

Oweninny Wind Farm

Oweninny Environmental Impact Statement Appendix 6

Emergency Response Plan

Contents

1	INTRODUCTION	3
2	EMERGENCY PROCEDURES	5
2.1	Summary of Main Points	5
2.2	Evacuation Procedure	6
2.3	Procedure in event of an accident	7
2.4	Procedure in event of an accident while working at height	10
2.5	Procedure in event of an accident on site roads	12
2.6	Procedure in event of fire in Wind Turbine The following procedure is to be followed in the event of a fire starting in the Wind Turbine with personnel inside.	14
	The following procedure is to be followed in the event of a fire starting in a Wind Turbine with no personnel inside the turbine.	15
2.7	Procedure in event of fire at substation	16
2.8	Procedure in event of forest fire	17
2.9	Procedure in event of wood/paper fire	18
2.10	Procedure in event of Turbine mechanical failure	19
2.11	Procedure in event of electrocution	20
2.12	Procedure in event of water pollution with sediment	21
2.13	Procedure in event of chemical spill	23
2.14	Procedure in event of exposed cables	28
2.15	Procedure in event of security alert	29
2.16	Procedure in event of landslide	30
2.17	Procedure in event of lightning	32
2.18	Extreme Weather Conditions	33
2.19	Lone working procedure	34
3	ACCIDENT INVESTIGATION	36
4	APPENDIX A – WINDFARM DETAILS	37
4.1	EMERGENCY FACILITIES	Error! Bookmark not defined.
4.2	EMERGENCY NUMBERS	37
4.3	ASSEMBLY POINTS	Error! Bookmark not defined.
4.4	TOWERS ON EACH FEEDER	Error! Bookmark not defined.
4.5	SINGLE LINE DIAGRAM	Error! Bookmark not defined.
4.6	ASSEMBLY POINTS LOCATION	Error! Bookmark not defined.
4.7	TURBINE GPS CO-ORDINATES	Error! Bookmark not defined.
4.8	TURBINE LOCATION MAP	Error! Bookmark not defined.

FOREWORD

Bord na Móna and ESB Wind Energy are fully committed to protecting the Health and Safety of colleagues, contractors, and the public on all Wind Farm Sites. An open and proactive Health and Safety Culture with the full involvement of all staff is promoted on all Wind Farm Sites. Visible leadership reinforces this belief and our goal of zero injuries.

Bord na Móna and ESB Wind Energy comply with, and constantly aims to exceed, all relevant legal and regulatory Health and Safety requirements. The required safety standards and behaviours are communicated to staff in a clear and unambiguous manner, with all necessary training, systems, and procedures put in place to support and continuously audit our safety performance.

The overall responsibility for Safety on each Wind Farm rests with the Wind Farm Manager. It is also the responsibility of all employees / Contractors to co-operate with the Manager, in particular for their own safety and for the safety of others who may be affected by their acts or omissions.

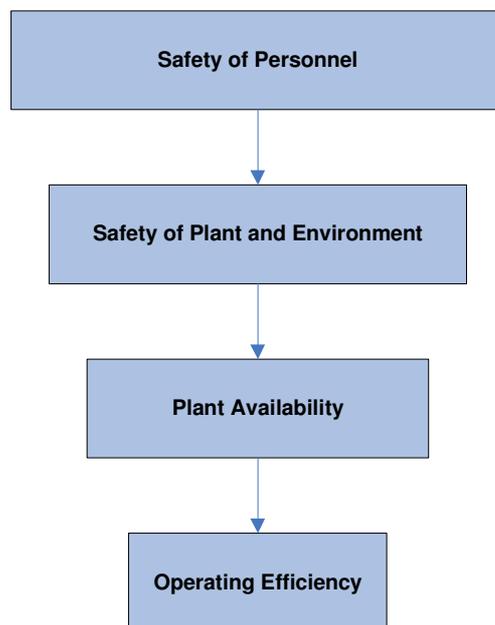
Bord na Móna and ESB Wind Energy are fully committed to the protection of the environment and comply with national and international legislation and obligations protecting the environment. Both Bord na Móna and ESB Wind Energy operate their sites to high environmental standards and environmental protection is enshrined in their individual policies.

Gerard Noonan

Project Manager Oweninny Power Limited

1 INTRODUCTION

Safety and environment are the main priorities within the Wind farm site in how we plan, organise and undertake day to day activities and operations. In all our activities Safety of Personnel is of the utmost importance and the following hierarchy is used in all decision making for day to day activities and business decisions.



All Oweninny Power Ltd. staff involved are committed to:

- Implementing the highest standards of operation and maintenance.
- Continuously improving safety on site
- Requiring contractors to comply as a minimum with ESBI Eng & FM Ltd safety standards as part of their contract.
- Complying with all health & safety, employment and equality legislation
- Complying with all environmental obligations

These emergency procedures have been developed with the safety of personnel at the forefront. They are to be followed in the event of any emergency on Oweninny Wind Farm.

Instructions detailed in the following pages and in the Site Safety Rules and the Electrical Safety Rules and Procedures are compiled to assist Staff in carrying out their duties in as safe a manner as possible and to ensure the safe evacuation of the Plant in an emergency.

However, it should be noted that these are guidelines only. A Risk Assessment must be carried out before work commences and the Plant Manager and / or Wind Farm Manager consulted in the event of any queries regarding Health and Safety in the Wind farm.

Oweninny Power Ltd. and sub –contractors have a responsibility to report immediately to their supervisor and the Wind Farm Manager any incident that has resulted in an injury being sustained to themselves, another employee or the public or any pollution incident occurring. Employees will assist in completing a full written report as part of the investigation of the circumstances in which the injury or environmental pollution occurred.

1.1 Control and Distribution

Only controlled copies of these procedures are to be used as working documents.

The Wind Farm manager is responsible for distribution and control of these procedures. A register of controlled copies issued to contractors and Oweninny Power Ltd. staff will be held by the Wind Farm Manager.

The procedures are subject to a periodic revision and each re-issue will show a revision number. Copies of the Emergency Response Plan which have not been stamped controlled are to be considered uncontrolled and not subject to re-issue.

This document and the information contained therein is the property of Oweninny Power Ltd. It must not be reported in whole or in part or otherwise disclosed without the prior written consent of Oweninny Power Ltd.

2 EMERGENCY PROCEDURES

2.1 Summary of Main Points

- Always contact the Site Manager before commencing work on site and when leaving site.
- Always carry a mobile phone or radio on site that is fully charged
- Always contact the Site Manager during an emergency, if for some reason you are unable to make contact with the Site Manager contact the Caretaker.
- Always have the contact numbers for Wind Farm Manager and your colleagues while on site.
- Always report a pollution incident to the Site Manager without delay
- Keep people as far away as possible from an accident or incident to ensure their safety, including the general public.
- Do not hinder emergency services in any way from approaching the wind farm and provide assistance where possible.
- Never approach a casualty until you ensure the scene is safe
- Do not approach a person in contact with electricity or an exposed cable unless certain that the supply has been disconnected.
- Do not approach a wind turbine that is on fire or spinning out of control.
- Evacuate to the nearest safe assembly point when the alarm is raised
- Where there is a phone number on the assembly point notice call it immediately during an evacuation.
- Only administer first aid if trained to do so
- Only use safety equipment if you have been trained to do so

- Always climb in pairs and only climb if you are certified to do so
- If working alone you must follow the lone working guidelines
- Move away from the vicinity of wind turbines during a lightening storm.
- Always be aware of overhead work in the vicinity of a wind turbine.

2.2 Evacuation Procedure

On hearing fire alarm in the substation or in the event of evacuation of the windfarm site by phone or radio proceed to the designated assembly points.

If an unsafe situation arises raise the alarm and evacuate the location. Contact Wind Farm personnel via radio or mobile phone to evacuate to nearest assembly point.

Note: Always evacuate immediately, do not attempt to take tools or other belongings with you.

Assembly Points specific to the Wind Farm are located in Appendix A
If there is a phone number displayed on the Assembly Point Notice ring it immediately to confirm arrival or ring the Site Manager

Wind Farm Manager will co-ordinate the evacuation and either perform a head count if present on site or confirm by phone or radio that all personnel are accounted for

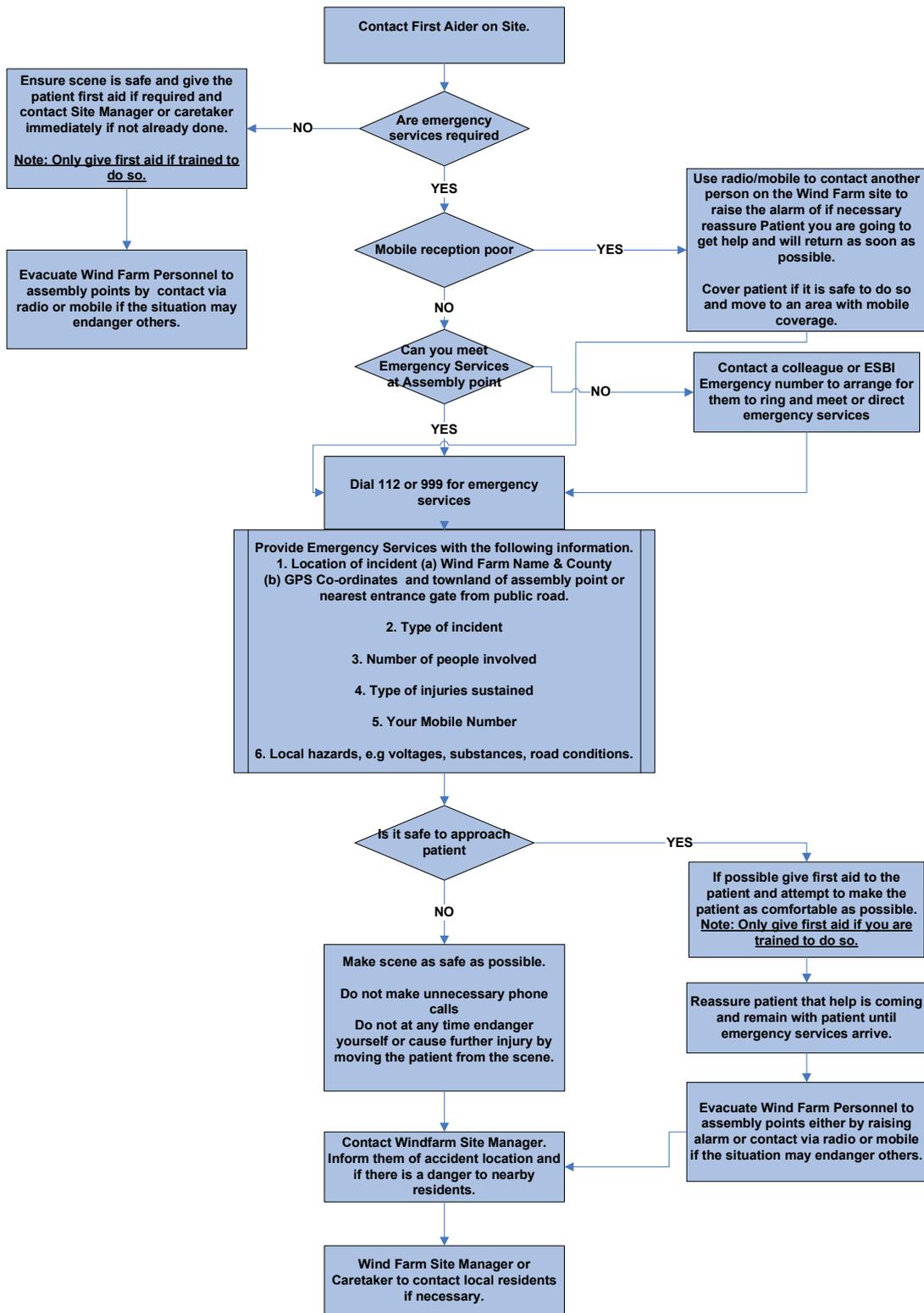
NOTE

All Personnel must contact the site manager on commencing and competing works on site.

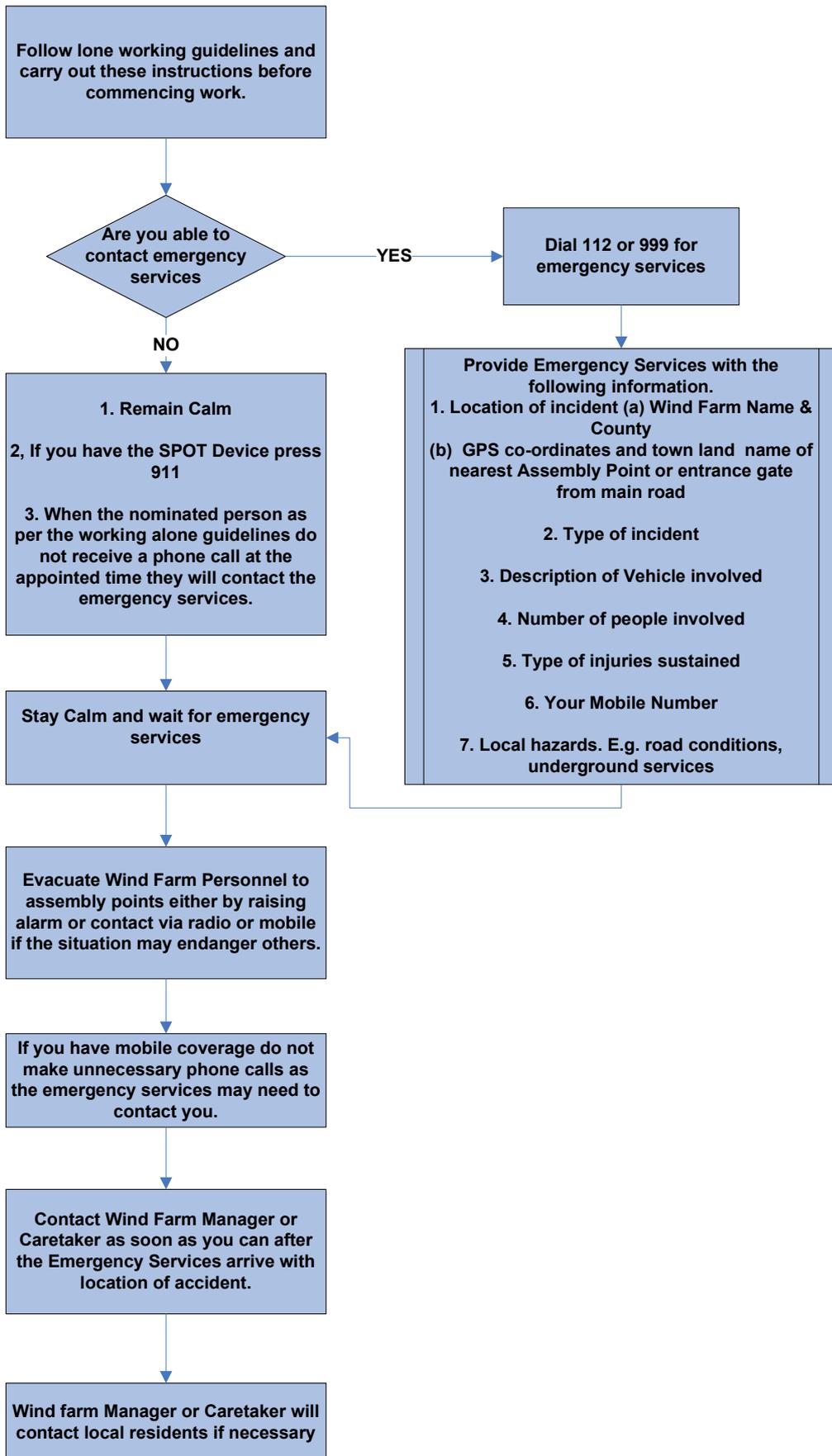
If the nearest assembly point is inaccessible or dangerous to access then go to the next safest assembly point

2.3 Procedure in event of an accident

This procedure is to be followed in the event of an accident to a contractor, member of public or staff member.



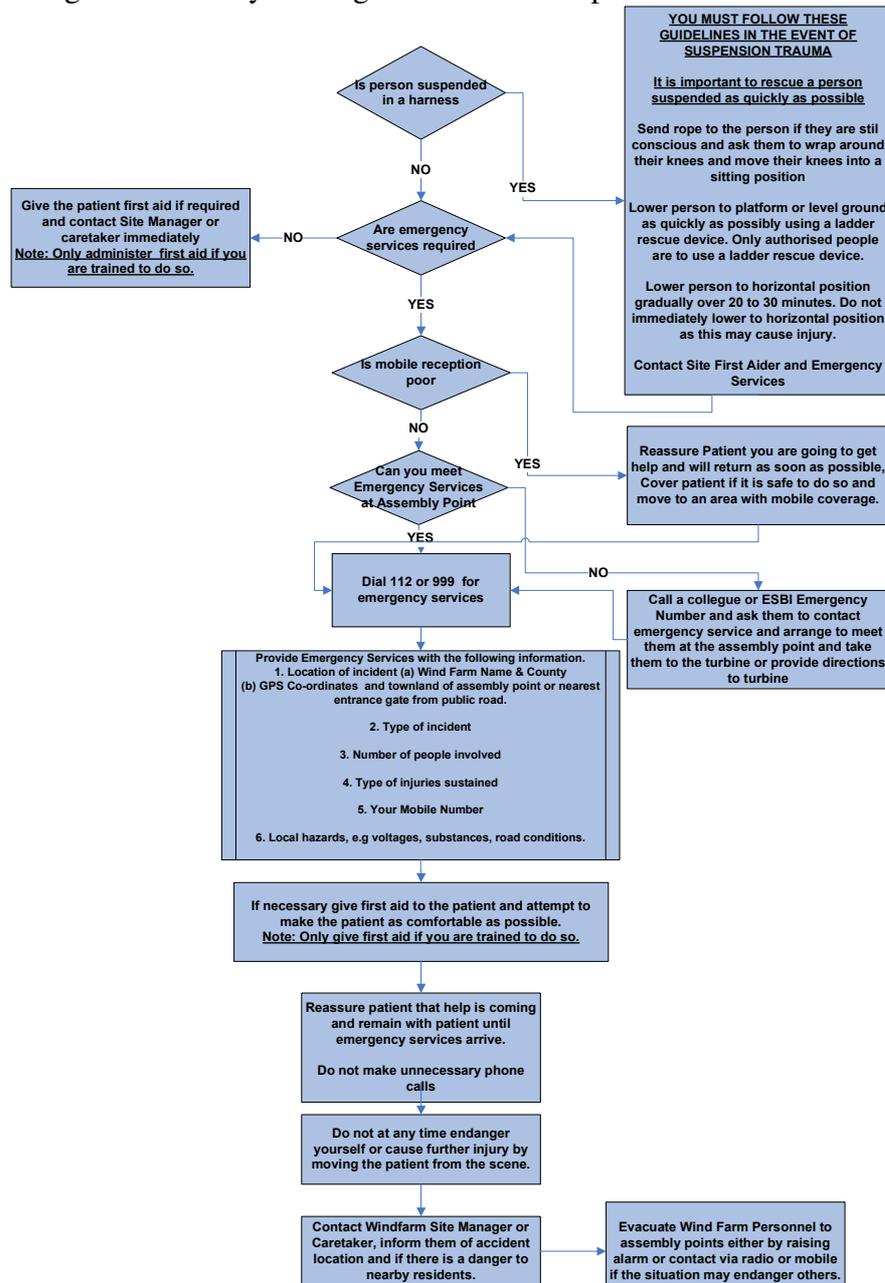
In the event of a personal injury where there is nobody present to provide immediate assistance the following procedure applies.



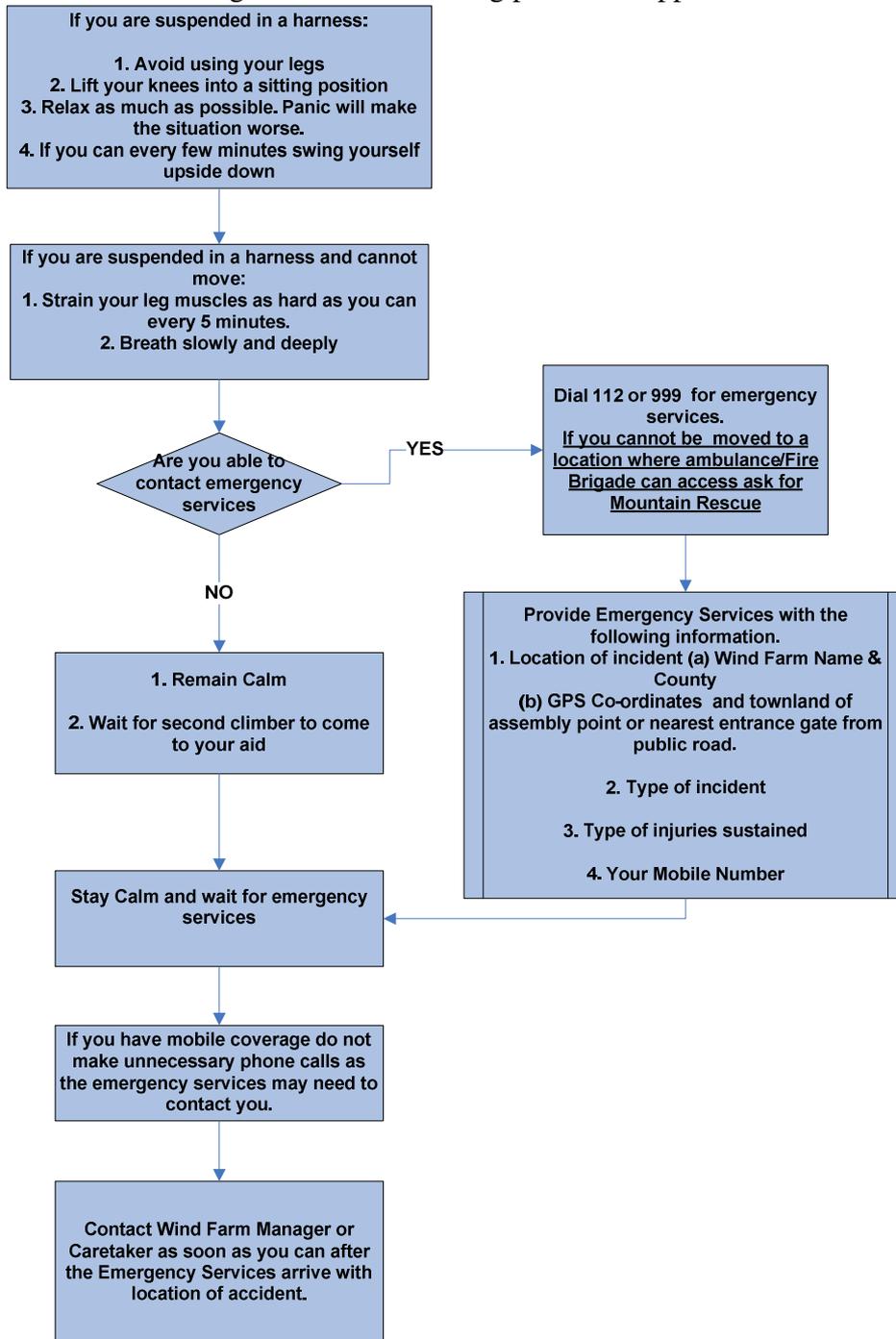
2.4 Procedure in event of an accident while working at height

The following guidelines must be followed while working at height.

- Climbing must be carried out in pairs. Not under any circumstance shall a turbine be climbed alone.
- A person must be certified to work at heights before climbing the wind turbine and safety equipment must be worn at all times while climbing.
- Never stand below or climb directly below another climber.
- Never enter or climb a tower during a lightning storm
- You must get the casualty to the ground or a tower platform.

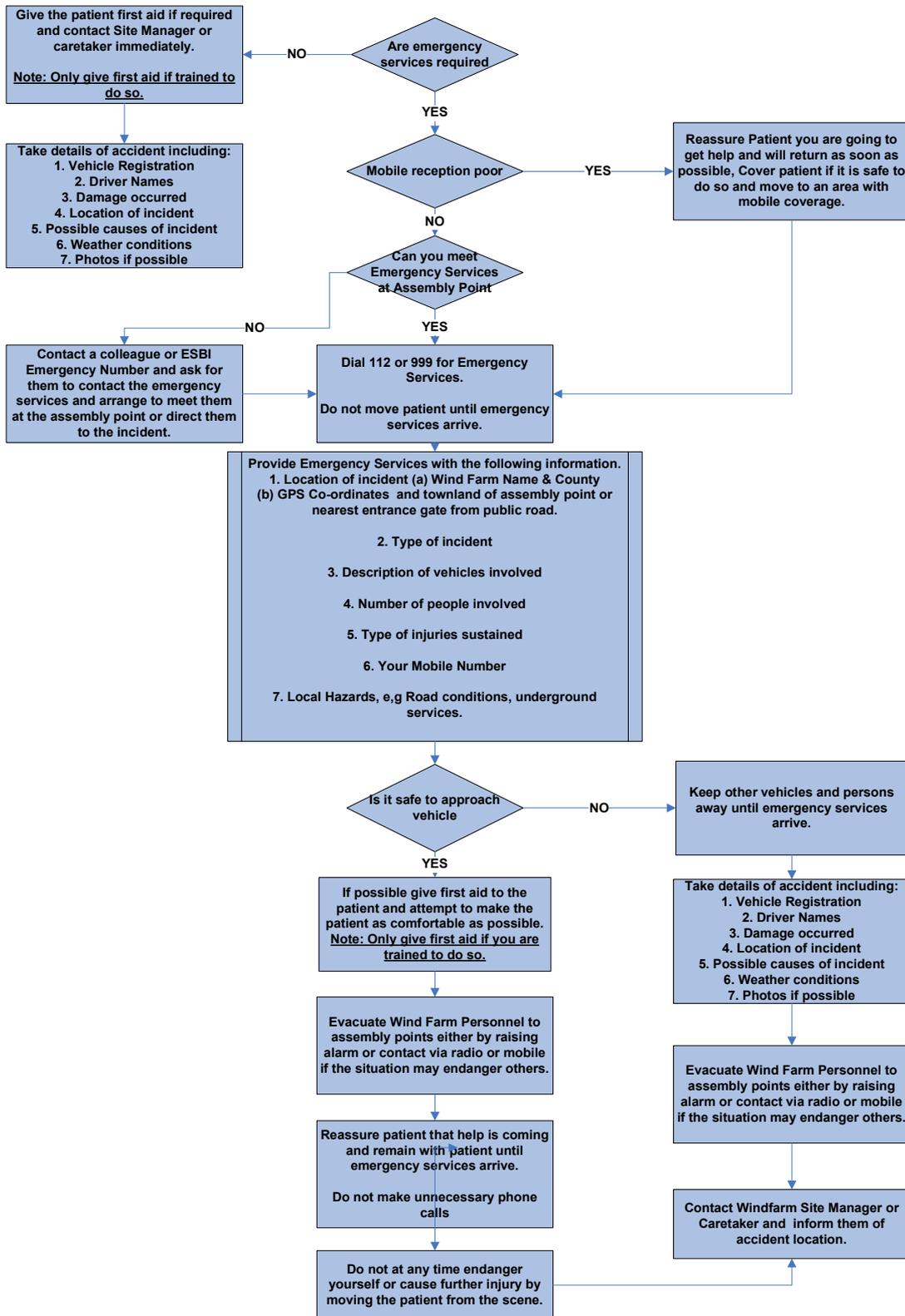


In the event that you are have an accident while working at height and are unable to contact the second climber or are awaiting rescue the following procedure applies.

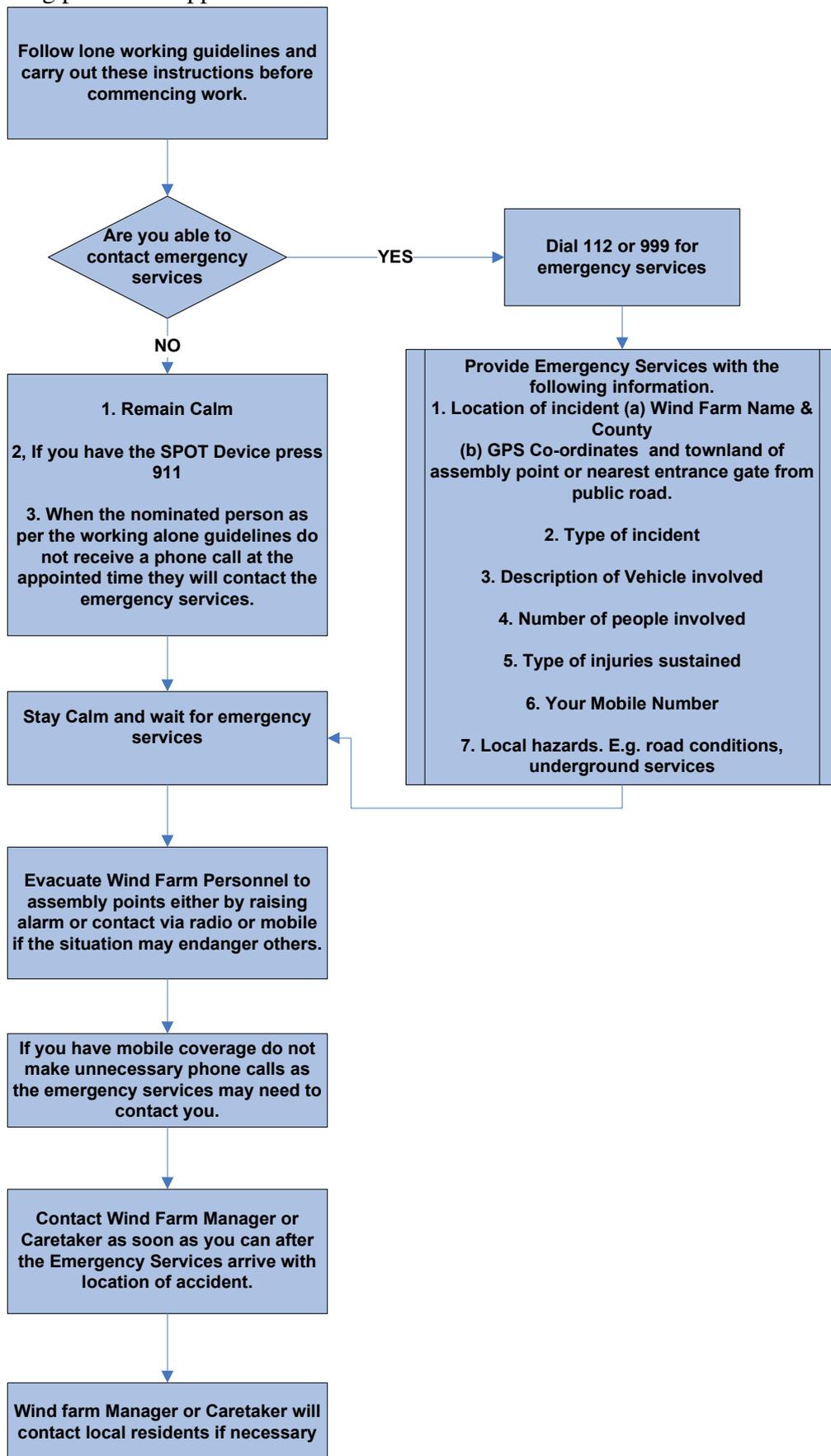


2.5 Procedure in event of an accident on site roads

Care must always be taken while driving on site roads as they are narrow and cannot allow vehicles to pass. There may also be animals on the roads.

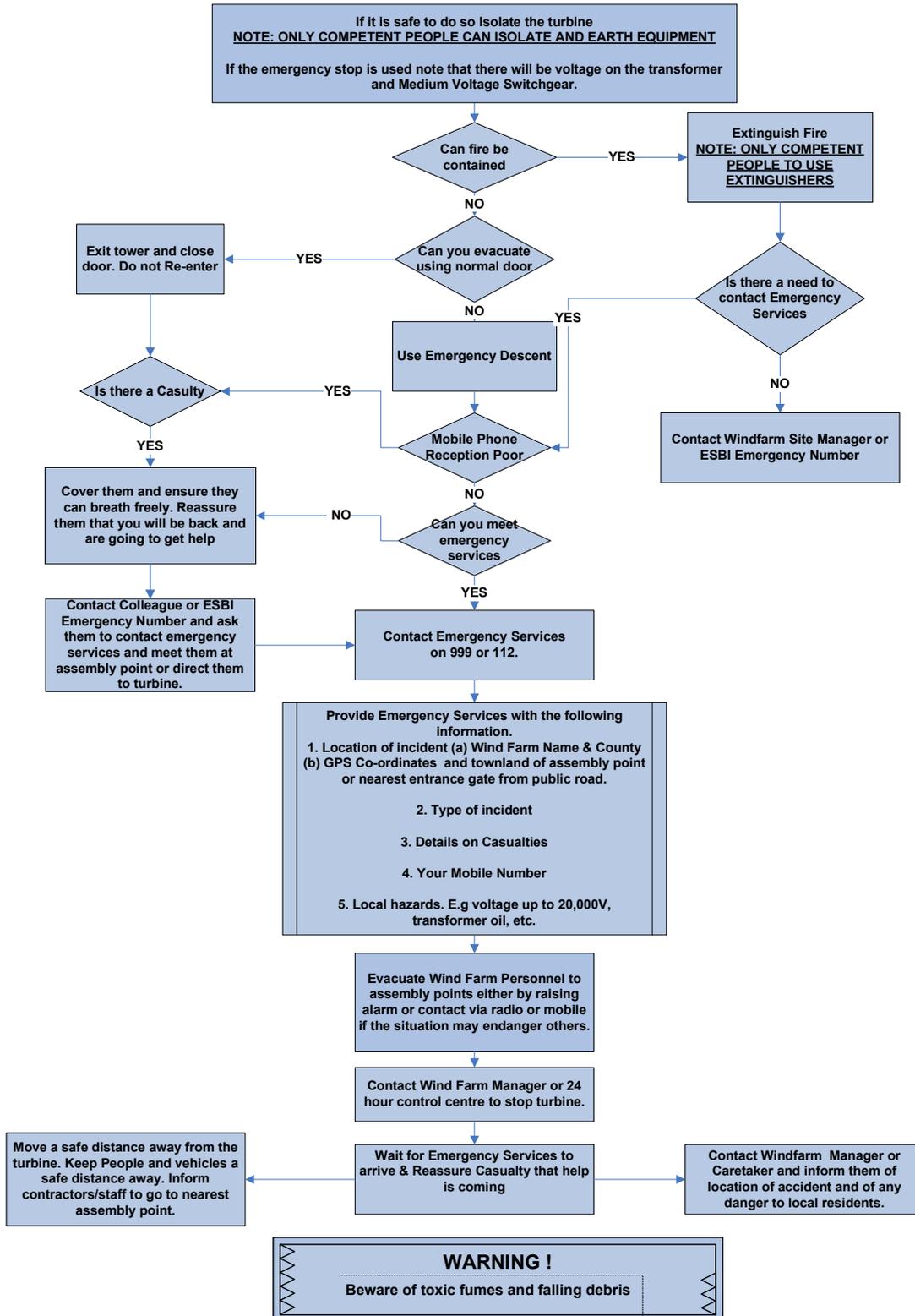


In the event that you have an accident while working alone and are unable to raise the alarm the following procedure applies.

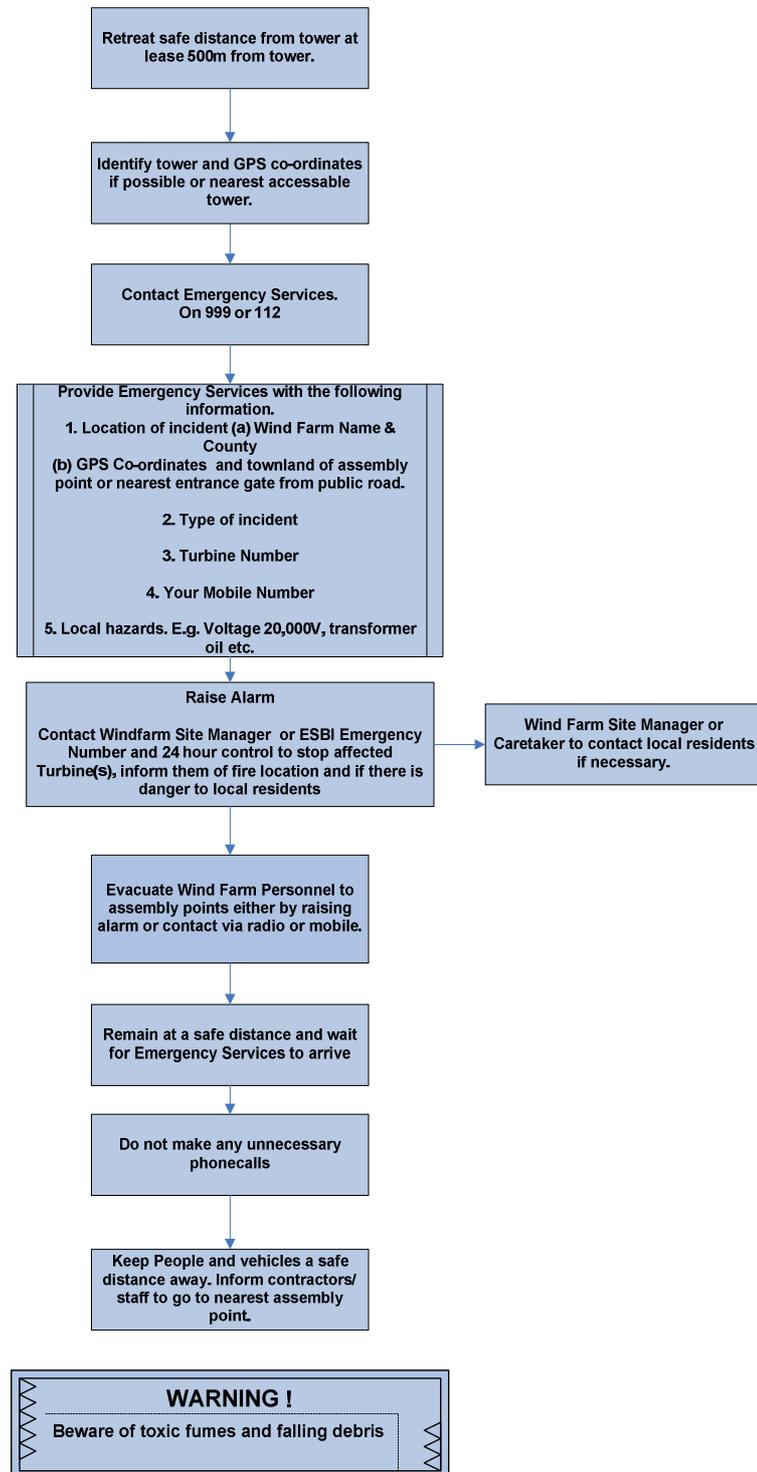


2.6 Procedure in event of fire in Wind Turbine

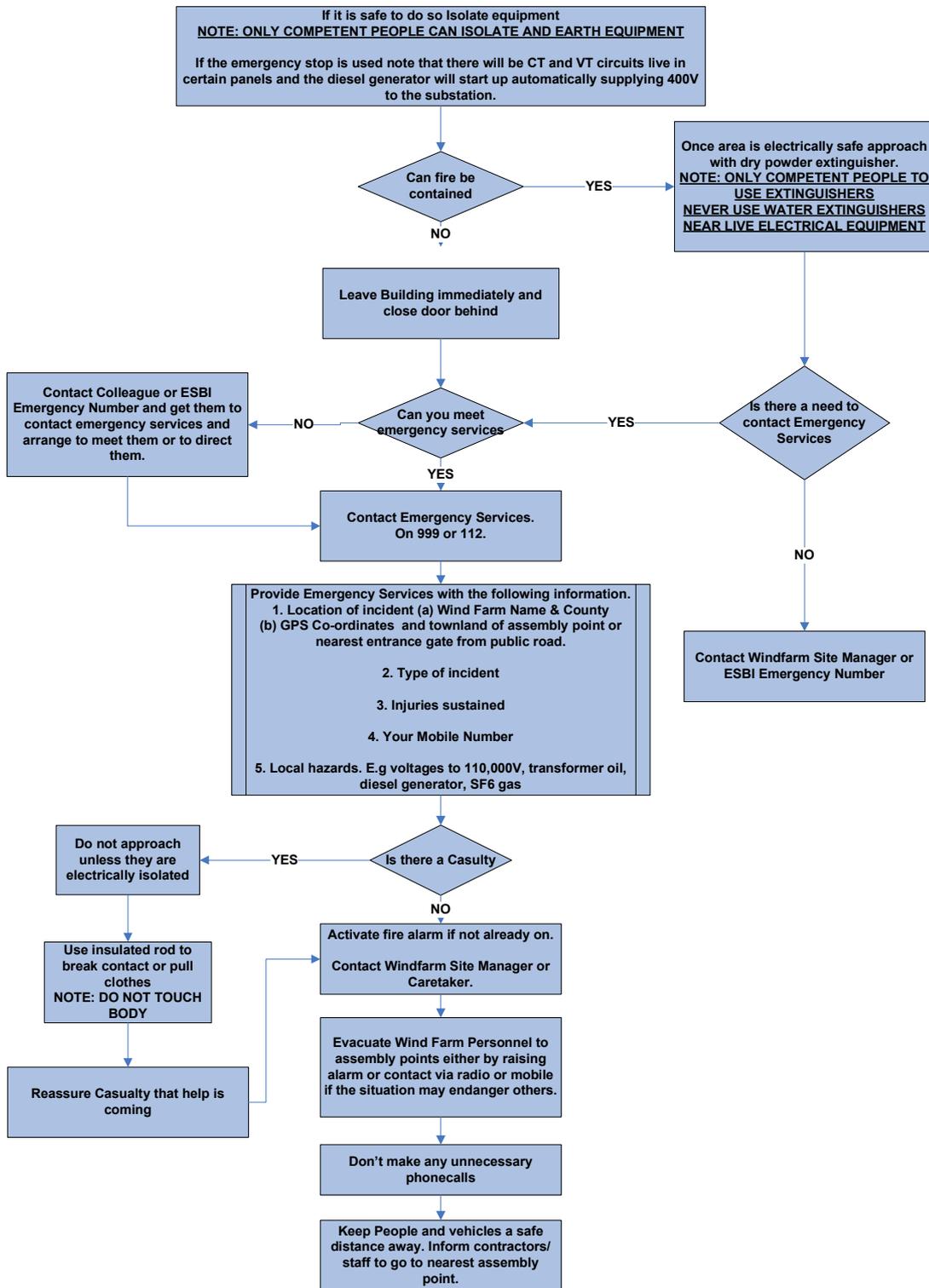
The following procedure is to be followed in the event of a fire starting in the Wind Turbine with personnel inside.



The following procedure is to be followed in the event of a fire starting in a Wind Turbine with no personnel inside the turbine.

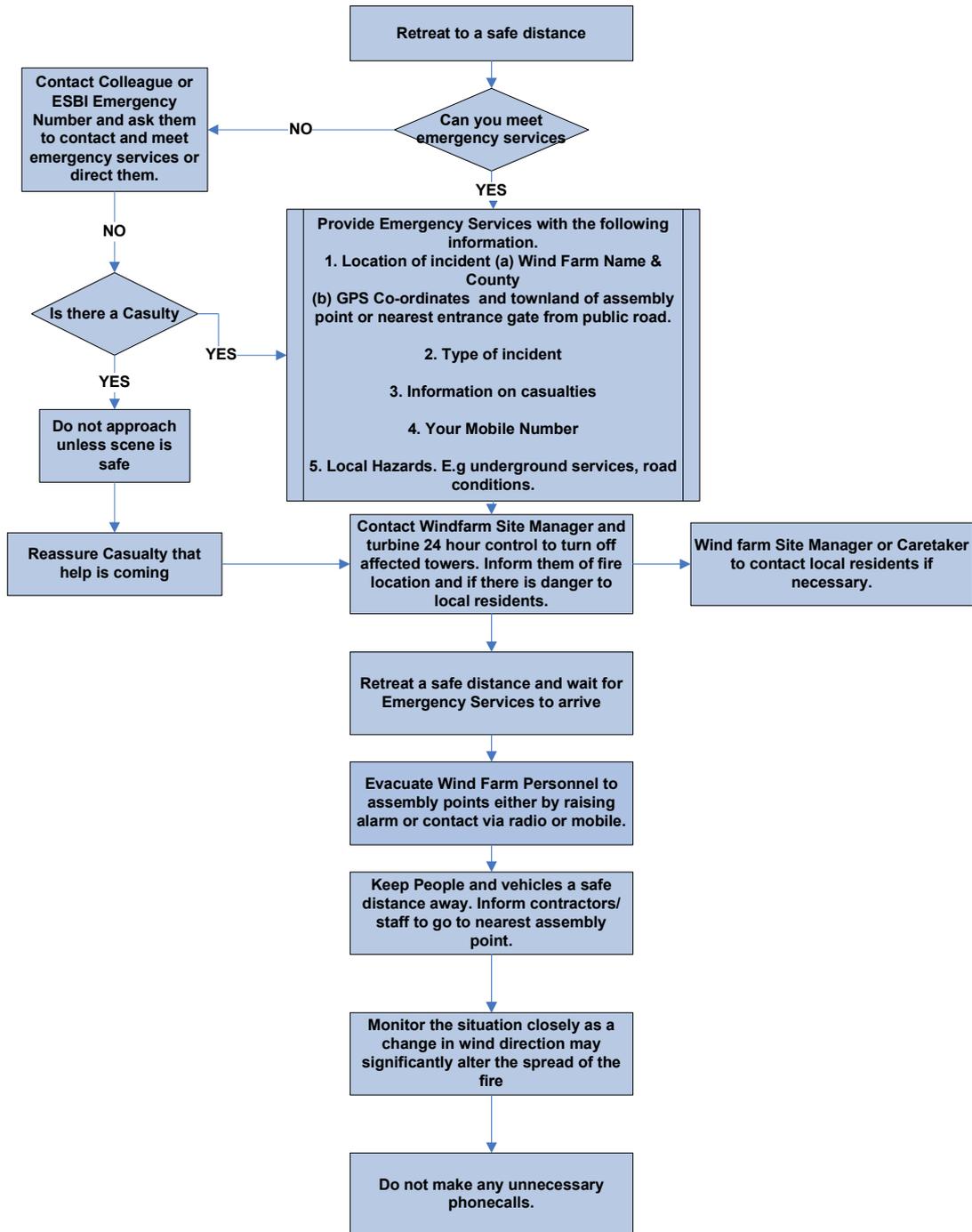


2.7 Procedure in event of fire at substation



2.8 Procedure in event of forest fire

. Smoking is prohibited indoors and in all areas adjacent to forestry.

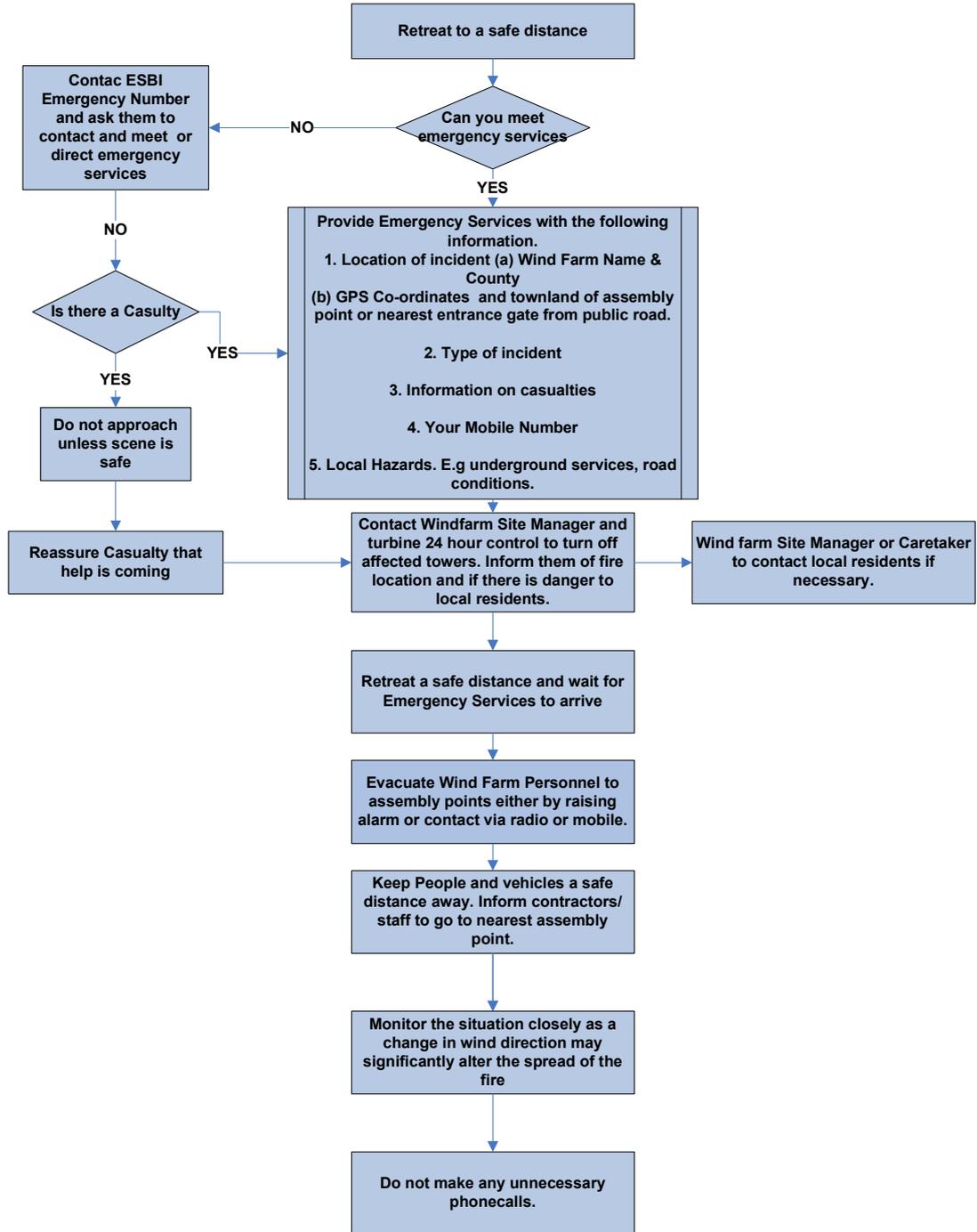


WARNING !

Do not become trapped by fire or smoke

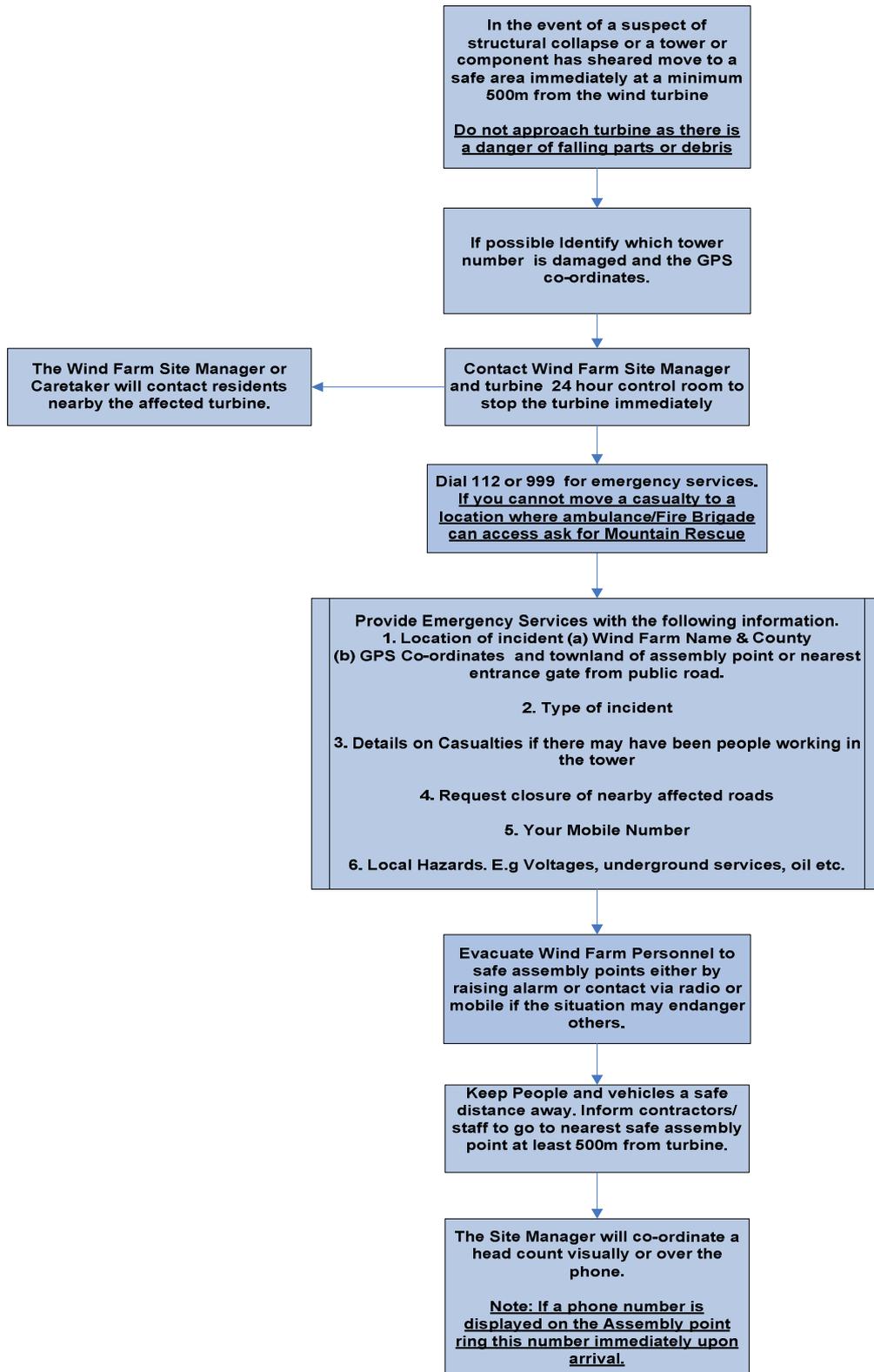
Always ensure that you have a means of escape to safe ground

2.9 Procedure in event of wood/paper fire

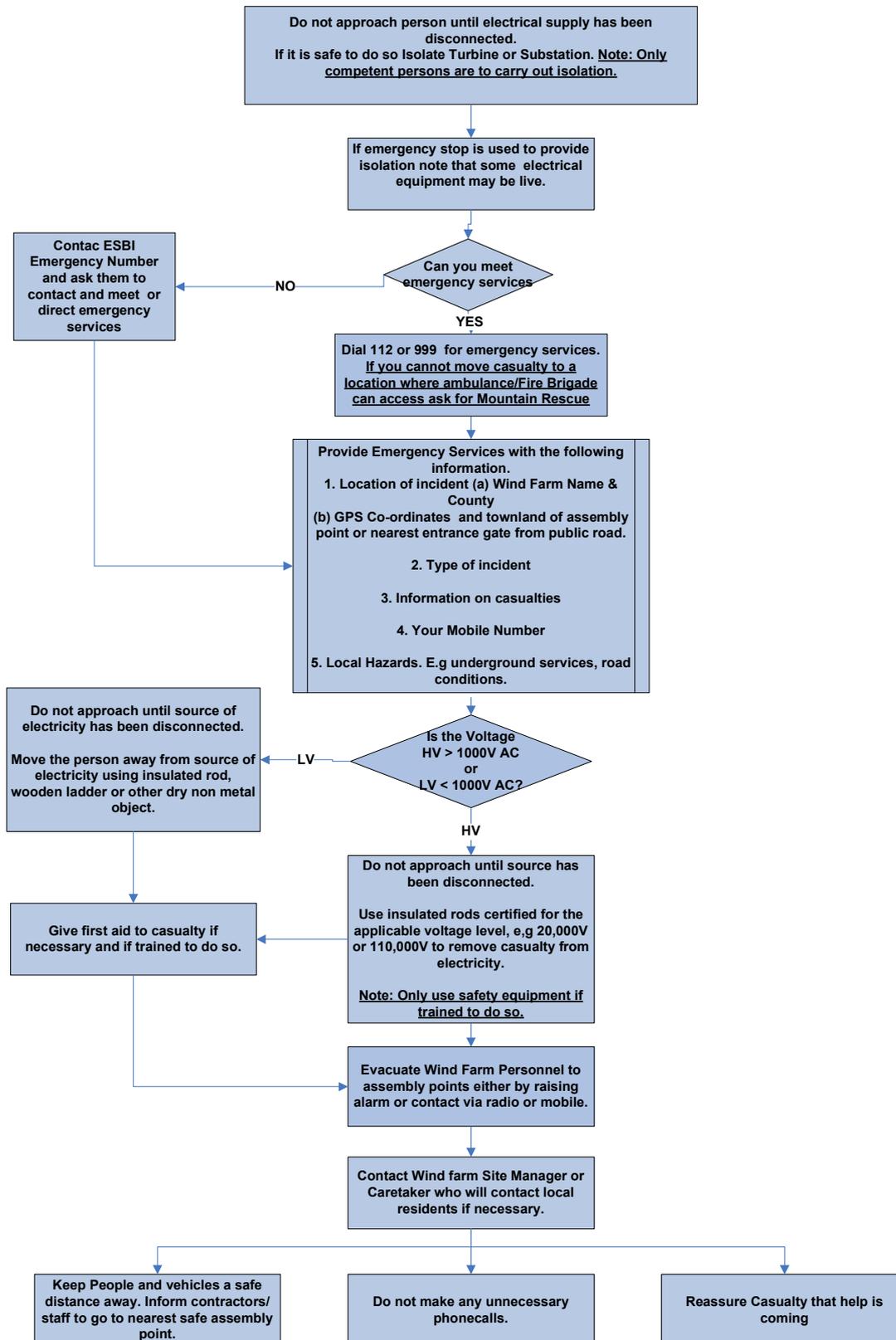


WARNING !
Do not become trapped by fire or smoke
Always ensure that you have a means of escape to safe ground

2.10 Procedure in event of Turbine mechanical failure



2.11 Procedure in event of electrocution

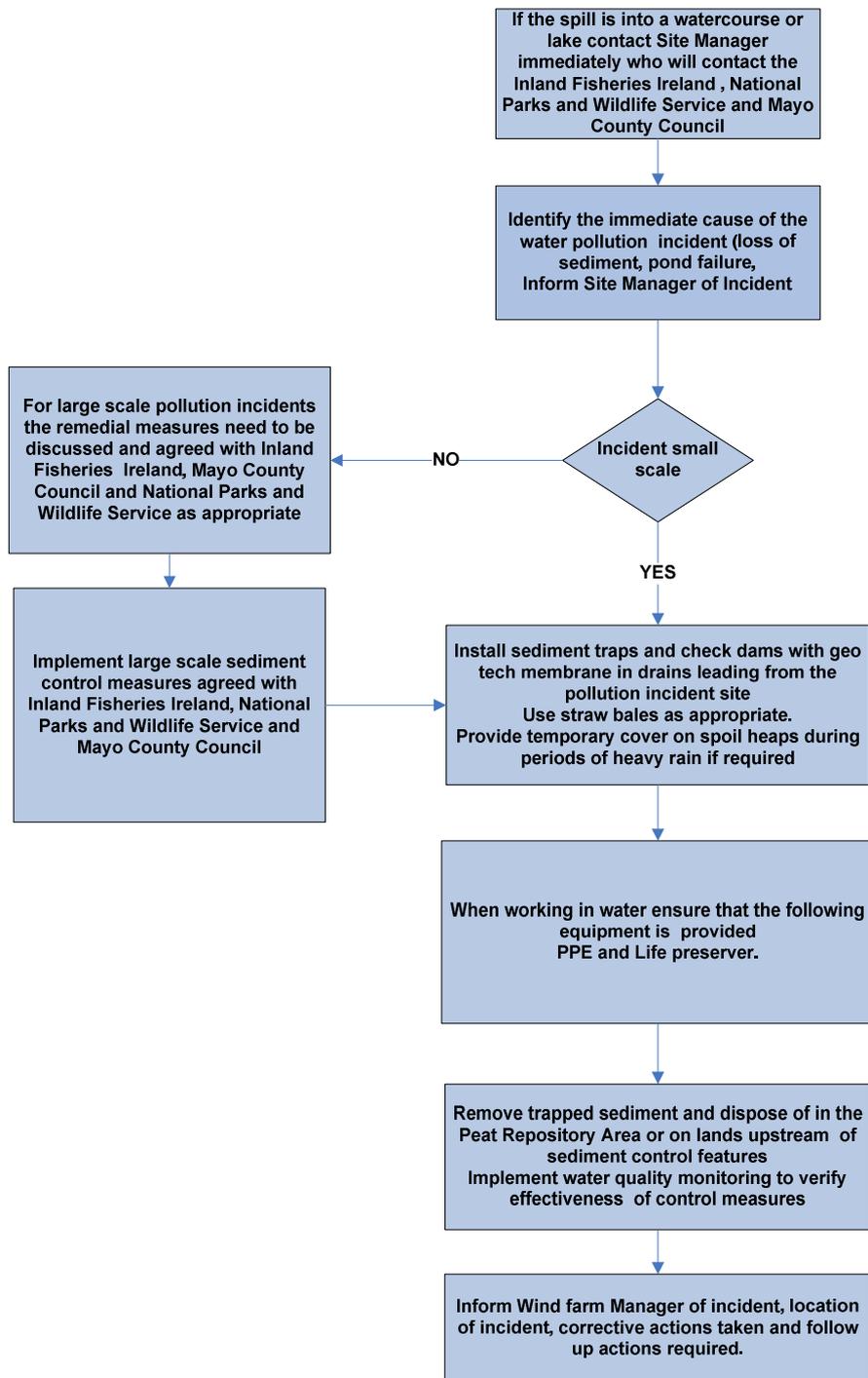


2.12 Procedure in event of water pollution with sediment

Construction can potentially lead to the following:

- Sediment loss to drains and receiving waters leaving the site
- Failure of the sediment control system of settlement ponds.

2.12.1 Procedure in the event of Water pollution from sediment loss



NOTE!
Silt raps and check dams should be monitored daily

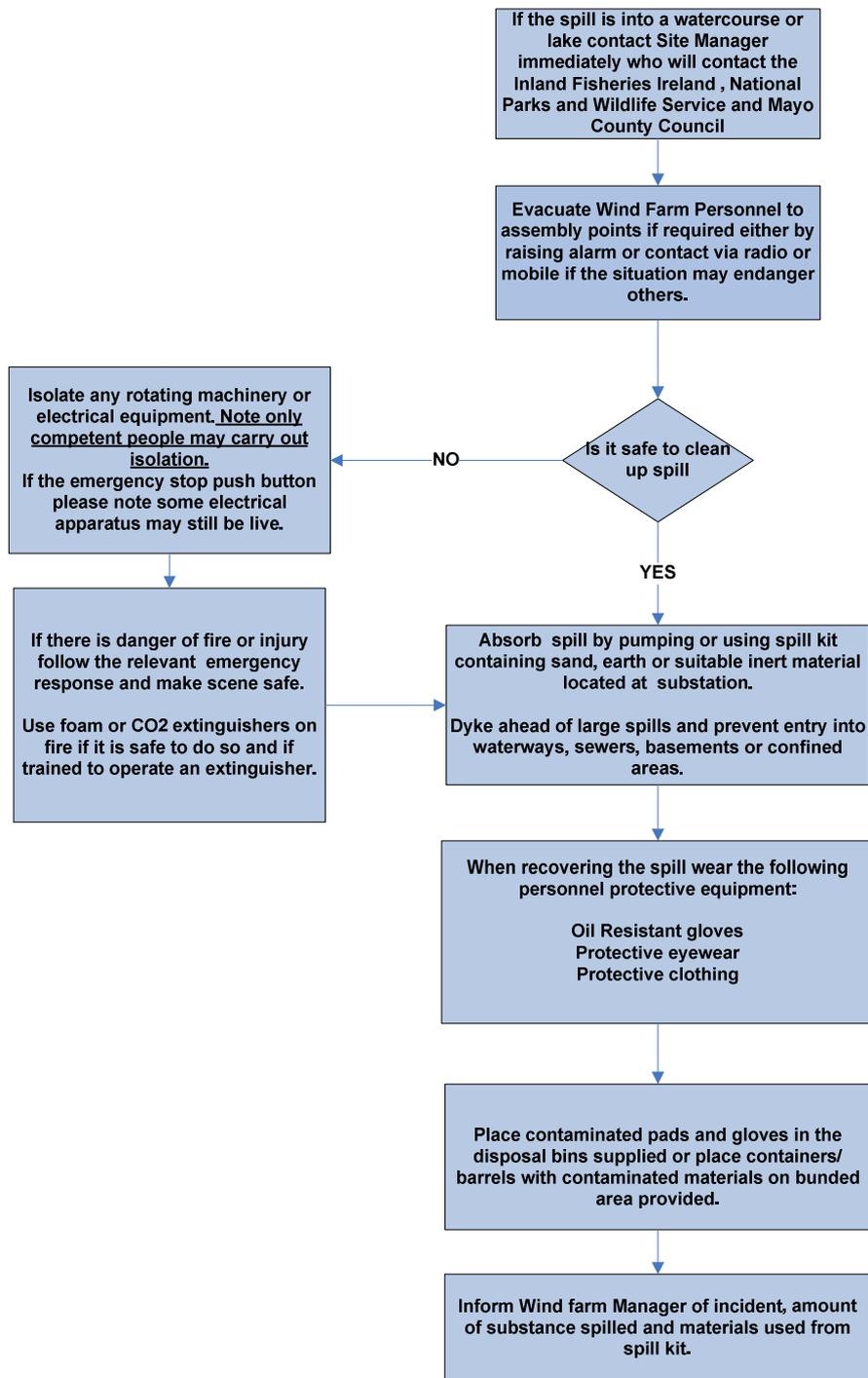
2.13 Procedure in event of chemical spill

Material Safety Data Sheets (MSDS) are located in each turbine for all turbine hazardous materials; there is also a reference MSDS located in the substation for the turbine. The Material Safety Data Sheets (MSDS) for the substation are located at the substation.

The largest quantity of hazardous materials on the windfarm are as follows:

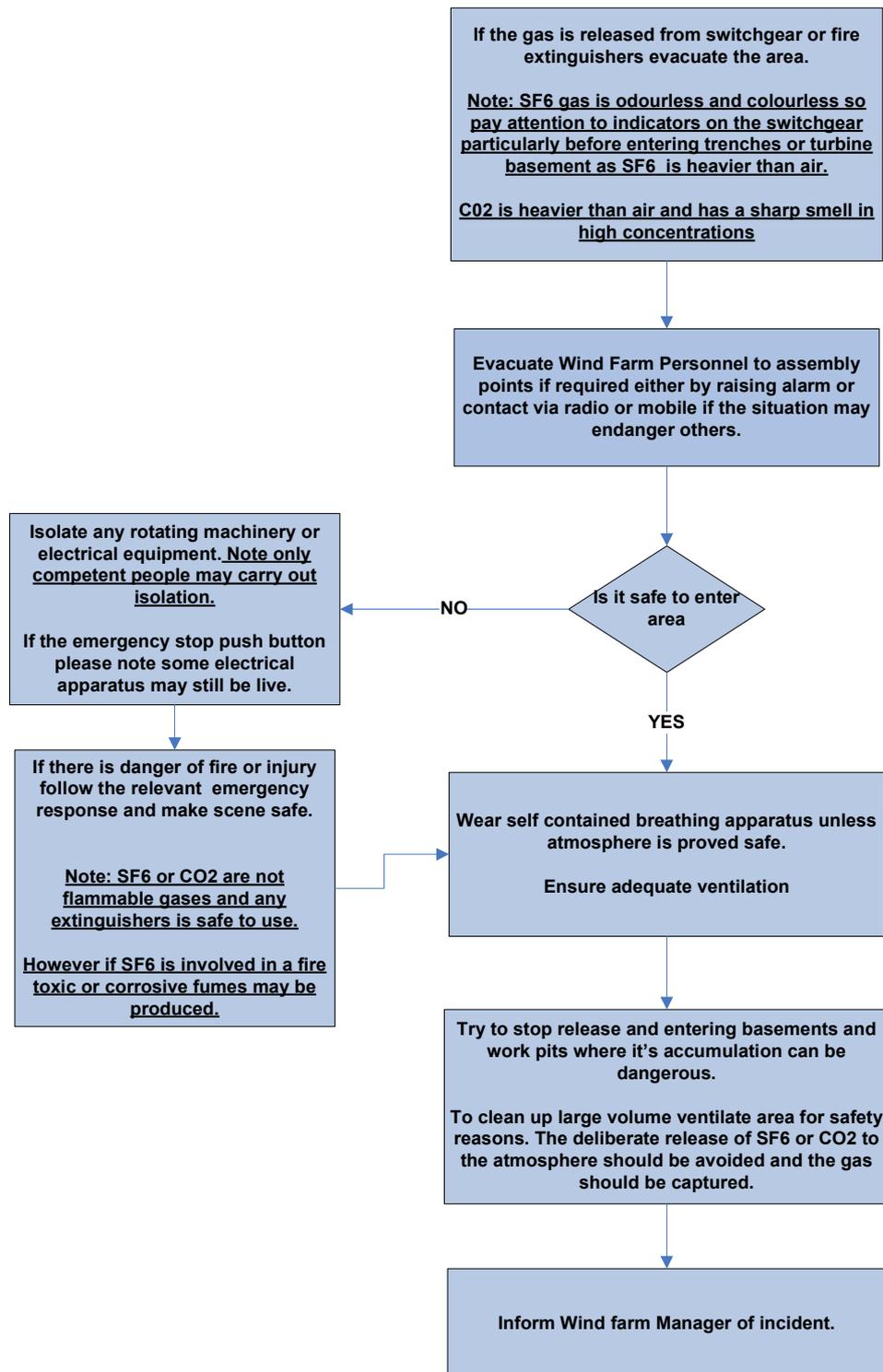
- Mineral/Silicon oil in transformers
- Lubricating oils in the turbines
- Petrol in the generator
- SF6 gas in the substation or turbine switchgear
- Lead Acid in the substation batteries
- Fire extinguishers in substation and turbine

2.12.2 Procedure in the event of Mineral oil, silicon oil, diesel oil or lubricating oil spill

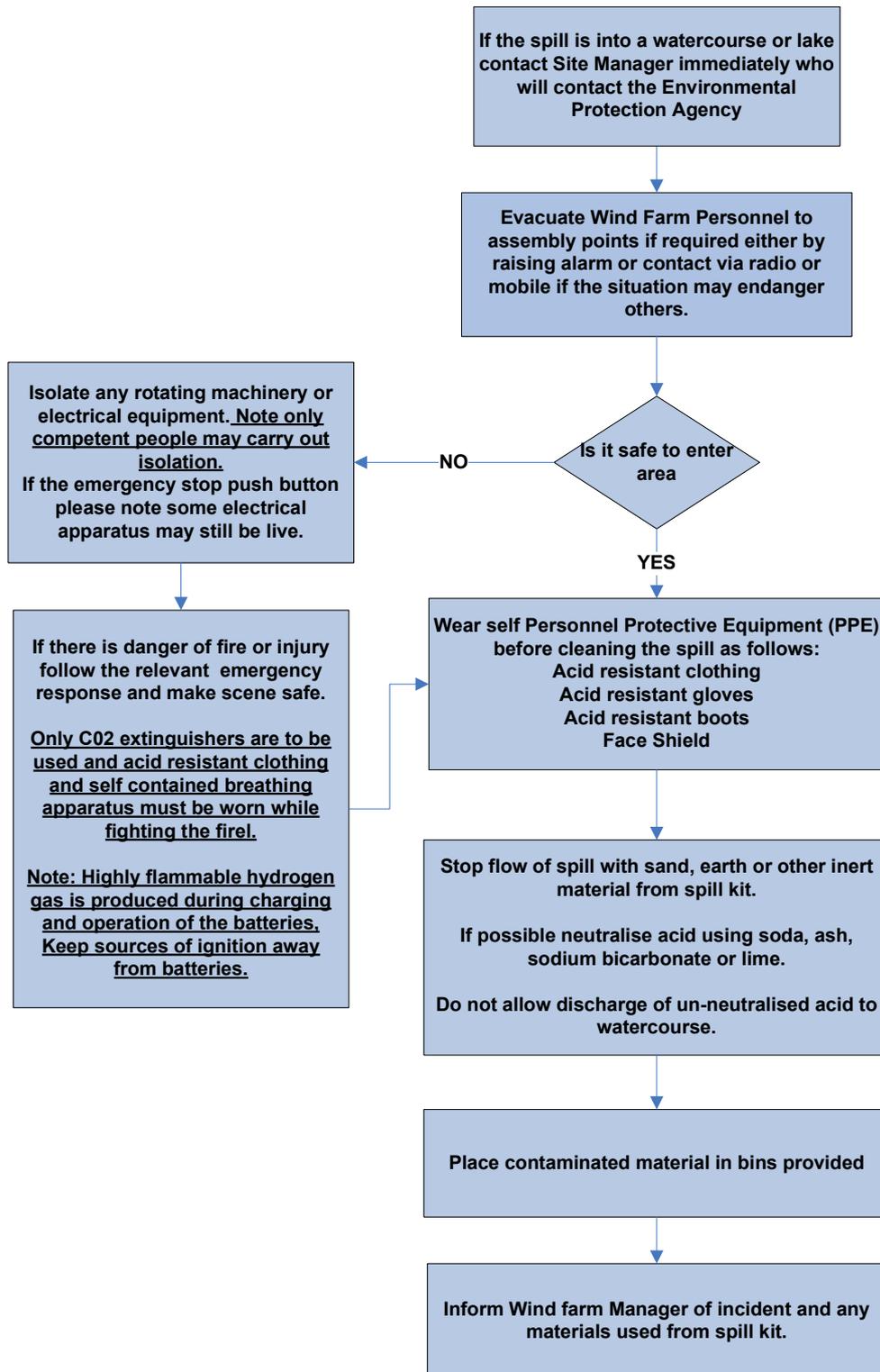


NOTE!
Do not smoke in the vicinity of an oil or grease spill.

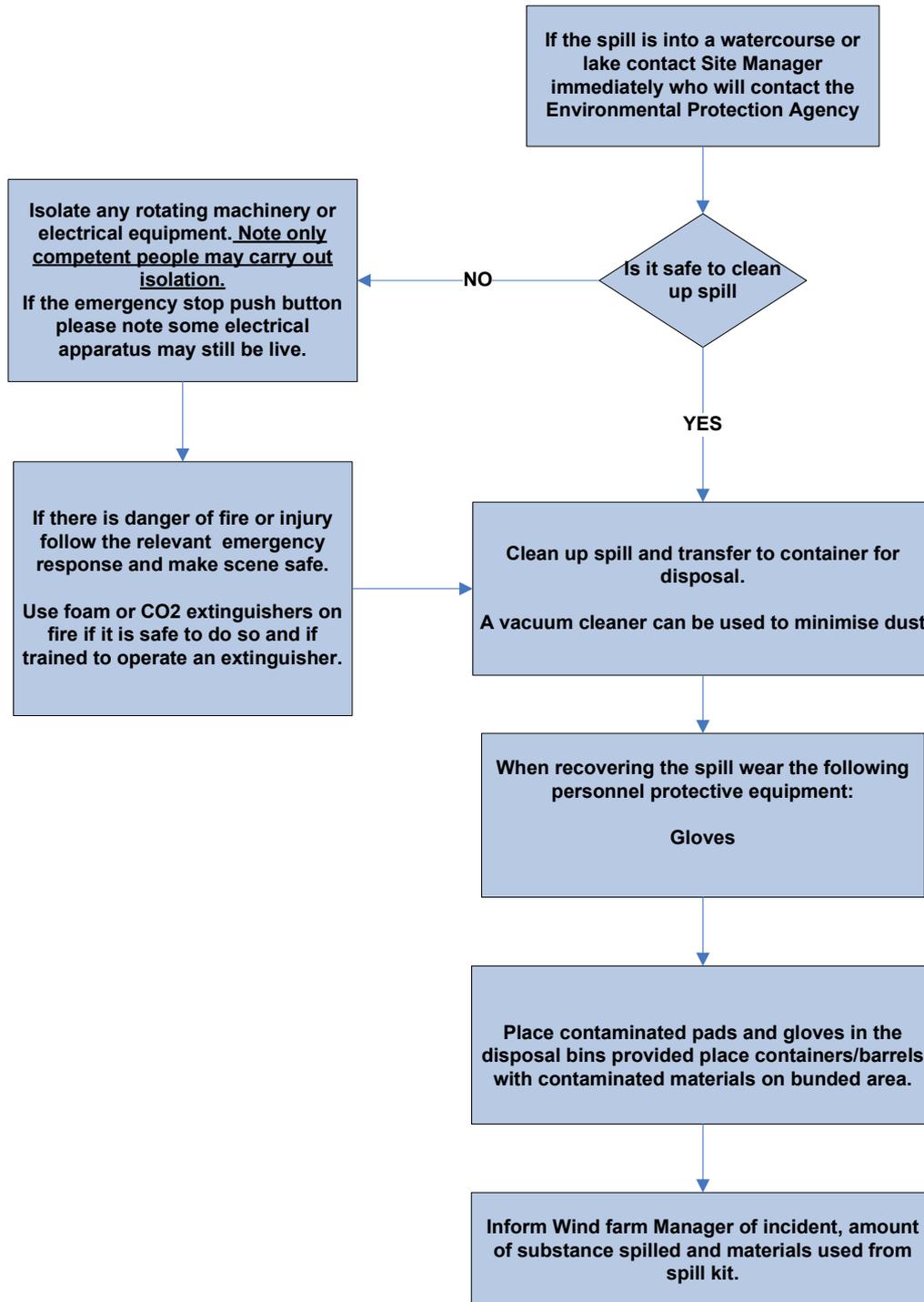
2.12.3 Procedure in the event of SF₆ or CO₂ gas leak



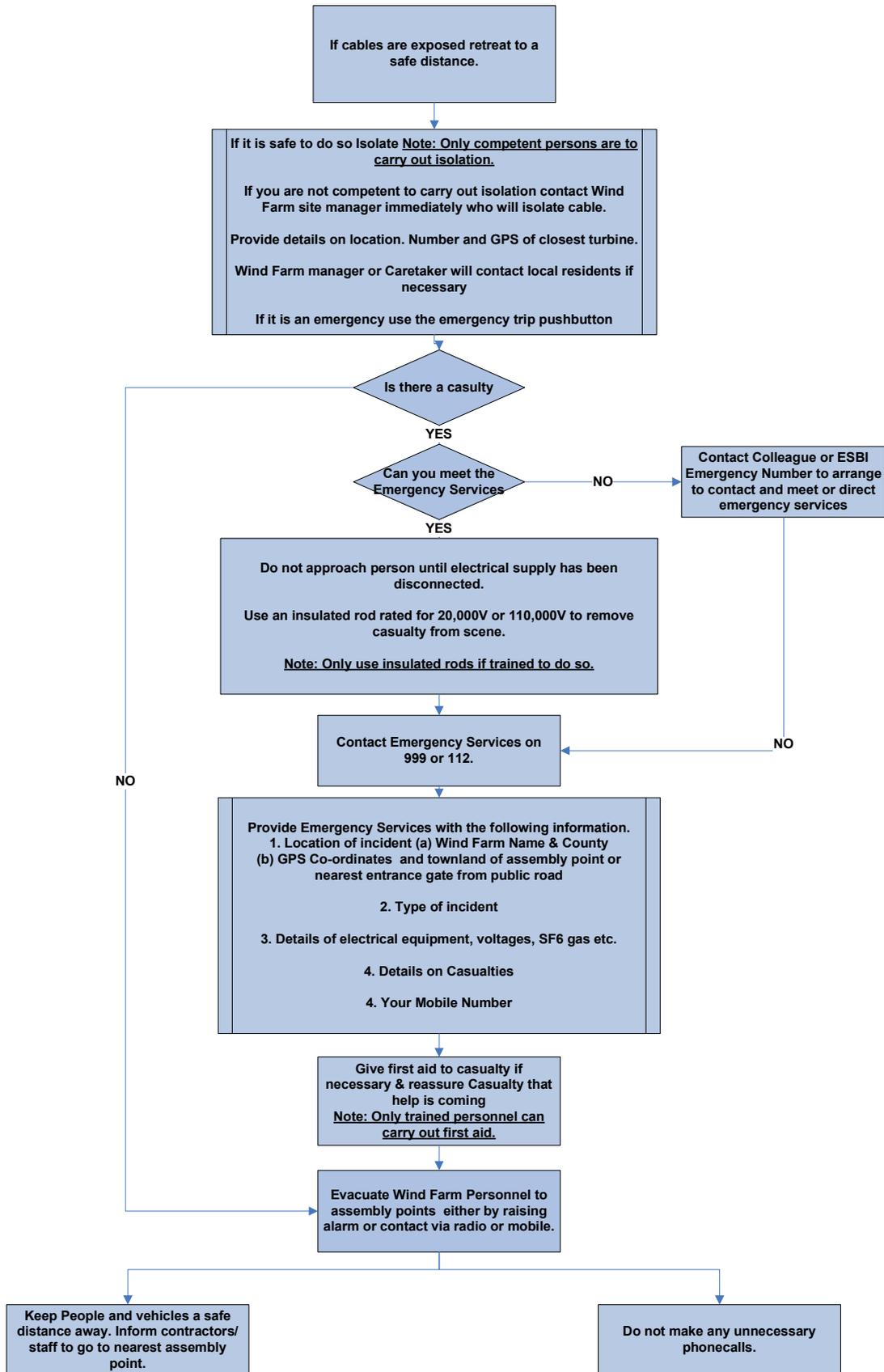
2.12.4 Procedure in the event of battery acid spill



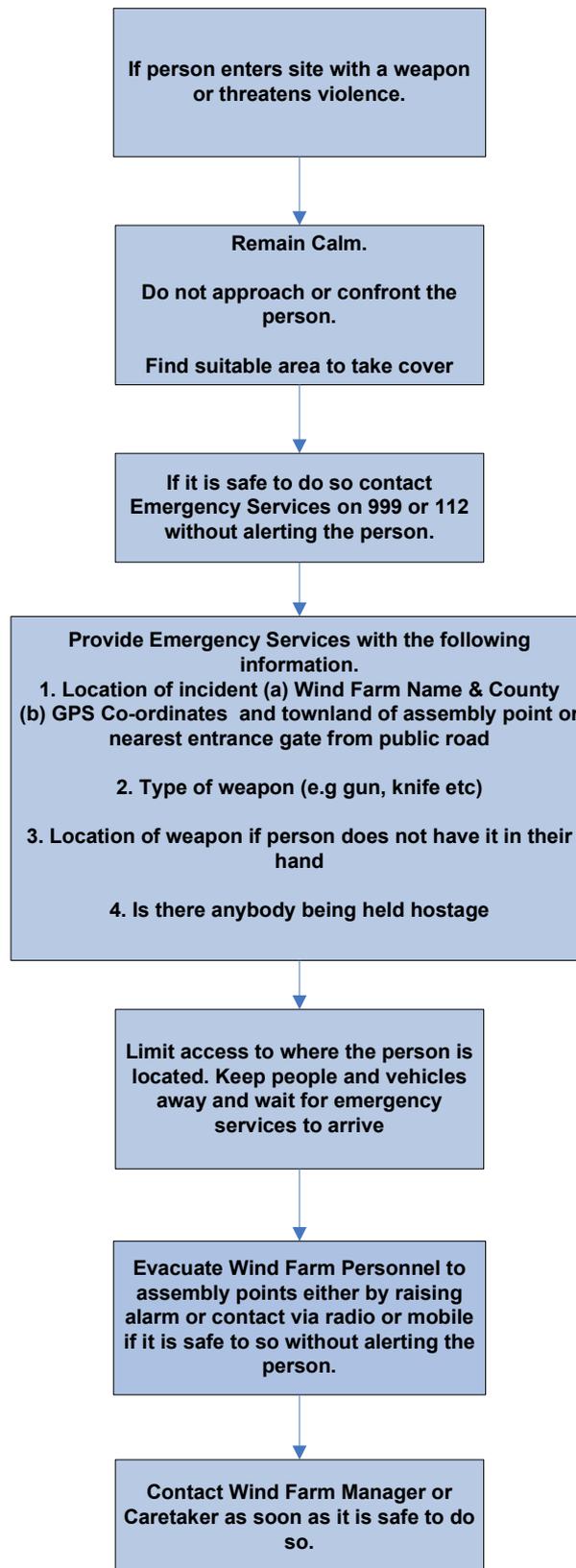
2.12.5 Procedure in the event of Powder extinguisher use



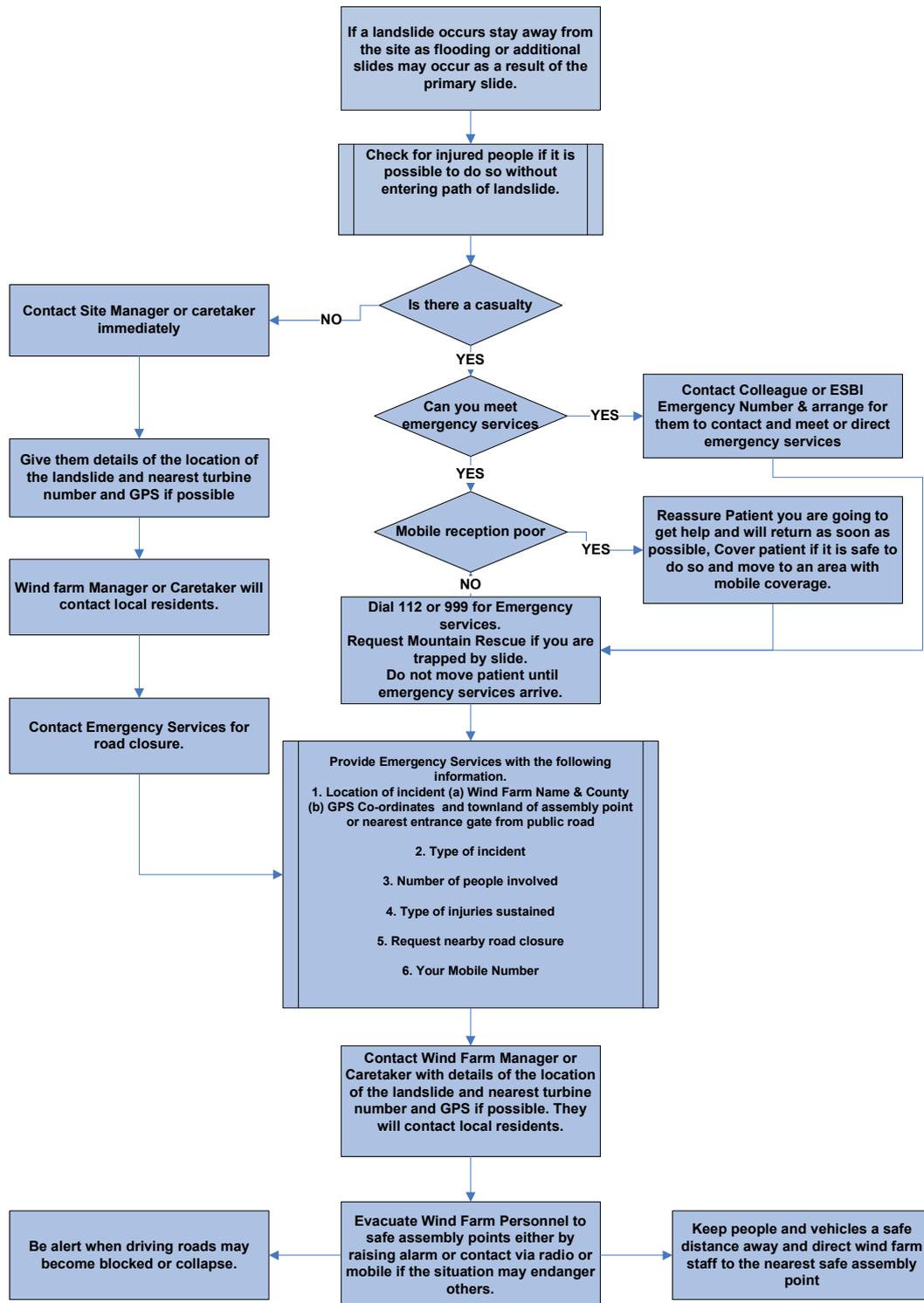
2.14 Procedure in event of exposed cables



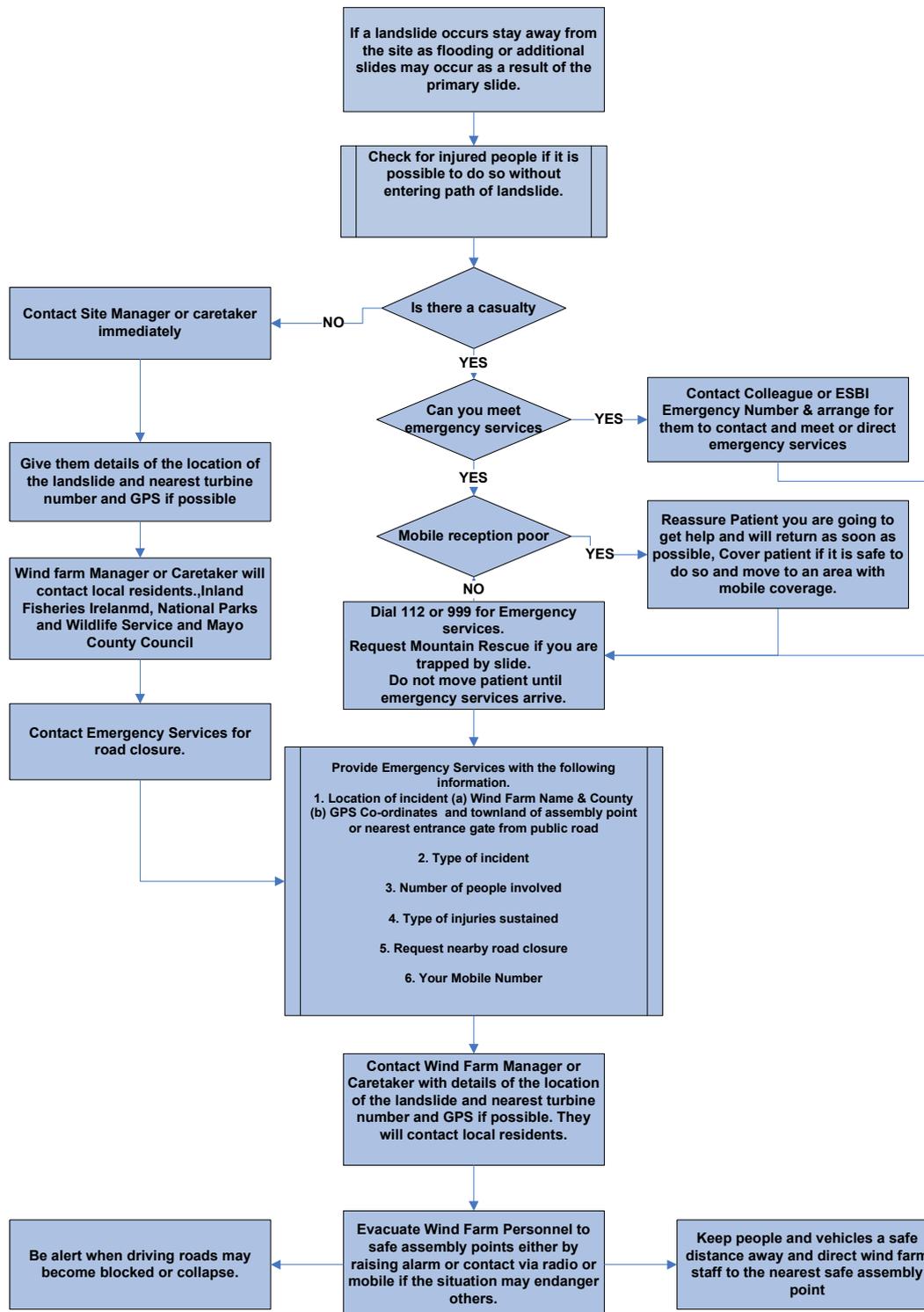
2.15 Procedure in event of security alert



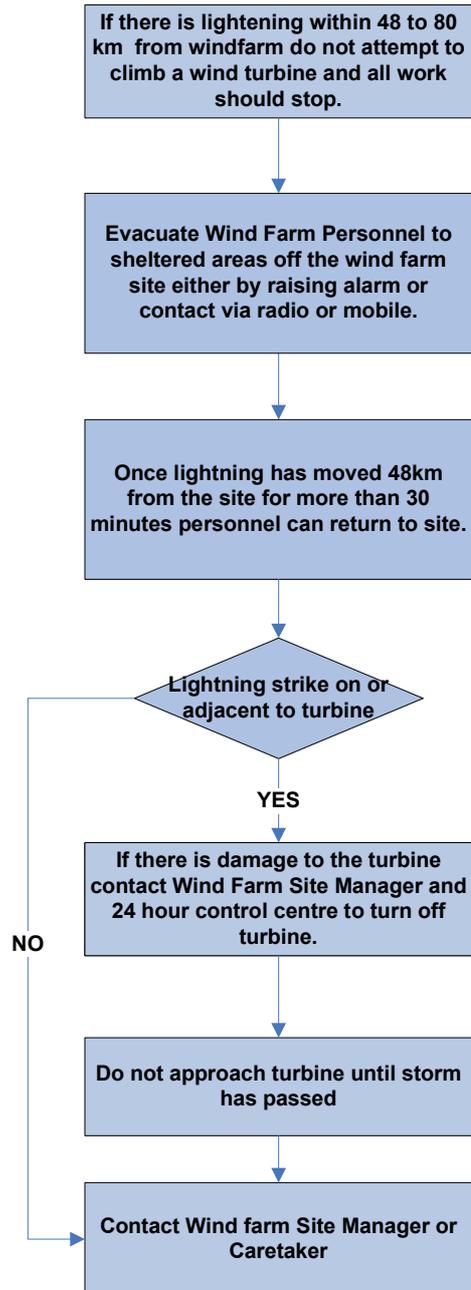
2.16 Procedure in event of landslide



2.17 Procedure in event of landslide impact on environment



2.18 Procedure in event of lightning



2.19 Extreme Weather Conditions

Wind Conditions.

Working on wind turbines is limited within certain wind speeds:

At an average wind speed of 15m/s to 19m/s no work shall be performed outside the nacelle or in the hub.

At average speeds of 20m/s all climbing of turbines is prohibited.

At wind speeds of 25m/s the wind farm should be evacuated using the evacuation procedure to the assembly points.

Snow/Ice Conditions

Climbing is permitted inside towers during ice and snow conditions but no work is to be carried out on the nacelle or hub or on lattice met mast towers.

Where roads are difficult to pass with snow or ice conditions then work should be stopped until conditions improve.

2.20 Lone working procedure

Staff members or Contractors may, on occasions, be required to work alone. Lone working by contractors must be approved by Site Manager and a risk assessment carried out.

The terrain in this site is inhospitable with particularly dangerous underfoot conditions in some areas.

The site may on occasions suffer from severe weather conditions such as frost and mist and strong gusts.

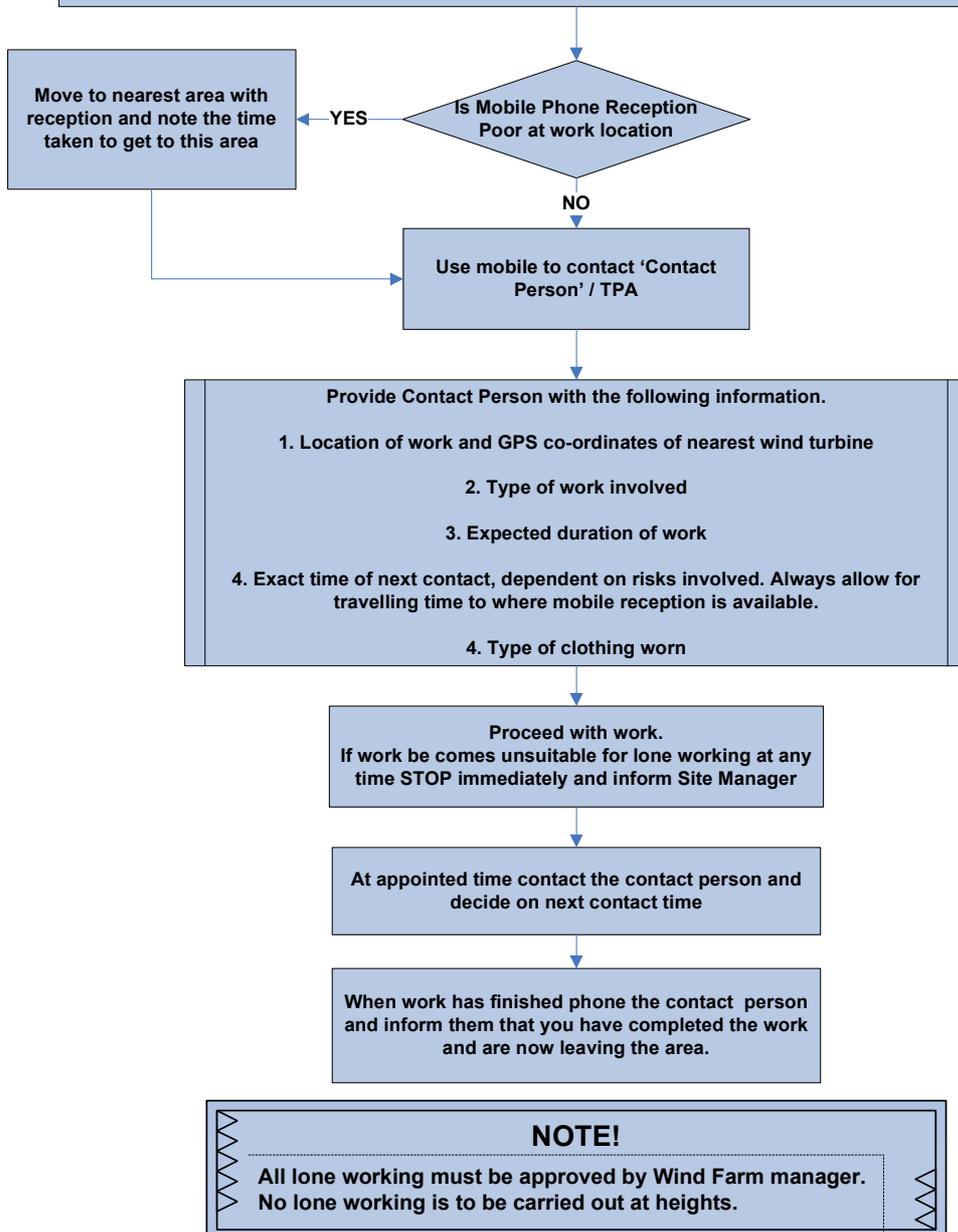
Some locations in the Windfarm may not have Mobile Phone Reception.

It is therefore vital for your own safety to follow these guidelines when working alone.

Before Proceeding to Work Location

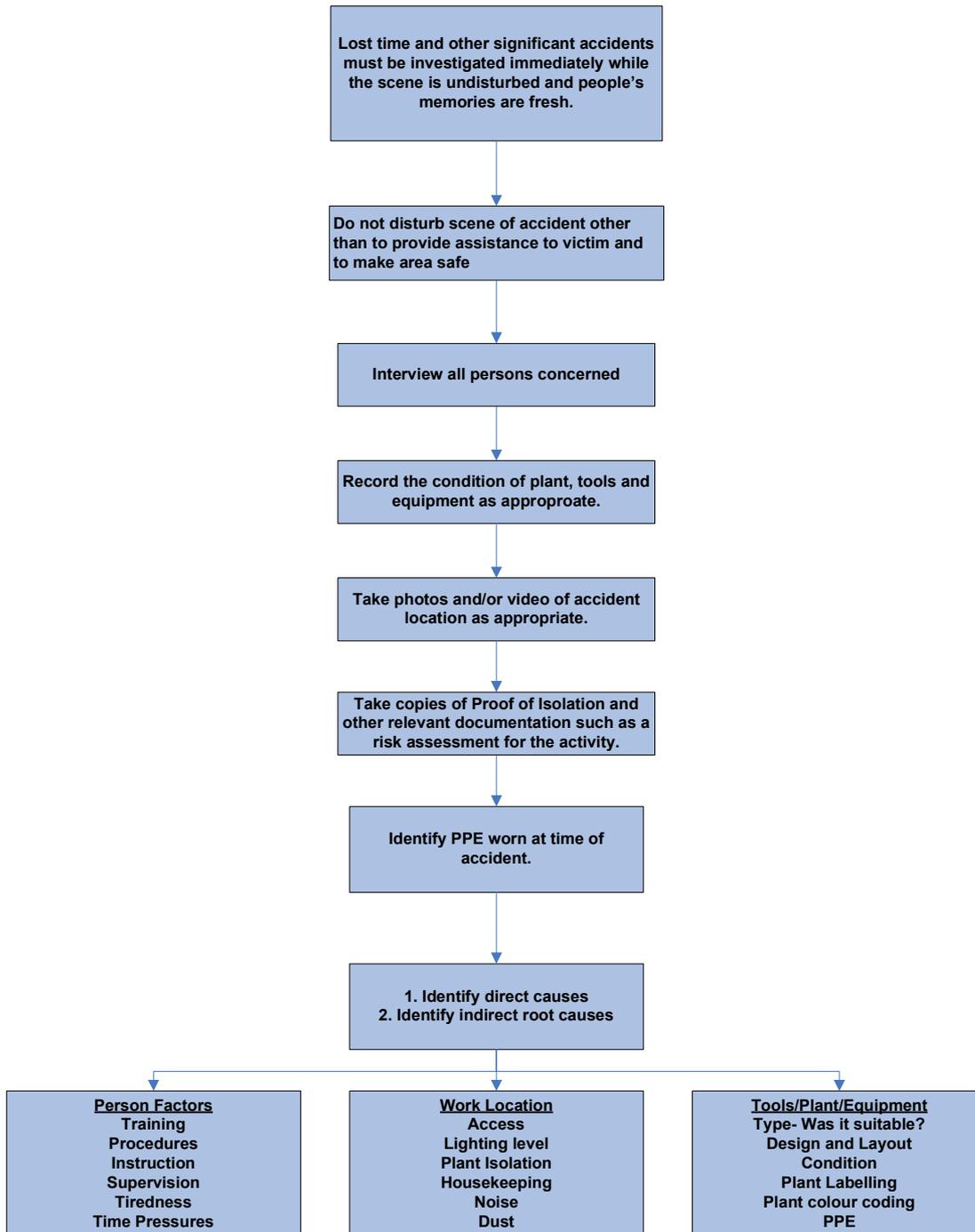
1. Assess the work requirements in advance. Take particular note of the exact location and the expected duration of the work.
2. Carry out risk assessment. Note the weather forecast for the area.
3. Select a dependable contact person. Explain to this person that you will be working alone in a remote area and request his permission to be your contact person.

This person could be the Site Manager, a work colleague or family member.
4. Discuss the work plan with the person and also the Emergency Plan in the event of an accident (Phone Numbers etc.) Give the grid coordinates of the nearest wind turbine or substation.
5. Always carry a mobile phone and SPOT device and check batteries are fully charged
6. Always carry a site map with grid coordinates and a list of emergency contacts
7. Always carry a portable first aid kit
8. Always wear PPE in particular high vis vest.
9. Use a flashing beacon on vehicle



3 ACCIDENT INVESTIGATION

All contractors are responsible for notifying Wind Farm Site Management of all accidents and the Health and Safety Authority where required.



4 APPENDIX A – WINDFARM DETAILS

4.1 EMERGENCY NUMBERS

Wind Farm Contacts:

Organisation	Contact Person		Contact details
Oweninny Power Limited	Gerard Noonan(Project Manager)		Mob: 0879976880 Tel: Email: gerard.noonan@esb.ie
Inland Fisheries Ireland Ballina	John Conneeley (Director Western River Basin District)	Ardnaree House, Abbey Street, Ballina, Co. Mayo, Ireland	Tel: 353 (096) 22788 Mob:353 (087) 2209262 Email: John.Conneeley@fisheriesIreland.ie
Mayo County Council	Environment Section	Second Floor, Mayo County Council Aras an Chontae The Mall Castlebar	Tel:353 (0)94 902 44 44 Email: Environment@mayococo.ie Out-of-Hours Contact 094 90 24444
	Roads Section	Second Floor Mayo County Council Aras an Chontae The Mall Castlebar	Phone: (094)902 44 44 Email: Roads@mayococo.ie Out-of-Hours Contact 094 90 24444
National Parks and Wildlife Service	Western Region Regional Manager: Deputy Regional Manager: Divisional Ecologist: District Conservation Officer: (Mayo).		Tel: 353 (095) 60 900 Tel:353 (076) 100 2519 Tel:353 (091) 539 284 Tel:353 (076) 100 2520
Fire Brigade	West Regional Control Centre		112 or 999
Garda	Bangor Erris	Bangor Erris is in the Mayo Division and in Belmullet District. Bangor Erris Garda Station,	Tel: +353 97 83462 Fax: No fax

		Bangor Erris, Co. Mayo.	
	District HQ: Belmullet	District Officer: Superintendent Joseph McKenna	District HQ Tel: +353 97 81917
	Divisional HQ: Castlebar	Divisional Officer: Chief Superintend. Finbarr O'Brien	Tel: +353 94 9038211
	Crossmolina.	Crossmolina Garda Station, Crossmolina, Co. Mayo.	Tel: +353 96 31371