

APPENDIX

NOTTINGHAMSHIRE COUNTY COUNCIL

**POLICY AND PROCEDURE FOR INSPECTION OF
DISUSED COLLIERY AND QUARRY SPOIL TIPS**

**Landscape and Reclamation Team
Nottinghamshire County Council Environment**

September 2004

PART 1 - POLICY

The Policy establishes a standard of practice and attainment so far as all technical and associated matters and inspections and reports are concerned in relation to disused tips and areas of unstable ground inspected by Nottinghamshire County Council.

1. LEGISLATIVE CONTEXT

1.1 General Legislative Context

In England and Wales legislation is contained in general terms by Acts of Parliament which set out the general areas addressed by the legislation, which are further refined by regulations which explain, extend or amend the parameters to which the relevant Act will apply.

A summary of legislation associated with mines and quarries is given below:-

- Town and Country Planning legislation controls the location, size and restoration requirements of these disused tips;
- spoil heaps and lagoons of liquid wastes at mines and quarries are subject to the Mines and Quarries (Tips) Act 1969 and the related 1971 Regulations, which lay down detailed requirements concerning their stability and safety;
- in the case of colliery spoil, changes contained in the Town and Country Planning Order 1995, which require the submission of a waste management scheme, together with new restoration obligations in the Coal Industry Act 1994, ensure that all future tipping is subject to proper planning control;
- new legislation in the Environment Act 1995 provides for an initial review and updating of all old mineral planning permissions, and the periodic review of all mineral planning permissions thereafter;
- whilst Environmental Protection Act 1990 governs and controls deposition and control of waste, mines and quarries are exempt from the Act

1.2 Mines and Quarries (Tips) Act 1969

The Mines and Quarries (Tips) Act 1969 confers functions, in Part II, upon local authorities for the purpose of ensuring that disused tips do not, by reason of instability, constitute a danger to members of the public.

- (a) Part II of the Act is concerned with disused tips. It enables local authorities to ensure that disused tips do not, by reason of instability, constitute a danger to members of the public.
- (b) A “disused” tip (as defined in the 1969 Act) is a tip that is neither an active tip nor a closed tip. By section 36(2), a disused tip is to be treated as unstable if, and only if, there is such a movement of the refuse that makes up the tip as to cause a significant increase in the area of land covered by the tip, or there is reasonable ground for believing that there is likely to be such movement. Circular 40.69 of the former Ministry of Housing and Local Government stresses the fact that provision of Part II of the Act does not enable a local authority to require the carrying out of works going beyond safety requirements, e.g. with a view to improving amenity.
- (c) The first step in Part II procedure is investigation, and a local authority may require the owner of a disused tip, or anyone who may be able to help, to produce relevant plans, records of work etc. Authorised representatives of the local authority may enter upon land normally after giving notice, but without notice in case of emergency, for the purpose of investigation and carrying out exploratory tests.
- (d) If a local authority considers that a disused tip is unstable, and for that reason constitutes, or is likely to constitute, a danger to members of the public, it has two courses of action available: (1) to serve notice requiring the owner of the tip to carry out specified remedial operations for ensuring the stability of the tip or (2) to carry out the remedial operations itself. The owner cannot be required to carry out operations unless they are on the tip itself, on the land on which the tip is situated, or on neighbouring land which he occupies or which he owns or leases: he cannot be required to do work on land over which he has no control. Copies of the notice have to be served by the local authority on various other people who have an interest in the matter, either because entry may be made on their land or because they may be called upon to contribute to the cost of the operations.
- (e) The owner of a disused tip, who has been served with a notice by a local authority requiring him to carry out remedial operations, may serve a counter-notice requiring the local authority to carry out the works itself. Alternatively, he and anyone else on whom a copy of the original notice was served, may apply to the court for the notice to be varied or cancelled on one or more of the following grounds:
 - (i) that there is no reasonable ground for believing that the tip is unstable or that, by reason of instability, the tip constitutes, or is likely to constitute a danger to members of the public;
 - (ii) that the remedial operations specified in the notice are more extensive than is necessary to secure the safety of members of the public;

- (iii) that the stability of the tip could be ensured by carrying out remedial operations different, in whole or in part, from those specified in the notice, and that the owner is prepared to undertake the alternative operations;
- (iv) that the owner or some other person had already begun, (or has entered into a contract with a third party to begin), operations different, in whole or in part, from the remedial operations specified in the notice and the alternative operations will ensure the stability of the tip;
- (v) that the time within which the remedial operations are to be carried out is not reasonably sufficient for the purpose;
- (vi) that there is some defect or error in, or in connection with, the notice.

This appeal procedure is not available where the local authority is to carry out the work, but the first two grounds of appeal, (with others), are available at a later stage – see paragraph 8 of this paper.

- (f) If the local authority decides to carry out the remedial operations itself, or is required to do so as mentioned in paragraph 5 of this paper, it must normally serve notice of its intention on the owner of the tip, specifying the nature and extent of the operations and or any consequential works of reinstatement, and serve copies of the notice on other interested parties. If, however, possible danger to members of the public requires the immediate carrying out of remedial operations, they may be started without notice first being served, but notice and copies of notices must be served as soon as reasonably practicable thereafter. The local authority is given necessary powers of entry, and may sell material removed from a tip in the course of operations, but must account for the proceeds of the sale.
- (g) The procedure for payment of the cost of remedial operations, etc. is somewhat involved. Basically, the owner of the disused tip is liable to meet the cost, but he may be able to obtain contribution from other people. Broadly, they are (a) anyone who was an owner or lessee of the land at any time within the preceding twelve years; (b) anyone who during that time used the tip for the deposit of spoil; and (c) anyone who during that time caused or contributed to the instability of the tip. If necessary, the owner can obtain a “contribution order” from the court, which should apportion the cost equitably among the parties concerned. Application for a contribution order must be made within the time limits prescribed in section 14(3).

- (h) Any contribution to be made pursuant to a contribution order will be specified in the order as a percentage of the total amount involved and appeal may subsequently be made to the court if the amount actually expended was greater than was reasonable. Where, however, the local authority undertakes the remedial operations, appeal lies at the time of demand for payment not only against the reasonableness of the expenditure actually incurred, but also on the question whether the operations were necessary at all or were excessive. That is a curious feature of the Act, because it could obviously be difficult to establish, after remedial operations had been completed, whether they had been necessary. That provision was presumably included in the Act because of the power of local authority to take immediate action to carry out remedial operations in case of emergency.
- (i) The foregoing is a brief account of Part II of the 1969 Act. A great deal of that Part, particularly the 2nd and 3rd Schedules to the Act, is concerned with the legal procedures involved, and it is outside the scope of this paper to examine them in detail.

The Mines and Quarries (Tips) Regulations 1971 sets out standards of maintenance, inspection and reports for tips associated with Mines and Quarries.

1.3 Further Best Practice

The former National Coal Board (Production) Codes and Rules, First Draft 1971, sets out statutory and additional former N.C.B. requirements for tips. This First Draft is still current.

This policy follows the former N.C.B. document guidelines in that although the 1971 Tips Regulations do not apply to disused tips, the same technical standards of maintenance, inspection and reports be observed for disused tips as for closed tips. In all cases particular attention must be paid to the maintenance, inspection and reporting in connection with drainage.

2. DISUSED TIPS IN NOTTINGHAMSHIRE

- 2.1 There are currently approximately 78 disused Part II spoil heaps in Nottinghamshire, ranging across the whole county.

The location and ownership is shown in Appendix 1.

3. POLICY OBJECTIVES

- 3.1 To carry out regular planned inspections, at suitable intervals, as considered necessary by the local authority to ensure compliance with the Mines and Quarries (Tips) 1969 Act.

- 3.2 To ensure, as far as possible, that the sites inspected do not constitute a danger to members of the public by reason of instability.
- 3.3 To take remedial action as outlined in the Act so that, as far as reasonable, the potential for movement, that may constitute a danger to members of the public for whatever reason, is minimised.
- 3.4 To provide adequate managerial, financial and staff resources to meet the above.

PART 2 – PROCEDURE

1. Regular Inspections

Disused tips must be inspected regularly by a Competent Person appointed by the Director of Environment Department, having due regard to experience and reliability. These inspections shall be at intervals based on the current classification of each tip inspected.

Each of the disused tips and areas of unstable ground is categorised into one of four risk factors as follows:-

Group 1: Remote from habitable property, unlikely to give risk to life or property and with no history of movement. (Inspected every 2 years)

Group 2: Stable with no history of movement but any movement may interfere with infrastructure, public footpaths, water courses etc. which, in turn, may adversely affect habitable properties. (Inspected every 12 months)

Group 3: Site with open tailings lagoons located in proximity to buildings, infrastructure, or watercourses etc. (Inspected every 6 months, supplemented by more frequent visits during period of heavy rainfall as considered necessary by the Competent Person)

Group 4: Site located in proximity to habitable property, watercourses etc. with known history of movement or obvious signs of instability. (Inspected every month.)

As a result of reclamation schemes, factory and housing development, major highway schemes, ground movement and other factors, the classification of a tip is likely to change over the years and it is important that the category into which each tip is placed is reviewed at least every year.

Revision of individual tip categorisation to be carried out by the Competent Person, as considered appropriate.

The Competent Person's report is submitted within two weeks of inspection. Detail requirements for an inspection are listed in Appendix 2.

In cases where inspection gives cause for immediate concern, the Managing Engineer shall be informed and a site inspection shall be undertaken by the Managing Engineer, with the Competent Person, at the earliest opportunity.

The appointed Competent Person should inform the landowner of his obligation to undertake, on his own initiative, for any works necessary to remedy minor defects.

The Managing Engineer must approve the action necessary to remedy all other reported defects and the urgency of such action.

2. Inspection of Adjacent Areas

It is insufficient to inspect the area of the tip alone. It is important that, at the discretion of the Competent Person, consideration is given to the possibility of a tip, not considered to present risk, becoming unstable as a result of the blockage of a watercourse remote from the tip body. The blockage may change the route of the watercourse and divert flow over the surface of the tip.

Where a site, in proximity to habitable property or areas frequented by the public, is located near to a watercourse, blockage of which could result in water being diverted over or into the tip, that watercourse should be inspected at least every 6 months. Also, where following receipt of a warning of heavy rainfall from the Meteorological Office, an inspection should be carried out 2-3 hours after commencement of that rainfall on a tip classified under Group 4.

3. Defects or Operations revealed by Inspection

The Competent Person must note in his report and record any defect or operation revealed by his inspection and, where relevant, notify the owner of the site and Managing Engineer.

The Competent Person must determine the action necessary to remedy every reported defect and the urgency of such action. He must ensure that the necessary action is taken and record that it has been taken. The Managing Engineer may consider monitoring the situation as necessary to ensure minimal risk to members of the public.

Where any major defect is revealed by an inspection of a disused tip, the Managing Engineer must be informed by the Competent Person and report every three months on the progress of action to remedy the defect.

The Competent Person must determine the extent, duration and legality of any operations being carried out on a disused tip that may either increase or decrease the risk factor applied to the tip during the period of operations and following the period of operations.

4. Baseline Reports

The Competent Person and Managing Engineer must arrange for the preparation of 'as built', baseline reports for sites included within the inspection regime. These will include the location of features that may no longer be discernable on site, but which may have a bearing on slope stability e.g. the location of filled silt lagoons. A comprehensive set of reports are to be completed by 2014.

6. Keeping of Reports, Plans, Sections and Records

All reports, plans, sections and records relating to the disused tips and areas of unstable ground inspected by the County Council must be kept at the office of the Authority.

7. Safety Policy

The Authority shall issue a written Risk Assessment for the personnel engaged on inspections. This document is given in Appendix 5.

8. Tip Safety Emergency Procedure

Where the Competent Person assesses a potential emergency situation, the set emergency procedure is to be followed. This document is given in Appendix 3.

9. Maintenance and Inspection Information

A current database of inspection information will be maintained within the Authority, containing the following:-

- tip locations, ownership etc.
- details of last and previous inspections
- other relevant information

10. Scope of Procedure

Inspections carried out under this procedure are not Health and Safety Inspections and are limited to the assessment of risk of slope instability only. More general Health and Safety hazards are addressed through separate Health and Safety inspections and risk assessments, which are undertaken for disused tips that form part of the authority's estate.

11. Summary

A flow chart summary of the procedure is given in Appendix 4.

NOTTINGHAMSHIRE COUNTY COUNCIL
ENVIRONMENT DEPARTMENT**Schedule of Part II Tips**

The tips listed below are disused and are subject to Part II of the Mines and Quarries (Tips) Act 1969

Ref.	Name of Tip	Ownership	Inspection Category Risk Number
1.	Annesley Old Tip	NCC	1
1a.	Annesley Newstead MPD5	Private	3
2.	Babbington-Babbington	Private	1
5.	Bentinck – North	Private	1
6.	Bentinck – South	NCC	2
7.	Bentinck – Far South	Private	3
7a.	Bentinck Opencast Void	Private	3
8.	Bestwood	NCC	2
9.	Bevercotes No 1 Tip	NCC	2
10.	Bevercotes No 2 Tip	NCC	2
11.	Bilthorpe No 1 Tip	NCC	2
11a.	Bilthorpe No. 2 Tip	U K Coal	2
12.	Blidworth No. 1	NCC	2
12a.	Blidworth No 2 Tip	NCC	2
13.	Brinsley	NCC	1
14.	Cossall	NCC	2
15.	Cotgrave A Site	NCC	2
15a.	Cotgrave B Site	NCC	2
16.	Cotgrave C Site	NCC	2
17.	Clipstone No 1 Tip	Newark & Sherwood DC	2
18.	Clipstone No 2 Tip	Newark & Sherwood DC	2
19.	Firbeck	NCC	2
20.	Gedling East & West	U K Coal	2
21.	Gedling Stoke Bardolph	U K Coal	2
22.	Gunthorpe Quarry Lagoons	Private	2
23.	Harworth No 1 Tip	U K Coal	2
24.	Harworth No 2 Tip (Part)	UK Coal	2
25.	High Park	Private	1
26.	Holly Hill	Ashfield DC	2

Ref.	Name of Tip	Ownership	Inspection Category Risk Number
27.	Hucknall 1	NCC	2
28.	Hucknall 2 Wigwam Lane	NCC	2
29.	Hucknall 2 New East	Private	2
30.	Kirkby-in-Ashfield North	NCC	2
31.	Kirkby-in-Ashfield South	NCC	2
32.	Kirkby-in-Ashfield West	NCC	2
33.	Langton Main Tip	Private	2
34.	Langton Small Tip	DoT	2
35.	Linby	NCC	2
36.	Mansfield No 1 Tip	Private	2
37.	Mansfield No 2 Tip	Welbeck Est	2
38.	Manton Old White A&B	NCC	2
39.	Manton Elkesley Lane D	NCC	2
39a	Manton Valley Tip E	NCC	2
40.	Manton North C	NCC	2
41.	Moorgreen Main Tip	Private	2
42.	Moorgreen Lagoon Site	Private	2
43.	New Hucknall	NCC	2
44.	New London	Private	1
45.	New Selston	NCC	2
46.	Newstead Far South	NCC	2
47.	Oakwood Grange	Private	1
48.	Pye Hill 1 Main Tip	NCC	2
49.	Pye Hill 1 Selston MH	NCC	2
50.	Pye Hill No 2	Private	2
51.	Rufford No 3 Tip	NCC	2
51a.	Rufford No 5 Tip	U K Coal	3
51b.	Rufford No 1 Tip	U K Coal	1
51c.	Rufford No 2 Tip	U K Coal	1
52.	Sherwood No 1 Tip	Private	2
53.	Sherwood No 2 Tip	NCC	2
54.	Silverhill No 1 Tip	NCC	2
54a.	Silverhill No 2 Tip	NCC	2
55.	Shireoaks	NCC	2
56.	Steetley	Private	2
57.	Sutton	Ashfield DC	2
58.	Trowell Moor	NCC	2
59.	Thoresby No 1 Tip	U K Coal	2
60.	Thoresby No 2 Tip (Part)	U K Coal	2
61.	Warsop Main	NCC & CA	2
62.	Watnall	NCC	2
63.	Welbeck No 1 Tip (Part)	U K Coal	2
63a.	Welbeck No 3	U K Coal	2

Ref.	Name of Tip	Ownership	Inspection Category Risk Number
64.	Ollerton No 1	NCC	2
65.	Ollerton No 2	NCC	2
66.	Ollerton No 4	NCC	2
67.	Shirebrook No 11/104	NCC	2
68.	Calverton No 8	CA	2
69.	Creswell No. 4	UK Coal	2

Note: 40 of the 78 Disused Tips listed above are in NCC ownership.

The above list is current as of September 2004, but will be subject to revision as sites are subsequently included or excluded.

OWNERSHIP	COLLIERY:	SPOIL HEAP REF:	INSPECTION CATEGORY GROUP NUMBER					
	NAME OF TIP:	GRID REF:						
WEATHER DURING INSPECTION:	ANY PARTS OF TIP EXCLUDED FROM INSPECTION?	PART ACTIVE/PART DISUSED <input type="checkbox"/> DISUSED <input type="checkbox"/>						
		DATE OF LAST REPORT:	DATE OF THIS INSPECTION:					
BEING RECLAIMED	PARTIALLY RECLAIMED	FULLY RECLAIMED	UNRECLAIMED	UNDER TENANCY				
Enter ✓ in appropriate box	No	Yes	New/ Worse		No	Yes	New/ Worse	
1. Any slumping, bulging, cracks or fissures, indicating movement of the tip?				6. Any seepage from tip?				
2. Any movement of foundation?				7. Are ditches adequate and satisfactory?				
3. Any erosion or undercutting of toe or slopes?				8. Are manhole covers secure?				
4. Any signs of burning?				9. Are culvert headwalls clear?				
5. Are lagoon draw-off and emergency overflow adequate and satisfactory?				10. Do sub-surface drains appear adequate and satisfactory?				
Comments on all entries in heavy-lined boxes:								
Details of any features giving cause for concern:								
Details of any maintenance or remedial work required:								
Details of any action taken by Competent Person:								
Signature of Inspecting Competent Person::				Counter signature (Group or Team Manager):				
Position:		Date:		Position:		Date:		

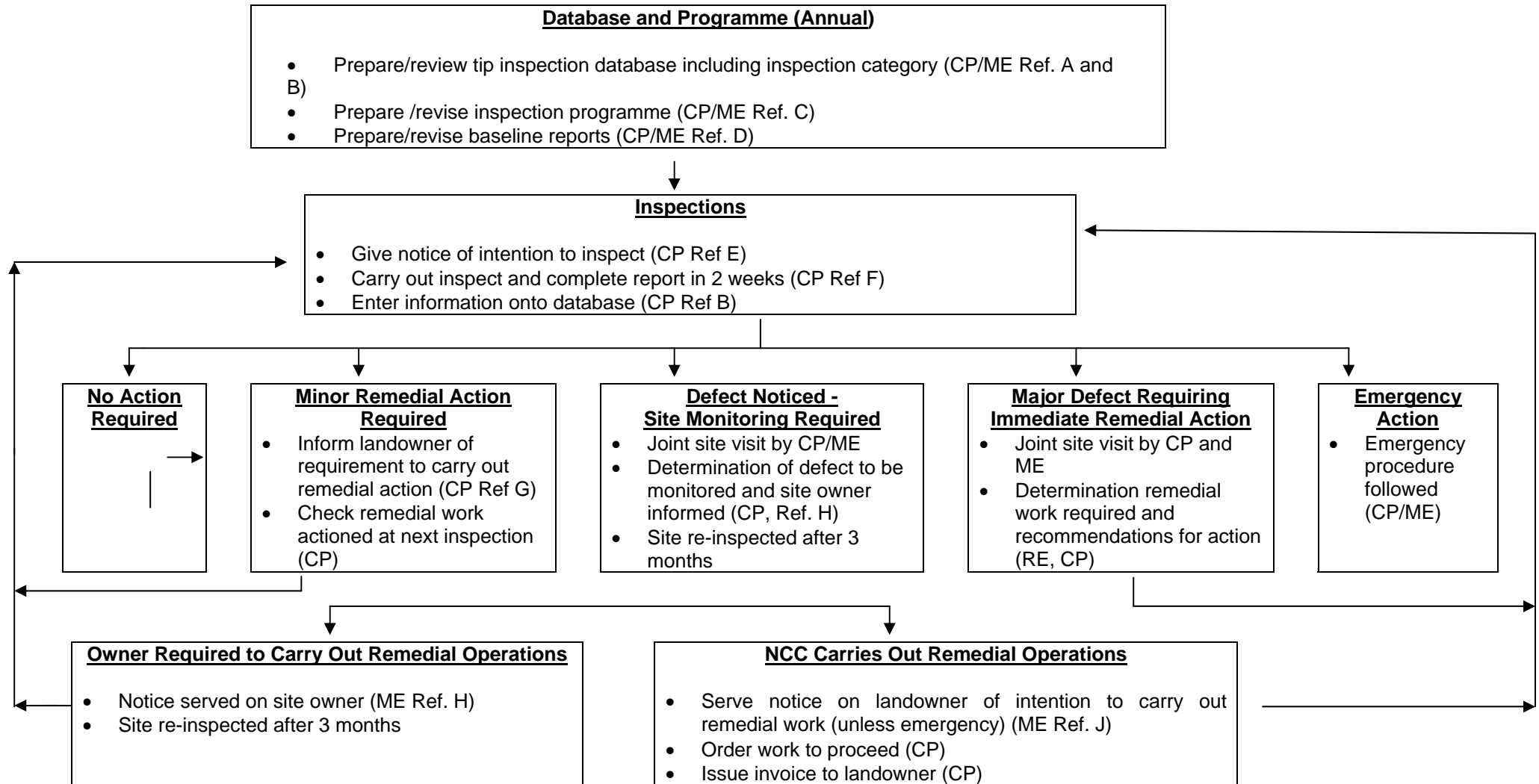
TIP SAFETY EMERGENCY PROCEDURE

This procedure to be initiated by the Managing Engineer, or Competent Person, following notification of increased degree of concern over stability of any Inspectory Category Group 1,2,3 or 4 tip:

1. Emergency Planning Officer to be informed of degree of concern over situation noted.
2. Emergency Planning Officer to inform Emergency Services of situation immediately.
3. Managing Engineer to assess situation on site with the Competent Person and inform Emergency Planning Officer whether to implement Emergency Plan or stand by.
4. If Emergency Plan implemented, identified staff to provide assistance as required on rota basis.

DISUSED TIP INSPECTION AND REMEDIAL ACTION PROCEDURE SUMMARY

Appendix 4



CP = Competent Person ME = Managing Engineer

Schedule of Procedural Documents

- A - Inspection Category
- B - Tip Database
- C - Inspection Programme Format
- D - Baseline report format
- E - Standard letter to site owner giving notice of inspection
- F - Inspection Tip Report Format
- G - Standard letter – Notification of need to carry out minor remedial work
- H - Standard notice to site owner for requirement remedial work to be carried out
- J - Standard notice to site owner intention of Authority to carry out remedial work

Definition of Roles

- | | |
|-------------------|--|
| Competent Person | shall mean either a Chartered Civil Engineer with a minimum of five years' relevant experience OR an Incorporated Civil Engineer with a minimum of ten years' relevant experience. |
| Managing Engineer | shall mean the supervising manager of the Competent Person. |



Operations/Activities covered by this assessment:		1 Tip Inspections and Site Visits				
Site Address/Location:		Various Disused Tips				
Persons considered at risk: (Note 1)		Reclamation Engineers/Tip Inspectors				
1.1	Hazards Considered (Note 2)	Existing Control Measures:(Note 3)	Risk Factor (Note 4)			Adequate Y/N (Note 5)
			Sev (S)	Like (L)	Risk (S x L)	
1.	Live traffic	<ul style="list-style-type: none"> Park car/van in safe location. Wear high visibility clothing. Stay on verge or footpath 	4	1	4	Y
2.	Rivers and other water courses greater than 150mm in depth,	<ul style="list-style-type: none"> Staff instructed not to enter watercourse. Inspections to be carried out from a safe position on the river bank. Return to office for advice/instruction if further access required. 	4	1	4	Y
3.	Other watercourses less than 150mm in depth,	<ul style="list-style-type: none"> Probe watercourse to prove depth and firm bed before entering. Only enter if absolutely necessary and watercourse is slow moving and invert is firm. Suitable boots to be worn. If in any doubt do not enter and return to bridge office for advice/instruction if further access required. 	1	1	1	Y
4.	Confined spaces	<ul style="list-style-type: none"> Staff instructed not to enter any confined space. Staff trained in confined space awareness. Return to bridge office for advice/instruction if further access required. 	4	1	4	Y
5.	Contact with contaminated water or materials	<ul style="list-style-type: none"> Wash hands if facilities are available. Wear appropriate PPE as necessary e.g. boots, rubber gloves. Cover any existing cut or scratch. Carry warning card on leptospirosis. Hepatitis A inoculation if considered necessary. 	3	1	3	Y
6.	Steep embankments, uneven ground, ditches and voids. Slipping/falling and lying injured and un-noticed on site	<ul style="list-style-type: none"> Correct footwear to be worn. If in doubt do not descend/ascend steep slopes/embankments. Return to office for advice/instruction if further access required. Take mobile phone and indicate destination and approximate time of return on office destination board. Phone in to report finished and going home if not returning to the office. Remind member of team taking message to amend destination board details. 	3	1	3	Y



7.	Hazards Considered (Note 2)	Existing Control Measures: (Note 3)	Risk Factor (Note 4)			Adequate Y/N (Note 5)
			Sev (S)	Like (L)	Risk (S x L)	
1.2	1.3 <u>Violence from the public</u>	<ul style="list-style-type: none"> Take mobile phone. Do not respond to verbal abuse. Seek refuge in car/van. Immediate phoning of police if threatened with attack. Report incident to office. 	3	1	3	Y
1.4	1.5 <u>Bites /stings</u>	<ul style="list-style-type: none"> Check staff not susceptible to allergic reactions. Carry appropriate emergency medication if considered necessary 	4	1	4	Y
1.6	Sharp objects – needle sticks, barbed wire	<ul style="list-style-type: none"> Advice staff to be aware of discarded needles particularly in urban areas. Wear appropriate PPE, e.g. safety boots and gloves. Do not climb over barbed wire. 	2	1	2	Y

Additional Information (Note 9)

Resulting Risk factor: (Note 8)	High	Medium	Low
Determination of risk factors = Severity x Likelihood (S x L)			
No Injury/Damage only	1	Unlikely	1
Minor injury	2	Possible	2
Major injury	3	Likely	3
Fatality	4	Very likely	4
The resulting figure (S x L) is used to prioritise action			
8 – 16 High risk immediate action			
6 Medium risk asap but within 6 weeks			
1 - 4 Low risk asap but within 6 months			

Signed:

Date:

Review Date: