

**Sizewell C Project**  
**Combustion Activity Permit Application**  
**Appendix I: Accident Prevention and**  
**Management Plan**

A - APPROVED

© Copyright 2024 Sizewell C Limited. All rights reserved.

## DOCUMENT CONTROL

This document is stored and approved in the Electronic Document and Records Management System (EDRMS).

<b>Prepared by:</b>	██████████ Senior Consultant
<b>Verified by:</b>	██████████ Associate Director
<b>Reviewed by:</b>	██████████ Environment Consents and Permits Delivery Lead
<b>Approved by:</b>	██████████ Sizewell C Environment Manager - Construction Permits and Consents

## REVISION HISTORY

Rev	Status	Amendment	Prepared By	Date
01	Final	First issue	██████████	11/04/2024

## CONTENTS

<b>Definitions .....</b>	<b>4</b>
<b>1 CONTEXT .....</b>	<b>5</b>
1.1 Introduction .....	5
1.2 Site Setting .....	6
1.3 Designated Sites .....	8
<b>2 ENVIRONMENTAL RISK ASSESSMENT .....</b>	<b>9</b>
2.1 Methodology .....	9
2.2 Impact Assessment .....	10
3.1 Substances stored at the Construction Site.....	27
<b>4 ACCIDENT MANAGEMENT .....</b>	<b>28</b>
<b>5 GENERAL INFORMATION .....</b>	<b>30</b>
5.1 Records.....	30
5.2 Reporting.....	30
5.3 Notification .....	30
<b>SPILL PROCEDURE AND REPORTING FORM.....</b>	<b>31</b>

A - APPROVED

## Definitions

Term / Abbreviation	Definition
ACA	Ancillary Construction Area
ADs	Associated Development
APMP	Accident Prevention and Management Plan
CEMP	Construction Environmental Management Plan
CES	Construction Electrification Supply
CoCP	Code of Construction Practice
CWS	Country County Wildlife Site
DCO	Development Consent Order
DMP	Dust Management Plan
EA	Environment Agency
EIA	Environmental Impact Assessment
EMS	Environmental Management System
EPR	Environmental Permitting (England and Wales) Regulations 2016, as amended
E&S Appendix	Environment and Sustainability Appendix
Ha	Hectares
Kv	Kilovolt
MCA	Main Construction Area
MDS	Main Development Site
MW	Megawatt
NGR	National Grid Reference
NNB	Nuclear New Build
NMMP	Noise Monitoring and Management Plan
PM	Particulate Matter
PPMP	Preventative Maintenance Programme
RAMS	Risk Assessment and Method Statement
Ramsar	Ramsar Convention on Wetlands of International Importance
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Special Scientific Interest
SZC	Sizewell C

## 1 CONTEXT

### 1.1 Introduction

This Accident Prevention and Management Plan (APMP) is provided as additional information to support the environmental permit application to enable electricity generation on site during the construction phase of the Sizewell C (SZC) nuclear new build project. The construction of SZC will utilise static diesel generators and mobile diesel generators to enable construction prior to the Construction Electrification Supply (CES) being in place. The CES involves electrification of the site from a 132 kilovolt (kV) substation, anticipated in early 2027. The generators are needed to provide energy for elements such as welfare facilities, lighting and operation of cranes.

The site is expected to have a total installed capacity of up to 123.2 MWth. The static generators installed capacity is expected to be up to 109.9 MWth, and mobile generators will have a total capacity of up to 13.3 MWth. The power demand during the peak construction is expected to be up to 82.4 MWth, after adjusting the load to account for the utilisation of the hybrid operational mode of the generators.

In total, up to 52 static and 8 working areas, which are considered to be area sources for the purposes of the application, will be located on site. The static generators on site will consist of up to 45 stage V emission static generators with hybrid batteries linked to the package substations, located within the MDS, and up to 7 static generators associated with ADs, located within or adjacent to the MDS. The site will also house a number of mobile generators for cranes and lighting on the construction site which are designed to be, and will be, moved around within a particular working area or contractor's platform which is expected to have a total capacity of up to 13.3 MWth. The mobile generators are represented as volume sources, split across 8 working areas which comprise: MCA, MCA perimeter, TCA compounds south-east, TCA compounds south-west, TCA compounds north-east, TCA stockpiles, ACA and TCA rail. Please see the AERA for further information regarding these working areas

The installation activity environmental permit will consist of liquid fuel burning engines operating under Section 1.1 Part A(1)(a) of the Environmental Permitting (England and Wales) Regulations 2016, as amended, (EPR) for the burning of fuel in an appliance with a rated thermal input of 50 or more Megawatt (MW).

The APMP is required to deal with any incidents or events that could result in:

- Pollution; or
- Not complying with an environmental permit.

The plan must also identify potential accidents, for example:

- Equipment breakdowns;
- Enforced shutdowns;
- Fires;
- Vandalism;
- Flooding; and
- Any other incident which causes an unexpected change to normal operations, such as extreme weather.

For each of the above categories, the assessment approach has followed a six-stage process in accordance with the EA web guidance ([Develop a management system: environmental permits – GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/develop-a-management-system-environmental-permits)) on environmental risk assessment:

1. Identification of hazard;
2. Identification of receptors the hazard may effect;
3. Identification of possible pathways to receptors;
4. Assess the risk (on the assumption of control measures being applied to avoid the accident happening);
5. Choose further measures to control the risk (if appropriate); and
6. Present overall assessment of the risk.

Further to the above there will also be a consideration of measures that will be undertaken to minimise the impact if the accident does happen.

The APMP should be read in conjunction with the Contingency Plan (Appendix J of the Supporting Information Document) and the potential accidents that can occur are detailed within Section 2. The potential accidents that can occur are presented as the Environmental Risk Assessment required as part of a bespoke environmental permit application and subsequently forms part of the management system.

## 1.2 Site Setting

The site is located on the east coast of England in East Anglia, 2.4 km east to the town of Leiston and directly north of Sizewell B. The site location is shown in Figure A.1, Appendix A of the Supporting Information Document.

The site of the proposed development is centred at UK National Grid Reference (NGR) TM 47355 64128. It is located on the Suffolk coast, approximately mid-way between Felixstowe and Lowestoft, to the north-east of the town of Leiston. The site address being used for the construction works is Sizewell B power station, near Leiston, Suffolk, IP16 4UR (as the nearest operational facility). The development comprises a Nuclear New Build (NNB) Power Station. This will include a power station building, reactor buildings, turbine halls, cooling water infrastructure, interim waste / fuel storage, operational service centre and offices, electricity transmission equipment, the temporary works area and associated infrastructure to facilitate construction or operation.

This permit application relates to the following areas of the site:

- MCA;
- TCA;
- ACA; and,
- Associated Developments 4 and 6 (considered as part of MDS for the purposes of this application).

The MCA, TCA and ACA are classified as falling within the MDS, while AD4 and AD6 are located to the west of the MDS comprising a highway scheme required to support the development.

A full description of the development, including details on how it will operate once built, is available publicly online. In summary, and for the purposes of informing the reader of this document, the development comprises two main elements from a construction perspective:

**MDS:** to include aspects such as the reactor buildings, turbine halls, cooling and drainage water infrastructure, interim waste / fuel storage, operational service centre and offices and electricity transmission equipment. The MDS comprises the MCA, TCA and ACA.

**AD sites:** including Darsham Park and Ride, Wickham Market Park and Ride, a Freight Management Facility and improvements to rail / highways infrastructure including the Sizewell Link Road, Two Village Bypass, Yoxford Roundabout, AD6 Road Scheme (which forms part of this permit application) and Leiston Branch Line upgrades.

The areas to which this permit application relates to include the MCA, the TCA, the ACA, AD4, and AD6 which are defined as follows:

**MCA:** The MCA comprises the main Power Station platform which will house the permanent operational plant and buildings. Works will also be undertaken along the foreshore to the east of the main Power Station development platform comprising of sea defences, a marine bulk import facility, combined drainage outfall and other elements. Additionally, a new substation will be constructed in the western section of the TCA approximately located at TM 45280 64153. The MCA is located in the east of the construction permit site. The southern boundary of the zone is south-west of the Sizewell B Power Station bounded by Sizewell Gap. The Sizewell Marshes Site of Special Scientific Interest (SSSI) bound the west and north of the zone and the North Sea is present to the east.

**TCA:** The TCA comprises the area of land located primarily to the north and west of the MCA and to the north of Sizewell Marshes Site of SSSI. This land is required on a temporary basis to facilitate the construction of the Power Station and will include contractor compound areas, borrow pits, spoil management zones, an accommodation campus, extensions to rail infrastructure, a site entrance hub and areas for material storage.

**ACA:** The ACA is isolated from the rest of the MDS and is located immediately north-east of the town of Leiston. The ACA is bounded by Valley Road to the north, Lovers Lane to the east, Eastlands Industrial Estate to the west and King George's Avenue to the south. Note that the DCO and associated planning documents refer to the ACA as Land East of Eastlands Industrial Estate.

**AD4:** AD4 is connected to AD6 and the MDS, intersecting at across Abbey Road. The area in its entirety, comprises a temporary rail extension of approximately 4.5km from the existing Saxmundham to Leiston branch line to a terminal within the main development site.

**AD6:** AD6 forms part of the development but is considered separate from the MDS. This part of the project is located to the west of the MCA and Sizewell Marshes SSSI. It comprises a new highway scheme and roundabout which will form an integral route for both construction and operational phase traffic.

The approximate co-ordinates for the centre of each zone located within the site are as follows:

- The MCA is centred around at approximate NGR TM 47284 64085;
- The TCA is centred around at approximate NGR TM 46235 64729; and
- The ACA is centred around at approximate NGR TM 45592 62778

The site boundary and the site zones can be seen in Appendix A.

The site is located within 1 km of several sensitive land uses [1] as follows:

- Nitrate Vulnerable Zone – the entire site is located within a Nitrate Vulnerable Zone (see Appendix A [2]).
- Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) – the AONB is present within the MCA and eastern edge of the TCA and located adjacent to the ACA.
- Sizewell Marshes SSSI – the SSSI is present to the western edge of the MCA (see Appendix A).
- Minsmere-Walberswick Heaths and Marshes SSSI, Special Area of Conservation (SAC), Ramsar and Special Protection Area (SPA) – is located adjacent to the north of the TCA (Appendix A)

The site boundary, zones, sensitive receptors, monitoring points and site drainage can be seen within Appendix A of the Supporting Information Document.

### 1.3 Designated Sites

There are a number of ecologically designated sites within 10km of the SZC construction site. These include:

- Alde-Ore and Butley Estuaries Special Protection Area (SPA)/Special Area of Conservation (SAC)/RAMSAR
- Minsmere -Walberwick Heaths and Marshes SAC/SPA/RAMSAR/SSSI
- Orfordness to Shingle Street SPA
- Sandings SPA
- Sizewell Marshes SSSI
- Leiston Alderburgh SSSI
- Leiston Common Country Wildlife Site (CWS)
- Aldringham to Aldeburgh Disused Railway CWS
- Dower House CWS
- Suffolk Shingle Beaches CWS
- Reckham Pits CWS
- Sizewell Levels and Associated Areas CWS
- Southern Minsmere Levels – Dunwich Forest & Kenton Hill CWS
- Aldhurst Farm habitat creation scheme
- Marsh harrier/reptile habitat mitigation area within SZC estate
- Ash Wood priority habitat

All of the ecologically designated sites are potential receptors for the accident scenarios considered in Section 2.

Furthermore, there are residential receptors throughout the area in proximity to the construction zones which will be considered as receptors within the environmental risk assessment.



## 2 ENVIRONMENTAL RISK ASSESSMENT

### 2.1 Methodology

The environmental impact and subsequent determination of mitigation for the wider SZC construction site which includes construction activity impacts has been considered as part of the following processes:

- Environmental Impact Assessment (EIA) – undertaken to support the SZC planning applications – identifies specific environmental requirements which are set out in SZC documents.
- Environmental aspects and impacts assessment undertaken as part of the development of the SZC Environmental Management System (EMS). This impact assessment and resulting mitigation is communicated to contract partners undertaking works at the site in SZC’s Environment and Sustainability Appendix (E&S Appendix) and bespoke contractual requirements written into contracts. This level of documentation will also set out actions to be taken to ensure permit compliance.
- Those undertaking work activities are required to produce and/or read and understand SZC compliance documentation, such as the relevant Construction Environmental Management Plan (CEMP), and to take account of these arrangements when developing method statements and risk assessments in respect of their work activities (including all design and construction activities). They must take into account all risks and mitigation measures provided to them at the most detailed level for each work activity and reflecting specific location, environmental factors, close proximity to other work activities etc. They must also read, understand and adhere to the Code of Construction Practice (CoCP).

In addition to the above approach, a site-specific environmental risk assessment has been carried out for the construction combustion activity permit application, which the APMP forms part of, and the remainder of this section provides the outcomes of that assessment including:

- Assessment of risk to environmental amenity;
- Actual and potential accident hazards;
- Typical incident scenarios that could arise from the activities proposed; and
- Assessment of the significance of the associated risk to the environment.

Results of the environmental risk assessment have been provided in the following tables:

- Table 2.1 Assessment of odour risk
- Table 2.2 Assessment of noise and vibration risk
- Table 2.3 Assessment of accident risks

Fugitive emissions associated with the SZC construction combustion facility have been considered as part of this environmental assessment.

Details of SZC’s prevention, control and mitigation measures are presented within the assessment and assume that all relevant controls are in place.

## 2.2 Impact Assessment

Table 2.1 Odour Risks

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is the risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>Odour emissions from the storage of fuel and/or chemicals on site at the SZC construction site</b>	Wider SZC construction site contractors  Residential dwellings near construction site	Air	The fuel and chemicals being stored on site are not particularly odorous. Nonetheless, any designated areas for the storage of chemicals at the SZC site are designed to contain all odours and emissions associated with fuel bulk storage. The most likely release of odour will result from refuelling activity, when dedicated bulk fuel transport vehicles will be used with trained operatives undertaking the delivery under SZC supervision.	Very Low	Very Low  May result in minor and localised odour annoyance for a limited period.	Very Low	Should any odours be observed, or complaints received with regards to odour, then this will be reported to the relevant contractor for resolution. The problem will then be reported to the Site Environmental Oversight Team who would investigate in accordance with site inspection procedure and adopt any corrective actions required to prevent a recurrence. Monitoring will be conducted regularly to support the above.
<b>Odour from use of diesel hybrid generators</b>	Local residences	Air	A written procedure, inspection regime and Preventative Maintenance Programme (PMP) for all plant and equipment forming part of the changes will be developed and implemented, following review of risk assessments by the site operations team to ensure compliance of any issue to the risk assessment, including odour. The PMP will guarantee that equipment	Low	Low  Odour  Harm to human health	Low	Should any odours be observed, or complaints received with regards to odour, then this will be reported to the relevant contractor for resolution. The problem will then be reported to the Site Environmental Oversight Team who would investigate in accordance with site inspection procedure and adopt any corrective actions required to prevent a recurrence.

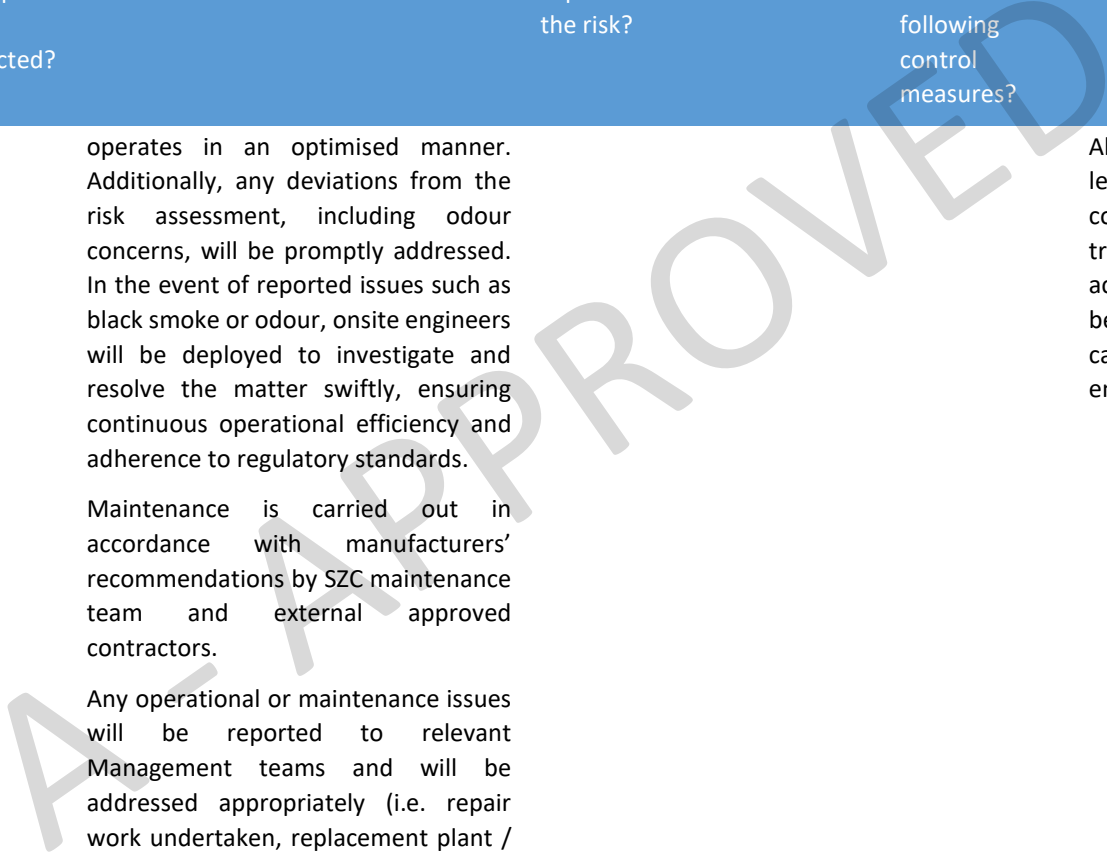
NOT PROTECTIVELY MARKED



Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
			<p>operates in an optimised manner. Additionally, any deviations from the risk assessment, including odour concerns, will be promptly addressed. In the event of reported issues such as black smoke or odour, onsite engineers will be deployed to investigate and resolve the matter swiftly, ensuring continuous operational efficiency and adherence to regulatory standards.</p> <p>Maintenance is carried out in accordance with manufacturers' recommendations by SZC maintenance team and external approved contractors.</p> <p>Any operational or maintenance issues will be reported to relevant Management teams and will be addressed appropriately (i.e. repair work undertaken, replacement plant / equipment fitted where necessary).</p>				All incidents will be recorded, and lessons learnt will be used to implement corrective actions. Should incident tracking identify a trend in this type of accident then maintenance regimes can be reviewed along with changes to fuel can be investigated to reduce particulate emissions.
<b>Odour emissions from</b>	Wider SZC construction	Air	Refuelling operations on site will be carried out by an individual tanker following a route making several stops, with fuel delivered to the diesel hybrid	Low	Very Low  May result in minor and	Very Low	Should any odours be observed, or complaints received with regards to odour, then this will be reported to the relevant contractor for resolution. The



Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>refuelling activities</b>	site contractors  Residential dwellings near construction site		generators in dedicated vehicles by SZC operatives. Refuelling activities at each generator location are limited in their duration and therefore odour will be limited and is very unlikely to occur beyond the installation boundary.		localised odour annoyance for a limited period.		problem will then be reported to the site Environmental Oversight Team who would investigate in accordance with incident investigation procedure and adopt any corrective actions required to prevent a recurrence.

A - APPROVED

Table 2.2 Noise and Vibration Risks

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>Generator Noise / Vibration</b>	Wider SZC construction site contractors  Residential dwellings near construction site  Designated ecological sites	Air / ground	The SZC Noise Monitoring and Management Plan (NMMP) sets out procedures and controls to limit noise for all construction works to comply with Development Consent Order (DCO) planning noise limits based on the DCO noise impact assessment. All generators within the SZC construction site will therefore comply with the noise restrictions set out within the Noise Impact Assessment. Furthermore, the culminative impact of these generators will be compliant with the noise impact assessment. Noise monitoring equipment is to be set up surrounding the SZC construction site perimeter and will automatically notify the relevant personnel if a breach of the trigger level occurs (3dB below the noise limit threshold). Corrective action will then be taken to reduce noise to below trigger levels.	Moderate with noise control measures in place	Low	Low	Should any noise or vibration issues be identified, or complaints received with regards to noise or vibration, then this will be reported to site relevant contractor for resolution. The problem will then be reported to the Environmental Oversight Team who would investigate in accordance with incident investigation procedure and adopt any corrective actions required to prevent a recurrence.

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
			<p>Working hours on site are restricted, with construction and operation of welfare facilities prohibited between the hours of 2300 and 0700 unless a Risk Assessment and Method Statement (RAMS) are produced to demonstrate that noise limits will not be exceeded and that suitable mitigations are in place.</p> <p>In the event of a complaint, SZC will follow the prescribed complaints procedure and will undertake further monitoring and/or appropriate remedial action.</p>				

A - APPROVED

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Table 2.3 Assessment of Accident Risks

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>Transfer of chemicals (oils/fuels)</b>	Wider construction site contractors Soils Groundwater Surface water Designated ecological sites	SZC Surface water Groundwater Drainage infrastructure	Refuelling will take place on hardstanding, meaning that leaching to soil / groundwater is unlikely to occur.  Plant nappies will be utilised where practicable to reduce the risk of release.  Fuel bowser valves will be locked during transportation and when not in use, and only competent staff will undertake deliveries of fuel.  Oil and chemical spill kits will be provided in appropriate locations and operatives will be trained in their use. Regular checks of spill kits will be undertaken to ensure absorbents and other equipment are readily available for use.  Fuel cubes located at generators are all double skinned by design.	Low	Low based on volumes of oils and fuel on site	Low due to the management processes and procedures.	Spill procedure (Appendix A) will be implemented in the event of an incident to control and remediate any release.  All incidents will be recorded and available for inspection. Lessons learnt will be used to implement corrective actions to ensure multiple occurrences of the same type of incident do not recur.

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

# NOT PROTECTIVELY MARKED

Document Reference Number 101254838  
Revision 01

## APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>Fire within generation unit</b>	Wider SZC Construction Site Contractors  Residential dwellings near construction site  Soils  Groundwater  Surface water  Designated ecological sites	Surface water  Air  Groundwater	<p>Routine site checks based on generator run hours and vigilant workers on site will ensure that the risk of ignition is minimised.</p> <p>Spills in and around generators are cleaned up as soon as observed and recorded.</p> <p>All generator units will be maintained in accordance with manufacturer's requirements and kept in good working order and sited to provide sufficient air circulation.</p> <p>Fire protection procedures for firefighting are in place in the event of fire and fire-fighting equipment will be located on site.</p> <p>On site 24/7 fire response unit at SZC construction site to extinguish any fires that do occur and support fire risk assessments.</p> <p>Dedicated smoking areas on site away from generators</p>	Low	Low  Uncontrolled release of combustion gases to air and water, likely only short-term impacts.	Low	<p>Generator would be shut down remotely to avoid catastrophic failure.</p> <p>Emergency procedures would be adopted and coordinated by an incident controller.</p> <p>Should this not be sufficient to address the incident then the emergency services will be called in order to extinguish the fire as soon as practicable.</p>



# NOT PROTECTIVELY MARKED

Document Reference Number 101254838

Revision 01

## APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>Fire within fuel tanks</b>	Wider SZC Construction Site Contractors Residential dwellings near construction site Soils Groundwater Surface water Designated ecological sites Adjacent land	Surface water Air emissions	Routine site checks and vigilant workers on site will ensure that the risk of fire is minimised.  Spills in and around fuel tanks would be cleaned up as soon as observed and recorded.  All equipment to be maintained in accordance with manufacturer's requirements and kept in good working order and located to provide sufficient air circulation. Fire protection procedures for firefighting are in place in the event of fire and fire-fighting equipment will be located on site.  No smoking within close proximity to any equipment containing flammable liquids. Emergency response arrangements are in place.	Low	Low  Uncontrolled release of combustion gases to air and water, likely only short-term impacts	Low	Fire protection procedures will be implemented. Should this not be sufficient to address the incident then the emergency services will be called in order to extinguish the fire as soon as practicable.  Oil fires would be controlled through the use of Class B extinguishers which would be CO <sub>2</sub> , dry powder or foam as water is not suitable. Therefore, any potential risk of contamination would be minimised.  All incidents will be recorded, and lessons learnt will be used to implement corrective actions to ensure multiple occurrences of the same type of incident do not recur.
<b>Blockage of drainage sump / drain</b>	Soils Adjacent soils Groundwater	Surface water Drainage Ground	Regular site inspections to check all areas of the facility including drainage areas are operating as should be.	Medium	Low  Potential contamination of flood waters	Low if due to appropriate maintenance procedures and	All damaged or blocked drainage runs or sumps will be repaired or unblocked.  Whilst it is expected that the drainage will contain uncontaminated

NOT PROTECTIVELY MARKED



Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
	Surface water		Blockages will be rectified as soon as possible after being flagged. All staff are encouraged to report any defective equipment as soon as it is observed.  Drains regularly inspected for damage and with appropriate rubbish / debris collection covers.			through regular inspections.	rainwater any obvious areas of spot contamination would be addressed prior to undertaking repairs.  All incidents will be recorded, and lessons learnt will be used to implement corrective actions. Should incident tracking identify a trend in this type of accident then site inspections can be increased in frequency.
<b>Vandalism</b>	Air Water Soils Adjacent soils Residential dwellings near construction site Designated ecological sites	Various – dependant on nature of vandalism	Equipment will be located on private land situated within the wider SZC construction site Boundary (and therefore subject to all security measures required for site entry).  Entry via gated access, which will be securely locked when site is unmanned.  Deliveries of fuel are only available during daytime hours, out of hours requests will require senior management approval and out of hours resourcing.	Low	Medium  Possible significant release to the environment dependent on extent of vandalism.	Low if security procedures are adhered to.	Any incidents of vandalism will be reported to the site security team and/or environmental team should there be an associated release which could impact the environment.  The incident most likely to impact the environment would be a release of oil or associated consumables such as ad blue. These are all securely stored and locked so as to prevent any accidental release. If a release has occurred, then the site spill procedure (Appendix A) will be adopted to prevent any further

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED



Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
							release and to remediate any spot contamination that has occurred.  All incidents will be recorded, and lessons learnt will be used to implement corrective actions to ensure multiple occurrences of the same type of incident do not recur.
<b>Litter</b>	Local residences  Adjacent land  Local watercourses  Designated ecological sites	Air (blown by wind)	Any additional raw materials received, and products removed from site will be in bulk containers such as drums / IBCs or tankers which will not generate litter waste.  The permit application does not propose any activities which are considered to have a significant risk with regards to litter from the site.  Any litter complaints will be investigated in accordance with the SZC complaint procedures. Corrective/mitigation actions will be implemented accordingly following investigation.	Low	Low  Increased nuisance receptors	Low significance should management practices and working standards be adhered to.  litter at	All litter will be picked up and disposed of in accordance with the site's duty of care to an appropriate waste contractor.  All incidents will be recorded, and lessons learnt will be used to implement corrective actions to ensure multiple occurrences of the same type of incident do not recur.

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

# NOT PROTECTIVELY MARKED

Document Reference Number 101254838

Revision 01

## APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
<b>Pests</b>	Local residences Adjacent Land Local waterways Soils	Air Surface water Land	<p>Waste is segregated and stored in appropriate enclosed containers in designated areas of the site and removed by licensed contractors.</p> <p>The site has a third-party pest contractor who regularly attends site for the control of pests.</p> <p>The permit application does not include any activity which is considered to a significant risk with regards to pests at the site.</p> <p>Any pest complaints will be investigated in accordance with procedures. Any corrective actions identified will be implemented accordingly.</p>	Low	<p>Medium</p> <p>Increased nuisance sensitive receptors</p> <p>pest at</p>	<p>Low significance should management practices and working standards be adhered to</p>	<p>A pest control contractor will be employed if pests are found to be an issue.</p> <p>All incidents will be recorded, and lessons learnt will be used to implement corrective actions to ensure multiple occurrences of the same type of incident do not recur.</p>
<b>Dust from vehicle movements</b>	Local residences Adjacent land Local watercourses	Air Surface water Land	<p>On site vehicle movements will not generate significant amounts of dust. Vehicle movements may generate dust via mud being tracked on to site from local roadways. If this is the case a road sweeper will be hired to clean access routes and main trafficked areas on site.</p>	Low	<p>Medium</p> <p>Increased nuisance receptors.</p> <p>dust at</p>	<p>Low significance should management practices and working standards be adhered to.</p>	<p>All incidents will be recorded, and lessons learnt will be used to implement corrective actions. Should incident tracking identify a trend in this type of accident then site inspections can be increased in frequency as can the use of road sweeping and other control measures</p>

# NOT PROTECTIVELY MARKED



Document Reference Number 101254838  
Revision 01

## APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
	Designated ecological sites		Any dust complaints will be investigated in accordance with procedures. Any corrective actions identified will be implemented accordingly.				such as dampening down of dry areas to prevent dust mobilisation.
<b>Particulate matter from generators</b>	Local residences Adjacent land Local watercourses Designated ecological sites	Air Surface water Land	<p>There is the potential to generate particulate matter from the generators. This is controlled through effective and regular maintenance regimes.</p> <p>The generators will be fitted with telemetry which will allow monitoring of their performance, although the full package of telemetry has not been confirmed but fuel use and efficiency would expect to be monitored. This would identify trends and allow for maintenance if it is observed performance is showing a significant decline.</p> <p>The generators are fitted with particulate filters to control any particulate emissions. Some of the generators will also be fitted with a Selective Catalytic Reduction</p>	Low	Medium Increased nuisance receptors. dust at	Low significance should management practices and working standards be adhered to.	All incidents will be recorded, and lessons learnt will be used to implement corrective actions. Should incident tracking identify a trend in this type of accident then maintenance regimes within the planned PPMP can be reviewed along with changes to fuel can be investigated to reduce particulate emissions.

Document Reference Number 101254838  
Revision 01

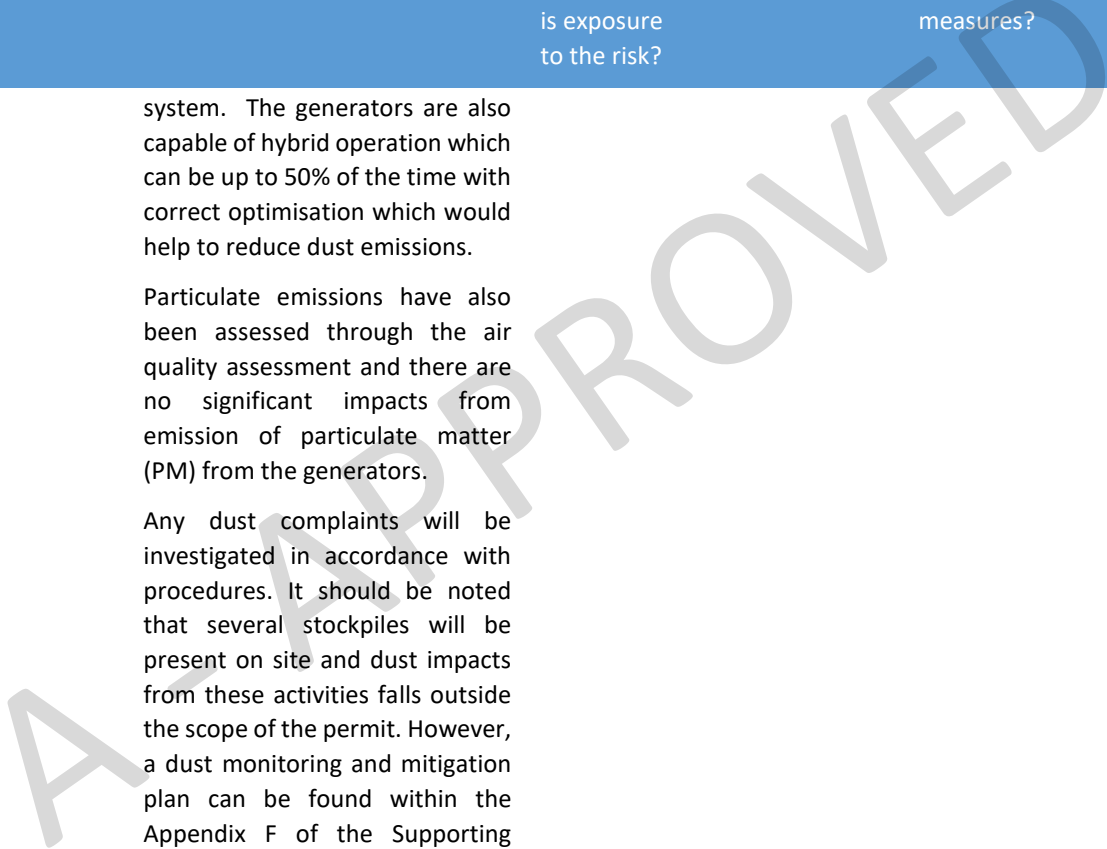
APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	

system. The generators are also capable of hybrid operation which can be up to 50% of the time with correct optimisation which would help to reduce dust emissions.

Particulate emissions have also been assessed through the air quality assessment and there are no significant impacts from emission of particulate matter (PM) from the generators.

Any dust complaints will be investigated in accordance with procedures. It should be noted that several stockpiles will be present on site and dust impacts from these activities falls outside the scope of the permit. However, a dust monitoring and mitigation plan can be found within the Appendix F of the Supporting Information Document (Integrated Emissions Management Protocol) which been submitted as part of this application.



NOT PROTECTIVELY MARKED

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
			Any corrective actions identified will be implemented accordingly following the Dust Monitoring and Management Plan (DMMP).				
<b>Deterioration of plant / equipment due to lack of maintenance</b>	Local residences Groundwater Soil Surface water Designated ecological sites	Air Groundwater Surface water Land Drainage infrastructure	A written procedure, inspection regime and Preventative Maintenance Programme (PMP) for all plant and equipment forming part of the changes will be developed and implemented, following review of risk assessments by the site operations team to ensure compliance of any issue to the risk assessment, including odour. The PMP will guarantee that equipment operates in an optimised manner. Additionally, any deviations from the risk assessment, including odour concerns, will be promptly addressed. In the event of reported issues such as black smoke or odour, onsite engineers will be deployed to investigate and resolve the matter swiftly, ensuring continuous operational	Low	Medium Contamination Odour Harm to human health	Low significance should management practices and working standards be adhered to.	All incidents will be recorded, and lessons learnt will be used to implement corrective actions. Should incident tracking identify a trend in this type of accident then maintenance regimes can be reviewed along with changes to fuel can be investigated to reduce particulate emissions.

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	<p>What measures will be taken to reduce the risk?</p> <p>efficiency and adherence to regulatory standards.</p> <p>Maintenance is carried out in accordance with manufacturers' recommendations by SZC maintenance team and external approved contractors.</p> <p>Any operational or maintenance issues will be reported to relevant Management teams and will be addressed appropriately (i.e. repair work undertaken, replacement plant / equipment fitted where necessary).</p> <p>Failures of equipment will be monitored under the preventative maintenance programme to identify trends and to ensure failures are captured before they happen where practicable.</p> <p>Spill equipment is available at strategic locations and staff are trained in the use of these spill kits, and the Emergency Spillage</p>	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED



Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	What measures will be taken to reduce the risk?	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	
			Procedure will be followed in the event of a spill.				
<b>Flooding</b>	Local residences Groundwater Soil Surface water	Groundwater Surface water Land Drainage infrastructure	Several areas of the site are indicated to be at risk of flooding (Flood Zone 3) as a result of rivers or seas without defences, including the southern, western and northern sections of the MCA and the eastern and southern sections of the TCA. To mitigate against this, current flood protection is provided by Bent Hills. To upgrade the level of protection, a temporary and permanent sea defence (planned to be installed by the end of 2026 and end of 2034 respectively) will provide a standard of protection for storm events of 1 in 10,000 year return period, including climate change allowances and no cliff-edge effects.  The surface water risk from flooding is low to moderate and are associated with topographical low spots.	Low	Medium Contamination Harm to human health	Low significance should management practices and working standards be adhered to.	All incidents of flooding will be recorded and lessons learnt will be used to implement corrective actions. Should incident tracking identify a trend in this type of accident then measures such as ceasing generator operation in affected areas, using sandbags as temporary flood prevention measures or in the last resort raising and / or moving the generators can be implemented.

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk	Measures that will be undertaken to minimise the impact if the accident does happen
What has the potential to cause harm?	What is at risk/ requires protection?	How can the receptor be affected?	<p>What measures will be taken to reduce the risk?</p> <p>SZC will be signed up to the EA’s national flood alert system. Emergency flood risk plans should be considered and included in contractor’s CEMPs.</p> <p>All generators are self-contained, and the day tanks comprise a self-bunded sealed tank to prevent any release. The fill points are lockable and securely fastened at all times.</p> <p>The construction site is subject to daily site inspections which would identify if there are any localised areas at risk of flooding. Should this be identified then measures can be taken to prevent any releases such as shutting down generators. Ensure that the fill points are fully locked and sealed.</p>	How likely is exposure to the risk?	What harm can be caused?	What is the risk that remains following control measures?	

All potential incidents associated with extreme weather are detailed within the contingency plan and are not repeated here within this APMP.

### 3 MATERIAL INVENTORY

#### 3.1 Substances stored at the Construction Site

EA guidance on accident management plans requires that a list of substances stored at the site, and the storage facilities are detailed within the plan. Table 3.1 below shows the materials stored along with their approximate quantities with regards to the permit.

**Table 3.1 Raw Material Stored at the Site**

Raw material	Approximate Quantity stored on site (litres)
Diesel Oil	125,056
Ad-blue	12,506
Coolant	1,473
Hydrotreated Vegetable Oil	The use of HVO is currently being trialled. This information will be provided at a later date should SZC decide to use HVO as an alternative fuel.
Antifreeze	The site uses coolants which are resistant to freezing weather conditions and resist boiling conditions when operated at peak loads for long periods. Therefore, the quantities of anti-freeze used are minimal.
Lubricating Oils	921

## 4 ACCIDENT MANAGEMENT

SZC use an online tool called Insight which is used to raise incidents/observations/non-conformances/good practice etc.

All records will be stored and recorded in Insight.

All investigations of accidents are undertaken in accordance with the following procedures and guidance:

- Emergency Preparedness and Response (EP&R) Standard (Doc ref:100953960) – specifies the relevant good practices used by SZC to ensure readiness for dealing with any accident or emergency arising on the SZC site and their effects.
- Establish, Maintain and Develop Emergency Preparedness Procedure (Doc ref: SZC-HSE-PRO-037) – provides a strategic approach for deploying the company EP&R policy and standard to establish, develop and maintain the emergency arrangements throughout all project phases.
- Environmental Aspects and Impacts Register (Doc ref: 101030949)– actively captures and manages environmental aspects and impacts at each phase of the project and includes normal, abnormal and emergency conditions.
- SZC Site Emergency Plan (Doc ref: 101037577) – outlines the principles for ensuring that appropriate response arrangements and measures are available for protecting the public, the workforce, environment, and business assets so far as that is reasonably practicable and satisfy regulatory requirements.
- Construction Emergency Preparedness & Response Document (Doc ref: CBL100100913) – supports an integrated emergency management approach and establishes the responsibilities of contractors in compliance with the EP&R requirements.
- SZC Emergency Exercise Programme (Doc ref: 101057059) – shows the schedule as planned to minimise any potential adverse impact on the construction schedule or site operations and that time/dates identified for delivery are agreed by stakeholders.
- CEMP – includes an Environmental Incident Control Plan template which site contractors are required to complete.
- IMS procedure including:
  - SZC-ACQ-PRO-011-Investigate Incidents
  - 100931287,006: NNB-104-REF-000047\_SZC Event Categorisation Register
  - 101211725 – Report Incidents Grab Pack.

The list of emergency contacts in the event of an accident or incident are detailed in Table 4.1 below.

**Table 4.1 Emergency Contacts List**

Organisation	Contact	Role/Responsibility	Contact details
SZC	SZC Security Control Room	Organise emergency response internally and/or externally i.e. 999.	<ul style="list-style-type: none"> <li>• Radio orange button (emergency);</li> <li>• Radio channel 16</li> <li>• Tel: [REDACTED]</li> </ul>
SZC	[REDACTED]	Site Operations Incident Manager	[REDACTED]
SZC (Engineering & Delivery)	[REDACTED]	HSE Manager	[REDACTED]
SZC (Engineering & Delivery)	[REDACTED]	H&S Manager	[REDACTED]

**NOT PROTECTIVELY MARKED**

Document Reference Number 101254838  
Revision 01

APPENDIX I: ACCIDENT PREVENTION AND MANAGEMENT PLAN



SZC	[REDACTED]	Site Environmental Surveillance Lead - Safety	[REDACTED]
Environment Agency	Incident Hotline	Environmental regulator for main rivers/waterbodies and permitting	[REDACTED]
ESWMB	Duty Officer	Regulator for ordinary watercourses	t: [REDACTED] e: [REDACTED]

A - APPROVED

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

Sizewell C Limited. Registered in England and Wales. Registered No. 09284825. Registered Office: 90 Whitfield Street, London, W1T 4EZ

Template No: SZC-SZ0000-XX-000-TEM-100000 UNCONTROLLED WHEN PRINTED  
Template Revision: 02

**NOT PROTECTIVELY MARKED**

## 5 GENERAL INFORMATION

### 5.1 Records

Documents will be retained electronically. This includes documents which are compiled by hand (e.g. recording of plant conditions/performance) All records will be:

- Legible;
- Made as soon as reasonably practicable;
- Documented in such a way that where amendments are made, the original record and any changes are all recorded and retrievable;
- Retained for a minimum of four years or until permit surrender; and,
- Readily accessible and available upon request.

### 5.2 Reporting

All reports required to comply with the permit will be provided to the Environment Agency, as required. The reports will be retained in accordance with the conditions and schedules outlined in the relevant sections of the permit. The reports and reporting period for the submission of this data will be agreed through the determination of this permit. Any relevant incident will be reported to the EA as soon as practically possible.

### 5.3 Notification

SZC will notify the Environment Agency without delay following the detection of:

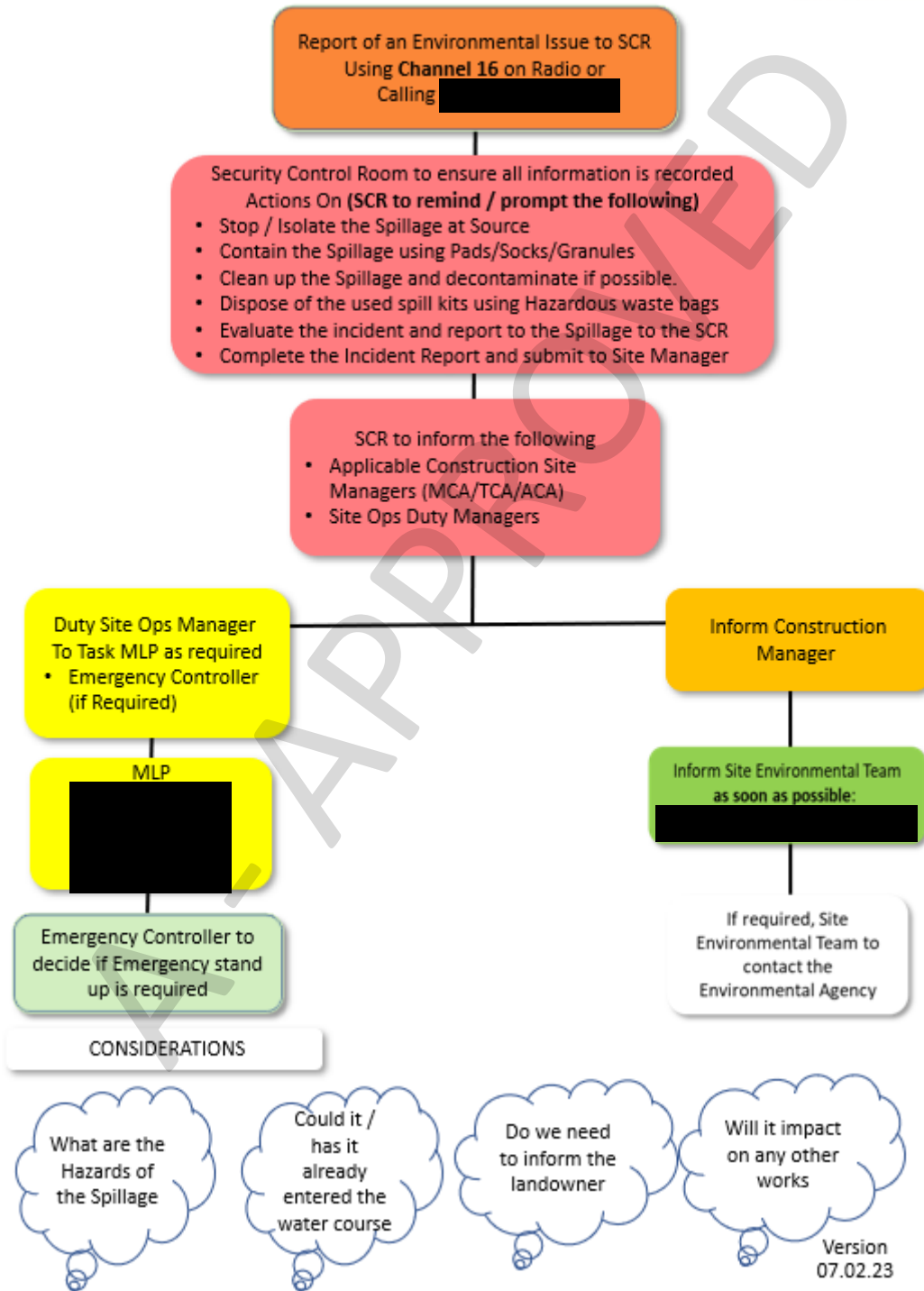
- Any malfunction, breakdown, or failure of equipment or techniques, accident or emission, of a substance not controlled by an emissions limit which has caused, is causing or is likely to cause significant pollution and potential risk to human health;
- The breach of a limit specified in the permit; or
- Any significant adverse environmental effect.

Written confirmation of actual or potential pollution incidents and breaches of emission limits will be provided to the Environment Agency within the appropriate timescales as covered by the conditions of the permit.

All notifications will be recorded and reported in line with the conditions of the permit.

### SPILL PROCEDURE AND REPORTING FORM

#### Environmental Issue Reporting Procedure



Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED

**Environmental Issue**  
**Reporting Form**

If any Spillage Occurs, then the following form should be completed and sent to SCR and then forwarded to Site Ops Duty Manager / Construction Duty Manager

<b>Site Spillage Reporting Form</b>		
<b>To be completed by operative / supervisor and sent to Site Ops / Site Environment team</b>		
<b>If not applicable, enter N/A in the comments.</b>		
<b>Ser</b>	<b>Report</b>	<b>Comments</b>
1	Date/ Time / Group	
2	Location - What3words	
3	What was the incident	
4	Substance Spilt / leaked	
5	Amount Spilt (mL / L)	
6	Reason why it occurred	
7	Spill kit used – Type and quantity	
8	Did the spill occur to natural ground (e.g. soil), or hard-standing impermeable ground (e.g. type 1, concrete).	
9	Did the spill enter a watercourse? If so, which watercourse?	
10	Was any contaminated soil / ground excavated? If so, provide approximate quantity (kg)	
11	Has the spill been contained, cleaned up and resolved or is it ongoing?	
12	Is further assistance needed?	
13	Where was the waste spill kit / contaminated ground disposed of	
14	Further Comments	
	Please provide images e.g. of the spill and clean up etc, if possible.	

Sizewell C | 101254838 / 002 | P1 - For Implementation | 12-Apr-2024 | NOT PROTECTIVELY MARKED