EXERCISE EREBUS
BRITISH RAIL ACTIVITY

1. Message Handling

British Rail (BR) will handle all Erebus messages through their York control centre this number is listed in the exercise directory.

2. Level of involvement

BR will be involved as a communications exercise only.

3. BR input

At 11:30 Hrs. BR will contact NRA Anglian ROC and report that material has been lost from one of their trains. This call will be made as the result of a simulated inspection of the train.

EXERCISE EREBUS
DETAILS OF RAILWAY CONTROL OFFICES

<u>Railway</u> <u>Control Office</u>	<u>Line(s) Controlled</u>	<u>Telephone No.</u>
Liverpool Street	Pakeston Quay to Ely (exclusive) Ely (exclusive) to Whittlesea	071-922-9139
Cambridge	Cambridge to Kings Lynn	0223-351370
York	Whittlesea to Leeds	0904-629157

EXERCISE BRIEFEXERCISE EREBUS ⁷ SEPTEMBER 19921. Exercise

Exercise Erebus is a pollution exercise organised by the National Rivers Authority Anglian Region also involving NRA Severn - Trent Region. Exercise play takes place on 7 September 1992.

2. Aims

The aims of the exercise are :

- to test the adequacy of NRA plans and procedures where a number of pollution incidents occur over a widespread area in a very short timescale.
- to resolve the NRA logistics of dealing with widespread pollution incidents.
- to exercise NRA relationships with other services.
- to test communication both within and without the NRA.
- to determine areas where follow up action is necessary.

3. Scenario

Exercise Erebus involves pollution of a number of water courses by Endosulphon, sold under the trade name Thiodan, UN Substance Identification Number 2761. The source of the pollution will be a "notional" container train 2200 hours (6 September) Parkeston Quay to Leeds. For exercise purposes a train list is attached also details of the routing and intermediate timings.

During the movement 5 x 250 litre drums of UN2761 will be lost from a container. The NRA responders will not be told that a train is involved and any release of information MUST be staged as in Clauses 4.1 and 4.2 below.

For exercise control purposes the Exercise Erebus manual contains details of a number of Rail Operational Controls including the Railfreight Distribution HQ Control and details of these are also attached.

I would stress however it is for the NRA responders to seek contact with BR until the time specified in Clause 4.2 below.

Contd.....

-2-

4. Events and BR involvement

4.1 0700-1130 hours

Exercise "play" starts at 0700 hours from which time NRA contacts will be alerted to the pollution of specified water courses. Those receiving notification will not be advised of any rail involvement. If Rail Operational Controls are requested for information after 0700 hours and before 1130 hours they are to say that they are not aware of any release problems involving a train but will investigate. If the question is asked again within this same period then the response must be that BR are continuing to investigate the problem.

In all cases details of messages received, the source and time must be recorded.

4.2 1130 hours - close of exercise 1530 hours

After 1130 hours those BR Operational Controls who have been requested for information by the NRA can advise those who have requested that information as follows :-

All messages must start and end with

"For Exercise Erehus purposes only"

"Our investigations have identified that the 2200 hours Parkstone Quay to Leeds container train which ran via the following route (details as attached) has lost 5 x 250 litre drums of UN 2761. Other drums in the container are damaged and part of their contents may have spilled onto the track. Exactly where this occurred is not known nor is the reason although enquiries are continuing".

Details of the notional train timings as attached can also be given if requested.

If no request for information has been received by 1130 hours then York Operational Control must advise NRA Anglian Region Control details as identified above. No other information is to be offered.

5. Exercise Limits

Although details of this exercise will be circulated to a number of directly involved Senior Managers also the British Transport Police and Director, Safety it is not intended that any action be taken other than as identified in Clause 4.

6. Feedback

Would Rail Operational Controls please send details of any messages received from and details given to exercise responders to P Abbott Standards Manager (Special Operations), Director, Operational Standards Room E303 Macmillan House, Paddington or fax details to 00-26682 following the exercise..

Attachments.

Paul Abbott
Standards Manager (Special
Operations)

13th August, 1992

4999996 11/08/92 18.32.35 00952 RETRIEVE EX 4499996 11/08/92 18.28.54 U0455 hbr
 ON N162 BY 999 FROM 1149200, TUESDAY 11/08/92
 TRAINING MODE N499996
 TRAIN LIST RESPONSE.

TRAIN LIST 1826 11/08/92

WTT NO	4E91C	TIME	2200	DATE	-----	
FROM	PARKSTNCT	TO	LEEDS FLT			
SO WGN NUMBER	CL	TFB	LH	WEIGHT	BF SPL HD DESIN R C HAZARD TAG	
	09	SETOUT	17184	LEEDS FLT		
	37055	X		105.000	50	
				105.000	TONNES	
					0 FT	
					50 POT AIR B/F	
	09	SETOUT	17184	LEEDS FLT		
01	601291	FGA	68	125.200	56 H 17184	001
DB 02	602625	FFA	134	163.500	64 DAN H 17184	2761FL 001
				18CONT.1234567		
				18-UNHAZ.2761		
				18-CLASS.8.1(A)		
WC 03	603228	FFA	200	220.400	94 HWC H 17184	001
WC 04	602200	FFA	265	277.300	125 HWC H 17184	001
WC 05	601380	FGA	336	334.700	156 HWC H 17184	001
06	601297	FGA	401	354.900	163 H 17184	001
07	603266	FFA	467	374.600	170 H 17184	001
08	603222	FFA	533	394.300	178 H 17184	001
09	603195	FFA	599	414.000	186 H 17184	001
10	601412	FGA	666	434.200	194 H 17184	001
WC 11	608084	FSA	734	491.720	229 HWC H 17184	17F
WC 12	608082	FSA	802	549.240	263 HWC H 17184	17F
DB 13	TIPH 93342	KFA	872	606.510	301 DAN 17184	1263FL 17F
				18-CONT.9560322		
				18-UNHAZ.1263		
				18-CLASS.3B		
DB 14	601057	FGA	939	663.910	327 DAN H 17184	1263FL 17F
				18-CONT.9560501		
				18-UNHAZ.1263		
				18-CLASS.3B		
WC 15	602671	FFA	1005	720.810	358 HWC H 17184	17F
WC 16	602862	FFA	1070	777.710	389 HWC H 17184	17F
WC 17	603174	FFA	1136	834.610	420 HWC H 17184	17F
WC 18	601754	FGA	1203	892.010	451 HWC H 17184	17F
WC 19	TIPH 93295	KFA	1273	949.280	488 HWC 17184	17F
WC 20	TIPH 93421	KFA	1343	1006.550	526 HWC 17184	17F
				18-16.CONTS		
				18-606.TONNES		
				901.550	TONNES	1343 FT
						476 POT AIR B/F

WARNING-WC-VEHICLE(S) ON TRAIN CONVEYING 8 FT 6 INCHES HIGH X 8 FT 2.5 INCHES WIDE CONTAINERS. ER29973-REQUIRED, SEE WM-F.6.

WARNING-DR-DANGEROUS GOODS ON TRAIN - SEE WM-F.6 AND NOTE COMMENTS BELOW. IN THE EVENT OF ANY OF THE WAGONS CONVEYING DANGEROUS GOODS ON THIS TRAIN BEING INVOLVED IN AN ACCIDENT, OR AFFECTED BY ANY DEFECT (BRAKES BINDING, LEAKING VALVES ETC.). ENSURE THAT INFORMATION IS PASSED TO THE CONTROL IN RESPECT OF THE SIX CHARACTER EMERGENCY CODE.

 * ADDITIONAL DANGEROUS GOODS INFORMATION FOR TRAIN CREW *
 * *****

* SQ OR CONTAINER	* WGN NUMBER	* TYP	* SPL HND	* EMERGENCY CODE	* D.G. CLASS	* HAZARDS
* 02	* 602625	* FFA	* DAN	* 2761FL	* 6.1	* HIGHLY TOXIC, TOXIC OR HARMFUL SUBSTANCE
* 13	* TTPH 93342	* KFA	* DAN	* 1263FL	* 3.B	* FLAMMABLE LIQUID
* 14	* 601057	* FGA	* DAN	* 1263FL	* 3.B	* SEE PREVIOUS WAGON/CONTAINER

* IN THE EVENT OF AN ACCIDENT, PROTECTION MUST BE CARRIED OUT IN ACCORDANCE WITH THE RULE BOOK.

* IN THE EVENT OF ANY OF THE WAGONS CONVEYING DANGEROUS GOODS ON THIS TRAIN BEING INVOLVED IN AN ACCIDENT OR AFFECTED BY ANY DEFECT, BRAKES BINDING, LEAKING VALVES, ETC., THE INFORMATION REQUIRED IN (I) TO (V) BELOW MUST BE GIVEN TO THE NEAREST SIGNALBOX PREFIXED BY THE WORDS "RAIL DANGEROUS GOODS EMERGENCY".

- (I) TRAIN REFERENCE NUMBER.
- (II) LOCATION OF THE INCIDENT AND TIME OF OCCURENCE.
- (III) WAGON TYPE(S) AND NUMBER(S), IF KNOWN, AND POSITION ON TRAIN.
- (IV) EMERGENCY CODE.
- (V) DETAILS OF THE INCIDENT AND WHETHER ANY MEMBERS OF THE PUBLIC OR THE STAFF ARE AFFECTED.

* YOUR PERSONAL SAFEGUARDS AT THE SITE OF AN INCIDENT.

- (A) KEEP WELL CLEAR ON THE WINDWARD SIDE, BUT AVOID LOW LYING AREAS.
- (B) DO NOT SMOKE, USE MATCHES OR POCKET LIGHTERS.
- (C) KEEP ALL NAKED LIGHTS OR LAMPS WELL AWAY.
- (D) KEEP ALL UNAUTHORISED PERSONS WELL CLEAR OF THE INCIDENT.
- (E) ON AN ELECTRIFIED LINE, IF NECESSARY, ARRANGE FOR THE CURRENT TO BE CUT OFF.

* IF POSSIBLE, WITHOUT RISK OF INJURY, ISOLATE THE WAGONS INVOLVED FROM THE REST OF THE TRAIN.

* IF AFFECTED WASH EYES WITH PLENTY OF WATER. REMOVE CONTAMINATED CLOTHING, WASH ANY OTHER AFFECTED PARTS OF THE BODY WITH PLENTY OF WATER (FOR THOSE SUBSTANCES WHICH REACT DANGEROUSLY WITH WATER, PLEASE NOTE CONTAMINATION WITH THE PRODUCT WOULD BE CONSIDERED A SMALL QUANTITY WHICH CAN SAFELY BE WASHED OFF WITH PLENTY OF WATER) AND OBTAIN MEDICAL ATTENTION QUICKLY.

 TRAIN LIST ACCEPTED SEE WH P6 C2/3,C3/7.

THE RULE BOOK SECTION H CLAUSE 4.1.1 CARRIED OUT AND TRAIN IN GOOD ORDER TO PROCEED

PREPARED BY
 ISSUED AT IPSWICH/D

SIGNED DEPOT
 SUPER VALIDATION

GRADE

AUTHORISED
 MAX LOAD 2000 TNS
 OR : -
 NUMBER OF WAGONS 0
 BRAKE FORCE TYPE F
 FOR ACTUAL LOAD- 0 TNS
 R/A 9
 LENGTH LIMIT 0070 SLU
 LOCO CLASS 37

ACTUAL
 1007 TNS ACTUAL LOAD
 20 NUMBER OF WAGONS
 TNS BRAKE FORCE AVAILABLE(AIR)
 5 HIGHEST R/A IN TRAIN
 1343 J FEET ACT LENGTH 64 SLU
 75 MPH MAX TRAIN SPEED
 0 PIPED VEH IN POTENTIAL
 BRAKED PORTION OF TRAIN

TRAIN SINGLE PIPED FROM -----

J = EXCL. POWER LOCO(S)

END

EXERCISE EREBUS
NOTIONAL TIMINGS
FOR TRAIN 4E91

	<u>Arr</u>	<u>Pass</u>	<u>Dep</u>
Parkeston Quay FLT			22.00
Ipswich Yard	22.41		23.15
Stowmarket		23.32	
Bury St.Edmunds		23.49	
Ely		00.20	
March	00.45		00.47
Peterborough		01.23	
Grantham		01.58	
Newark		02.27	
Retford		02.43	
Doncaster	02.59		03.01
South Emsall		03.33	
Normanton		03.52	
Woodsford		04.10	
Leeds FLT	04.26		