PNGC

Annex to Club Rules

SAFETY & ENVIRONMENTAL MANAGEMENT PLAN

Date: July 2020

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1. INTRODUCTION

- 1.1 This Annex to the Club Rules describes Safety & Environmental Management at PNGC and the tasks and responsibilities of key members of Portsmouth Naval Gliding Centre (PNGC) at Middle Wallop airfield site.
- 1.2 The Safety Annex is based on the safety and environmental management requirements as defined in Reference (1),(2) and (3), the authority of which is paramount.
- 1.3 **Every member** of PNGC has a responsibility for Safety & Environmental issues at PNGC.

2. RESPONSIBILITIES OF THE PNGC COMMITTEE

- 2.1 The Chairman and Committee of PNGC are directly appointed and responsible to the RNGSA and BGA for safety & environmental management of gliding activities at Middle Wallop site, or PNGC sponsored activities at other locations in the UK and Abroad.
- 2.2 Additionally PNGC is responsible to the Commanding officer and Airfield Manager, appointed by Middle Wallop on behalf of the airfield owners (Ministry of defence), to assist him in discharging his tasks in accordance with the Airfield Operations Manual (DAM) where PNGC Operations are involved.
- 2.3 The PNGC Safety Officer (PSO) should be suitably experienced in the field of Safety, and in particular gliding operations. The PSO is to be a member of the Safety Management Committee and as such will be functionally responsible to the PNGC Chairman for the necessary observance of safety requirements. This appointment will be subject to approval by the Chairman PNGC.
- 2.4 The provision of services and facilities which are necessary to enable assurance to PNGC members that all aspects of flight safety, personal safety and environmental concerns have been adequately addressed in a timely manner is the responsibility of the PNGC Committee.
- 2.5 The Chairman will ensure, with the assistance of the PNGC Safety Officer and CFI, that:
 - 2.5.1 All flying and ground operations shall have Risk analysis and appropriate mitigation action to reduce risks to a tolerable and "as low as reasonably practicable" (ALARP) condition as defined at Ref.2).

- 2.5.2 Emergency procedures shall be in place to cover accidents/incidents.
- 2.5.3 Good safety and environmental housekeeping is maintained in all areas under PNGC control.
- 2.5.4 Adequate protective clothing and equipment is provided and procedures issued, to deal with foreseeable emergencies or risks.
- 2.5.5 Adequate provision is made to control newly introduced articles and substances, covering each stage of their use and handling.
- 2.5.6 No contaminated or otherwise hazardous material, chemical or gas will be permitted to be used, without provision being made to account for the hazards involved. At all stages, the Safety Officer is to be consulted.
- 2.5.7 Evaluation of hazardous items is taken into account with regard to handling, receipt, inspection, storage, processing, testing, transporting and disposal. This includes consideration for provision of adequate safeguards to protect any person, whether intentionally or indirectly involved.
- 2.5.8 With regard to the COSHH Regulations, anyone who intends or anticipates introducing work processes to be carried out at PNGC which involves the use of hazardous substances as defined in the Regulations (ref 10), is to ensure that, in consultation with the Safety Officer, a written COSHH Assessment is produced – BEFORE the process is undertaken.
- 2.5.9 All arrangements and precautions should be identified in the Risk Assessment completed prior to work starting. Risk Assessment forms are available from the PSO or on the Club Web site Page.

3. RESPONSIBILITIES OF PNGC SAFETY OFFICER

3.1 The PNGC Safety Officer (PSO) is responsible to the Chairman and Committee for non-flying safety and environmental management within the Club. Flight Safety will be the responsibility of the Chief Flying Instructor reporting directly to the PNGC Chairman and RNGSA Air Member.

- 3.2 The PSO may also be required to liase with the Airfield Manager or Airfield Owners regarding safety and environmental issues affecting other airfield users.
- 3.3 The function of the PSO is to provide specialist advice to the PNGC Chairman and Committee in this area of expertise.
- 3.4 The PSO shall be qualified through training and/or having a minimum of 5 years experience in the particular field which they are appointed to represent. With the appropriate experience a PSO can cover a number of related disciplines.
- 3.4 The PSO shall produce and maintain
 - a) Risk Assessment database.
 - b) Hazard Identification Log
 - c) A Register of COSHH Assessment Forms.
 - d) Environmental Impact Assessments
 - e) Safety Register (defects with potential to cause harm)
- 3.5 The PSO shall work closely with the BGA Safety Committee on matters relating to Health, Safety and Environmental issues along with Flight Safety matters delegated by the CFI.
- 3.6 The PSO will assist the CFI, when required, in conducting internal investigations relating to Flight Safety.
- 3.7 Management of the correct disposal of Special/Hazardous waste.

4. PNGC SAFETY COMMITTEE ORGANISATION

- 4.1 The PNGC Safety Committee shall comprise of the PNGC Chairman (or his nominated Deputy), The Club Manager, Chief Flying Instructor and the PNGC Safety Officer.
- 4.2 The Committee will meet periodically to review the identified hazards in the Hazard Log and any new Risk Assessments submitted since the previous meeting.
- 4.3 The Committee will also review any accidents, incidents and 'near-misses' with a view to improving safety and environmental issues.
- 4.4 The Chairman or CFI shall discuss any relevant items raised at the meeting forums of the Airfield User's, RNGSA, BGA Chairman or BGA CFI's Conference.

4.5 In the event that action needs to be taken urgently then communication to the appropriate organisations will be authorised directly by the Chairman (or nominated Deputy).





- 1. Instructors
- 2. Tug pilots
- 3. Launch-Point Controllers
- 4. Winch operators

- 1. Workshop Manager
- 2. Electrical maintenance
- 3. Fire-fighting Equipment
- 4. Vehicle maintenance
- 5. Grass cutting
- 6. Fuel Manager
- 7. First Aid Equipment
- 8. Hangar Bos'un

5. ENVIRONMENTAL MANAGEMENT

- 5.1 PNGC as a MoD sponsored organisation will aim to follow the guidelines of JSP
 418 (Environmental Management) and ISO 14001 to assist the Maritime
 Coastguard Agency (MCA) and the South East England Development
 Agency(SEEDA) in complying with Statutory Regulations and Standards.
- 5.2 PNGC will identify the environmental impacts of its operations to ensure that it complies with statutory legislation whilst continually monitoring its operations in support of environmental protection.
- 5.3 Environmental Impact Assessments will be used as a source of identifying Environmental Aspects (hazards).
- 5.4 The capture, recording and assessment of environmental impacts will use the same techniques as those used to manage safety hazards. (Note: The criteria for assessing the severity of environmental hazards differs somewhat from safety hazards and are outlined in Annex **).
- 5.5 The PNGC Safety Committee will review environmental issues as part of its normal business. Any relevant issues will be made known to MCA and SEEDA Management.
- 5.6 An example of an Environmental Risk Assessment Form can be found at Annex **.

6. **REFERENCES**

- 1. Management of Health and Safety at Work 1999
- 2. United Kingdom Health & Safety Publication "Reducing Risk , Protecting People 2001"
- 3. ISO 14001 Environmental Management
- 4. ANO and Rules of the Air
- 5. BGA Laws and Rules
- 6. Airfield Operations Manual (Middle Wallop DAM)
- 7. PNGC Club Rules
- 8. Dangerous Substances and Explosive Atmospheres Regulations 2002
- 9. Health and Safety at Work etc Act 1974
- 10. COSHH Regulations 2002
- 11. Control of Pollution (Oil Storage) England Regulations 2001
- 12. Special Waste Regulations 1996
- 13. Noise and Statutory Nuisance Act 1993
- 14. Water Resources Act 1991
- 15. Chemicals (Hazard Information and Packaging for Supply)1994
- 16. JSP 418 (MoD Environmental Manual 1996)
- 17. ISO 14001 Environmental Management Standard
- 18. Manual Handling Operations Regulations 2002
- 19. Regulatory Reform (Fire Safety) Order 2005

7. ACRONYMS

ACOP	Approved Codes Of Practice
ALARP	As Low As Reasonably Practicable BGA
	British Gliding Association
BS	British Standard
CFI	Chief Flying Instructor
CHIP	Chemicals (Hazard Information and Packaging for Supply) COSHH
	Control of Substances Hazardous to Health
DAM	Middle Wallop Defence Aerodrome Manual
DEFRA	Department of Environment Fisheries and Rural Affairs
HSE	Health and Safety Executive
ISO	International Standards Organisation JSP Joint
	Service Publication
MCA	Maritime Coastguard Agency MoD
	Ministry of Defence
PNGC	Portsmouth Naval Gliding Centre PSO
	PNGC Safety Officer
RNGSA	Royal Naval Gliding & Soaring Association SEEDA
	South East England Development Agency SEMP Safety
	and Environmental Management Plan SMPSafety
	Management Plan

8. **DISTRIBUTION**

Chairman - PNGC CFI - PNGC Club - Noticeboards PNGC - Web Page

9. ISSUE STATUS

This Plan is at Issue 8th July 2020 and will be reviewed annually unless major changes require an earlier 'up issue'.

PNGC RISK ASSESSMENT FORM

Serial No: Date of Next Review:

Organisation			ctivity		Hazard Identif	fication
PNGC		Fh	ving - Gliders		Elving Activities	
Privately Owned Clider			ving - Oliders		Mochanical	
Privately Owned Bower Aircreft					Flootrical	
Other Airfield Llear		GI			Electrical	
Other Aimeid User					wasie	
			avei		Others (an a sife)	
					Others (specily)	
		Ot	hers (specify)			
SUMMARY OF ACTIVITIES						
1						
1.						
SUMMART OF HAZARDS						
1.						
BOBULATION AT DISK (inc No.)						
POPULATION AT RISK (INC NO.)						
CURRENT SAFETY PRECAUTION	NS & C	ONTROL N	MEASURES			
1	1					
1.						
CURRENT RISK ASSESSMENT	1	HIGH		MEDIUM		LOW
RISK REDUCTION ACTIONS						
1.	-					
L						
FINAL RISK ASSESSMENT		IIGH		MEDIUM		LOW
	· · ·		l			
Accessed by		Davia	wod by Cofety O	ficer	Authorizod by	CEUChairman
Assessed by		Revie	weu by Safety O	ncer	Authorised by	UFI/Unairman
Deter					D-1	
Date:		Date:			Date:	••

GUIDANCE NOTES

For further guidance on completing this form contact the PNGC Safety Officer ent Will be completed by the PNGC Safety Officer or Administrator.

Risk Assessment

No.	
Organisation	Tick the appropriate box.
Activity	Tick the appropriate box.
Hazard Identification	From the Hazard Identification Check List select all hazard types applicable to the task/activity being assessed and enter the hazard identification code in the appropriate box.
Summary of Activities and Hazards	Briefly describe the key aspects of the task/activity being assessed and how the hazard(s) may arise. Look only for the HAZARD(S) which you could reasonably expect to be present and which may result in significant harm under the conditions of your task / activity. In addition to hazards, which arise from "normal operations", consider also likely abnormal and emergency situations
Population at Risk	State the approximate number of people likely to be effected by the hazards of the task/activity. Don't forget it may not be just personnel carrying out the activity who may be effected. Consider also third parties.
Current Safety Precautions and Control Measures	Describe the control measures or precautions already taken to reduce the risks from the hazards you have listed? e.g. Training, supervision , written procedures, fitting of guards and covers, provision of special tools or work areas, adequate information, instruction and safe systems etc
Current Risk Assessment	Assess the level of risk taking into account the current control measures and precautions using the matrix below. Consider first the likely probability of the event arising and identify which row of the matrix is applicable. Then consider the most likely outcome of the hazard being realised in terms of personal injury or environmental impact and identify which column on the matrix applies. The box at which the two crosses will fall into either the low/medium/high risk sections of the matrix. i.e.C3
Risk Reduction Actions	Have risks been reduced to a level that is as low is reasonably practicable? It may help to consider if the current measures have to meet standards set by regulations, Air Navigation Order, BGA Laws & Rules, HSE guidance and local Agreed Codes of Practice (ACOPS). Where appropriate identify further risk reduction measures.
Final Risk Assessment	Now re-assess the expected level of risk assuming the further risk reduction measures identified are in place.
Date of Next Review	Assign a date for the next review based on an estimate of the likely hood of changes occurring that may effect the validity of the assessment.
Acceptability of Risk	 LOW: No action is required if a hazard falls in this area, although some cost-effective improvements may be judged worthwhile. MEDIUM: If a hazard falls in this area, a cost versus benefit analysis will help decide whether remedial action is taken or the risk accepted. HIGH: If a hazard is judged to be in this area the activity is not to be carried out until corrective action are implemented to reduce the risk to a lower level.



HAZARD IDENTIFICATION CHECKLIST

1	ELYING ACTIVITIES
1 1	OPERATIONS
1.1	
1.2	
1.3	
1.4	
1.5	VISITOR MANAGEMENT
1.6	OTHER
2	MECHANICAL HAZARDS
2.5	DRAWING-IN / TRAPPING
2.6	IMPACT
2.7	STABBING / PUNCTURE
2.8	FRICTION / ABRASION
2.9	HIGH PRESSURE FLUID INJECTION
2.10	SLIPS / TRIPS / FALLS
2 11	FALLING / MOVING OBJECT
2.12	OTHER MECHANICAL HAZARDS
2.12	
3	ELECTRICAL HAZARDS
3.1	DIRECT CONTACT
3.2	INDIRECT CONTACT
3.3	ELECTROSTATIC PHENOMENA
3.4	SHORT CIRCUIT / OVERLOAD
3.5	SOURCE OF IGNITION
3.6	OTHER ELECTRICAL HAZARDS
0.0	
4	WASTE
4.1	TOXIC
4.2	HAZARDOUS
4.3	DOMESTIC
44	SPECIAL
15	FIE
4.5	TOEL
5	WASTE
5.1	TOXIC
5.2	HAZARDOUS
5.3	DOMESTIC
5.4	SPECIAL
5.5	FUEL
	-
6	OTHER
6.1	Winch Driving
6.2	Airfield Driving
6.3	Launchpoint Control
6.4	Work Environment
6.5	Stressful Posture
6.6	Poor Workplace design
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Severity Category	Safety Consequences				
	Personnel	Material Safety			
Catastrophic	Multiple deaths or multiple serious injuries	Total loss or extreme damage of property (100%)			
Major	Severe Injury/ illness or single fatality	Major damage of property. (10 - 95% of unit cost)			
Moderate	Injury or occupational illnesses	Severe damage of a property (1-10% of unit cost),			
Minor	A single injury or occupational illness and/or multiple minor injuries or occupational illnesses	Small damage to property (0.01 - 1% of unit cost)			
Negligible	At most a single minor injury or minor occupational illness	Negligible damage to property. (< 0.01% of unit cost),			

Fig 2

Table of Safety Severity Categories

PNGC ENVIRONMENTAL RISK ASSESSMENT FORM

Serial No: Date of Next Review:

Organisation	Activity	Hazard Identification				
PNGC	Flying - Gliders	Release of Energy				
Privately Owned Gliders	Flying - Power	Chemical Hazard				
Privately Owned Power Aircraft	Maintenance	Hazardous Substances				
Other Airfield Users	Ground Handling	Local Environment				
	Travel (Expeditions)	Hazardous Waste				
Other (specify)	Visitors	Others (specify)				
	Others (specify)					
SUMMARY OF ACTIVITIES SUMMARY OF ENVIRONMENTAL ISSUES SPECIES AT RISK (inc No.) CURRENT ENVIRONMENTAL PRECAUTIONS & CONTROL MEASURES						
RISK ASSESSMENT						
RISK REDUCTION ACTIONS TO BE APPLIED						
Assessed by	Reviewed by PNGC Safety Officer	Authorised by CFI/Chairman				
 Date:		Date:				

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ENVIRONMENTAL RISK ASSESSMENT GUIDANCE NOTES

For further guidance on completing this form contact the Health & Safety Adviser or Safety Officer

Risk Assessment	Will be completed by the Risk Assessment Database Co-ordinator or Administrator.				
Organisation	Tick the appropriate box.				
Activity Hazard Identification Summary of Environmental	Tick the appropriate box. From the Environmental Effects Check List s being assessed in the appropriate box. Briefly describe the key aspects of the ta hazard(s) may arise.	select all effects applicable to ask/activity being assessed	o the task/activity and how the environmental		
Species at Risk	Look only for the environmental nazards, we may result in significant harm to the environ of your task / activity. In addition to enviro consider also likely failures (human and mad State the approximate number of living anim	nen you could reasonably ex ment or living animals/marin primental hazards, which ar chinery) and the environmen als/marine life etc. likely to b	the effected by the hazards of		
	the task/activity. Don't forget it may not be just be animals/m forms, such as plants, micro-organisms. Pay	arine life, which may be effort A particular attention to the	ected. Consider also other life e immediate local environment		
Current Environmental Precautions and Control Measures	Describe the control measures or prec- environmental hazards you have listed? equipment, check on the life forms in the provision of adequate information, instructio methods, emergency procedures atc	autions already taken to E.g. provision of spillage area both in advance of tl n, and training, and provisio	reduce the risks from the e trays and special spillage ne test and just prior to test, n written procedures, disposal		
Current Environmental Risk Assessment	Assess the level of environmental risk, takin precautions using the matrix below. Conside which row of the matrix is applicable. Then of hazard being realised in terms of environme applies. The box at which the two crosses w matrix.	g into account the current co r first the likely probability of consider the most likely outco ntal effects and identify whic ill fall into either the low/mec	ntrol measures and the event arising and identify ome of the environmental h column on the matrix lium/high risk sections of the		
Risk reduction Actions	Have environmental risks been reduced to a to consider if the current measures have to r DEFRA guidance and ACOPs, or recognised identify further risk reduction measures.	level that is as low is reason neet standards set by regula d industry standards of best	nably practicable? It may help ations, Environmental Agency, practice. Where appropriate		
Final Environmental Risk Assessment Date of Next Review	Now re-assess the expected level of environ identified are in place. Assign a date for the next review based on a may effect the validity of the assessment	mental risk assuming the funder the funder of the likely hood	rther risk reduction measures of changes occurring that		
Acceptability of Environmental Risk	LOW: No action is required if an environmer improvements may be judged worthwhile. MEDIUM: If an environmental hazard falls in	ntal hazard falls in this area, this area, a cost versus ber	although some cost-effective nefit analysis will help decide		
	HIGH: If an environmental hazard is judged until corrective action are implemented to	accepted. to be in this area the activit o reduce the risk to a lowe	y is not to be carried out r level.		



ENVIRONMENTAL HAZARD IDENTIFICATION CHECKLIST

	RELEASE OF ENERGY
1.1	THERMAL
1.2	ACOUSTIC
1.3	EXPLOSIVE
1.4	ELECTRICAL
1.5	MECHANICAL
1.6	KINETIC
1.7	LIGHT
1.8	NUCLEAR RADIATION
2	CHEMICAL HAZARDS
2.1	LIQUID
2.2	GAS
2.3	SOLIDS
2.4	DUST
2.5	MIST
2.6	VAPOUR
2.7	FUMES
3	RADIATION HAZARDS
3.1	NOISE
3.2	
3.3	
3.4	IUNISING / NON-IONISING RADIATION
3.5	UTHER RADIATION HAZARDS
4	
4.1	TOXIC FLUIDS
12	
4.2	TOXIC GAS / MIST / FUMES / DUST
4.2 4.3	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST
4.2 4.3 4.4 4.5	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES
4.2 4.3 4.4 4.5 4.6	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES
4.2 4.3 4.4 4.5 4.6 4.7	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES
4.2 4.3 4.4 4.5 4.6 4.7 5	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY
4.2 4.3 4.4 4.5 4.6 4.7 5.1 5.2 5.3	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8.	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8. 5.9	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR OTHER ENVIRONMENTS
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 6	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR OTHER ENVIRONMENTS HAZARDOUS WASTE
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8. 5.9 6 6.1	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR OTHER ENVIRONMENTS HAZARDOUS WASTE TOXIC
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8. 5.9 6 6.1 6.2	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR OTHER ENVIRONMENTS HAZARDOUS WASTE TOXIC FLAMMABLE
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 6 6.1 6.2 6.3	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR OTHER ENVIRONMENTS HAZARDOUS WASTE TOXIC FLAMMABLE BIOLOGICAL
4.2 4.3 4.4 4.5 4.6 4.7 5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 6 6.1 6.2 6.3 6.4	TOXIC GAS / MIST / FUMES / DUST FLAMMABLE FLUIDS FLAMMABLE GAS / MIST / FUMES / DUST EXPLOSIVE SUBSTANCES BIOLOGICAL SUBSTANCES OTHER HAZARDOUS SUBSTANCES LOCAL ENVIRONMENT LAND BUILT UP AREA LAND FORESTRY LAND UNDERGROUND FLOODED SHAFT/PIT SEA LOCAL WATERS SEA OPEN OCEAN RIVERS AND TRIBUTARIES AIR OTHER ENVIRONMENTS HAZARDOUS WASTE TOXIC FLAMMABLE BIOLOGICAL OTHER

Severity Category	E	Environmental Consequences		
			Environmental (Including General Public) Safety	
Catastrophic			Severe long term environmental damage which affects people, animals and marine and bird life for more than 100 years	
Major			Major event resulting in severe environmental damage to animals, marine and bird life taking between 10 to 100 years for recovery	
Moderate			Environmental impact which causes a single death and multiple animal, marine and bird deaths. Recovery 1 to 10 years.	
Minor			Impact levels above legal limit which temporarily affects animal and marine life. Recovery 1 week and minor public interest	
Negligible			Negligible impact at or below legal limit. Nuisance extending for 1 week. No public or media interest.	

Fig 3

Table of Environmental Severity Categories