

OFFICIAL SENSITIVE



# Control of Major Accident Hazards (COMAH)



## Multi-Agency External Emergency Plan for: Redcliffe Bay Petroleum Storage Depot (PSD) Down Road, Portishead, BS20 8LB

Version 1.4 AUG 2025

OFFICIAL SENSITIVE

## Executive Summary

### Statutory Duty

Redcliffe Bay Petroleum Storage Depot (PSD) is registered as an 'Upper Tier' site, under the terms of the Control of Major Accident Hazards (COMAH) Regulations 2015, as it has the capacity to store in excess of 25,000 tonnes of Kerosene (Aviation Fuel) up to a maximum of 52,000 tonnes.

Under the Regulations, North Somerset Council has a duty to prepare an 'External Emergency Plan' to:

- Contain and control incidents to minimise their effects, and limit damage to persons, property and the environment.
- Implement the measures necessary to protect persons and the environment from the effects of major accidents.
- Communicate the necessary information to the public, to the emergency services and other organisations involved in the response.
- Provide for the restoration and clean-up of the environment following a major accident to the environment.

### Site Location

The site is situated just south of Portishead (Charlcombe Park, Down Road, BS20 8LB), on a steep, terraced slope that terminates at the cliff edge on the north west boundary, adjacent to the Severn Estuary. Ground levels vary from 53m AOD (Above Ordnance Datum) in the north east to 20m AOD to the south west of the site. The average topographic gradient across the site is 1:7.

The Site is located adjacent to residential properties with:

- A public footpath (Mariners Path) that lies adjacent to the western boundary, to the west of which is a 15m high cliff over the Severn Estuary.
- Residential housing to the north east, east and south east of the site
- Weston-in-Gordano is to the south east of the site.
- Agricultural land to the south-west of the site. Charlcombe Wood and a single residential building, Dunvagan House, is located approximately 200m to the south west of the site.
- Land to the south beyond Down Road being predominantly open fields used for agriculture.
- An outdoor activity centre with paintballing and a Moto-Cross track approximately 260m south of the site, and
- Weston Lodge Farm which lies approximately 540m south of the site.

## The Product

The product, ([Aviation Kerosene](#)), is principally transported to and from the site in underground cross-country pipes and stored in large, semi-buried tanks of robust military design and construction, having originally been built by the Ministry of Defence. Other products held on site include [diesel fuel](#) (stored in the emergency generator tank) and slops (a mixture of water and oil generated during site operations, stored in two slops tanks on site). All products are stored in liquid form and are finished products, no processing takes place at site.

## The Hazard

***The most credible accident hazard relates to a spillage resulting in environmental pollution of the land, drains and watercourses. A fire is extremely unlikely due to the combustion characteristics of the product.***

## The Aim

The aim of this External Emergency Plan is to provide for a co-ordinated, co-operative deployment of multi-agency resources and skills to mitigate the effects of a major accident/incident; the roles and responsibilities of all agencies that may be involved in responding to a major incident occurring at Redcliffe Bay (PSD) are included.

## Exercising Schedule

This plan will be exercised once every three years.

## Document Control

This plan will be routinely reviewed every three years. Recipients should limit distribution on a need-to-know basis only; the plan is accessible to External Responder Agencies via Resilience Direct, Internal (NSC) Responder Officers via Microsoft Teams and the public through Public Information Copies in NSC Main Libraries and Portishead Town Council.

| Date | Version | Summary  |
|------|---------|--|
| 2017 | 1.4.1   | Plan distributed to multi-agency partners  |
| 2021 | 0.1     | Draft plan for consultation – List of Consultees at <a href="#">Annex C</a>  |
| 2021 | 1.0     | Finalised plan   |
| 2022 | 1.1     | Following Exercise New Dawn II debrief, amendments to notification diagram.  |
| 2024 | 1.2     | Draft version for use in Exercise Vulcan - minor amendments - contact information, updated rest centre map, roles/responsibilities SWAST |
| 2025 | 1.3     | Updated version with learning points from Exercise Vulcan Jan '25  |
| 2025 | 1.4     | Contact details, notification diagram and SWAST arrangements   |

Any amendments or observations should be forwarded to North Somerset Council Emergency Management Unit via email [emu@n-somerset.gov.uk](mailto:emu@n-somerset.gov.uk)

## Contents

|  |    |
|--|----|
| 1. Activation.....   | 1  |
| 2. Contacts .....  | 3  |
| 3. Notification Chain .....  | 4  |
| 4. Multi-Agency Response.....  | 5  |
| 4.1 Key Locations & Safe Routes Table.....                                   | 6  |
| 4.2 Safe Routes, RVPs and Emergency Control Centre (ECC) Locations Map.....  | 7  |
| 4.3 Information for Responders attending Site.....                           | 8  |
| 4.4 Off site Response.....   | 8  |
| 4.5 Multi-Agency Response Groups .....                                       | 8  |
| 5. Public Information & Public Safety.....                                   | 9  |
| 5.1 Notifying the public of an incident .....                                | 9  |
| 5.2 Public Information During an Incident .....                              | 9  |
| <b>Emergency Message to the Public</b> .....                                 | 10 |
| 5.3 Notification of the ‘all clear’ .....                                    | 10 |
| 5.4 Non-Emergency Warning & Informing.....                                   | 11 |
| 6. Evacuation & Transport .....  | 11 |
| 6.1 Evacuation .....   | 11 |
| 6.2 Transport.....   | 12 |
| 7. Agency Actions, Roles and Responsibilities .....                          | 12 |
| 8. Welfare & Shelter .....   | 16 |
| 9. Health and Environmental Impact Considerations .....                      | 18 |
| ANNEX A - Evacuation and Pick Up Points by Wind Sector .....                 | 25 |
| ANNEX B - Product Data Sheet.....  | 34 |
| Annex C Assistance Card Issued to Residents in Public Information Zone ..... | 36 |
| ANNEX D – Consultees .....   | 37 |
| Glossary.....  | 38 |

## 1. Activation

There are several scenarios that could result in the activation of this External Emergency Plan:

| Scenario   | Responsible Agency                           | Actions  |
|--|--|--|
| Staff on-site discover a major accident* at Redcliffe Bay  | Site Operator (Exolum)                       | <b>Activate the External Emergency Plan via Emergency Services &amp; relay the <a href="#">standard M/ETHANE message</a>:</b><br>1. Fire Service – 999<br>2. Police - 999<br>3. Ambulance – 0300 3690518 (incident management)<br><br>Inform the Environment Agency’s Hotline: 0845 8503518. |
| Staff at remote monitoring site alerted to major accident* at Redcliffe Bay                                |  |  |
| A member of the public alerts the Emergency Services to an accident at Redcliffe Bay via the 999 system.   | Emergency Services (including HM Coastguard) | Attend site and alert: <ul style="list-style-type: none"> <li>Site Operator (Exolum)</li> </ul> Assess scene and alert as necessary: <ul style="list-style-type: none"> <li>Other Emergency Services</li> <li>North Somerset Council</li> </ul>  |
| Incident occurs outside of site boundary that impacts, or has the potential to impact, on site operations. |  | Alert: <ul style="list-style-type: none"> <li>Site Operator (Exolum)</li> <li>North Somerset Council</li> <li>Multi-Agency Response Partners</li> </ul>  |

\*A major accident is an occurrence (including a major emission, fire or explosion) resulting from uncontrolled developments and involving dangerous substances in the course of the operation at the COMAH Site. This could lead to danger to human health or the environment, inside or outside the establishment. The response may need / have potential to need, resources beyond those immediately available on-site and/or the effects of the accident may go beyond the site boundary. For the purposes of reporting for a multi-agency response, the term ‘Major Incident’ is utilised within the M/ETHANE message to Emergency Services.

**Activation of the [Sevenside Sirens](#) public warning system is by the Police.**

Site Operator will relay the ‘M/ETHANE’ message below to Fire / Police / Ambulance via the numbers listed in [section 1](#).

|          |   |
|----------|---|
| <b>M</b> | <p>“We are an Upper-Tier COMAH Site and are declaring a major incident which requires the COMAH External Emergency Plan arrangements to be initiated. Please initiate your actions and onward notifications in relation to the site and the External Emergency Plan. I have the following ETHANE report regarding the incident”</p> |
|----------|---|

|          |  |   |
|----------|--|---|
| <b>E</b> | Exact Location of the emergency                      | <p><b>The address of the incident is:</b><br/>Redcliffe Bay Petroleum Storage Depot<br/>Charlcombe Park<br/>Down Road<br/>Portishead<br/>North Somerset<br/>BS20 8LB</p>  |
| <b>T</b> | Type of Incident                                     | Leak / Spill / Fire   |
| <b>H</b> | Hazards Present or Expected                          | <ul style="list-style-type: none"> <li>• Bulk Petroleum Storage – Avtur (Flammable Liquid) (1863 3Y)</li> <li>• Below ground pipeline contain flammable liquid up to 15 bar pressure.</li> <li>• Diesel.</li> <li>• Manifold contain flammable liquid up to 10 bar pressure.</li> <li>• Electrical Substation</li> <li>• Smoke plumes?</li> <li>• Wind direction is from ..... to .....</li> <li>• Restrictions for responders ...intrinsically safe equipment, specific PPE required?</li> </ul>                                     |
| <b>A</b> | Access – <a href="#">Routes that are safe to use</a> | <p><b>The safest approach to the site is:</b><br/> <b>Safe Route A</b> - From A369 Wyndham Way, Nore Rd, Down Rd<br/> <b>Safe Route B</b> – Junction 20 M5 (Clevedon), Northern Way, Tickenham Rd, Walton Rd (B3124), Walton St, Down Rd<br/> <b>Safe Route C</b> - Junction 19 M5 (Portishead), A369 (The Portbury Hundred), B3124 (Clevedon Rd), Valley Rd<br/> The <b>On-Site RVP</b> is located at the main gate (Grid ST436752) if safe otherwise at the top of the street.<br/> <b>What3words:</b> hill.toothpick.blackmail</p> |

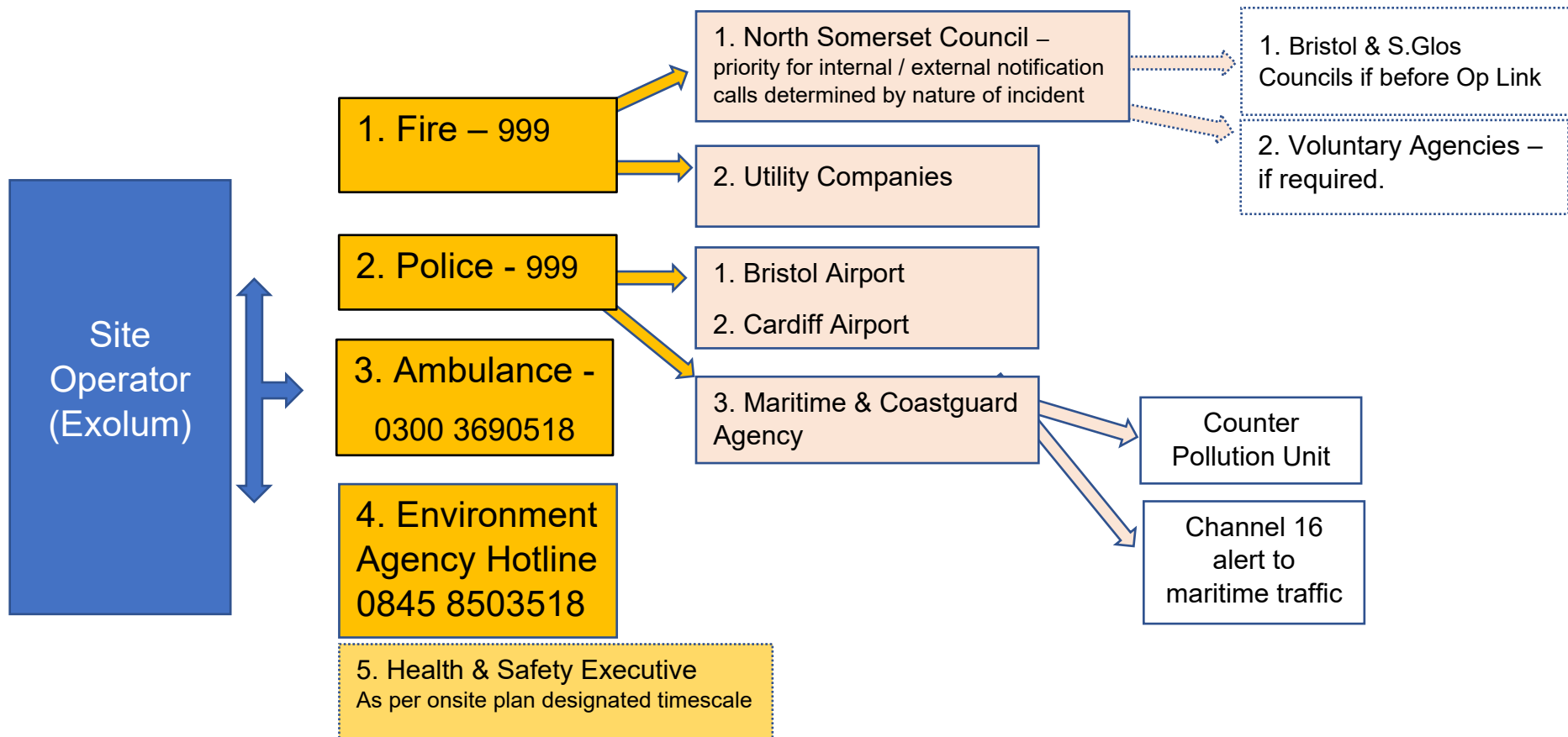
|          |   |   |
|----------|---|---|
| <b>N</b> | Numbers and types of Casualties             | <ul style="list-style-type: none"> <li>• Fatalities?</li> <li>• Asphyxiation?</li> <li>• Burns?</li> <li>• Numbers of personnel not accounted for?</li> <li>• Last known locations?</li> <li>• Break/ Fractures?</li> </ul> |
| <b>E</b> | Emergency Services present and/or required. | Fire, Police, Ambulance?  |

## 2. Contacts

|  |
|--|
| <b>REDCLIFFE BAY SITE CONTACTS</b>   |
| Redcliffe Bay PSD (Mon-Fri 08:00-16:00) – 01275 817097   |
| Hallen PSD (24/7 Monitoring function for Redcliffe Bay) – 0117 9506107   |
| Exolum (Site Operator) Emergency Duty Manager – Tel: 0203 7275111  |
| Terminal Manager – Matt Healy - 07753459916  |
| Operations Supervisor – Andy Taynton – 01275 817097 / 07753 459825   |
| Ify Wood – 07725 605156  |
| <b>AVON &amp; SOMERSET LOCAL RESILIENCE FORUM MULTI AGENCY RESPONSE PARTNERS VIA OPERATION LINK</b>            |
| Operation Link – 01278 645935<br>Back up - 999 / 101   |
| <b>NORTH SOMERSET COUNCIL</b>  |
| Emergency Management Unit (Office Hrs) – 01934 426706 / 426770 / 427371  |
| Switchboard (Office hrs) – 01934 888888  |
| CCTV Ops Room (24/7) –01934 634666 (daytime) / 01934 888888 (out of hrs) for Duty Emergency Management Officer |

### 3. Notification Chain

These are the immediate notification calls to be made regardless of the activation of the Op Link Mass Notification system. Agencies will have their own onward (internal and external) notification procedures in place that are not displayed on this diagram.



The Police will initiate an 'Operation Link' notification message to all agencies within the Avon and Somerset Local Resilience Forum area. Operation Link allows for an initial multi-agency teleconference to brief, inform and agree the control, co-ordination and communications response to the incident. Registered COMAH sites will receive the message.

## 4. Multi-Agency Response

The first Emergency Responder at scene will assess the situation and produce a M/ETHANE report to determine the subsequent multi-agency emergency response:

All agencies will follow the [Joint Emergency Services Interoperability Principles](#) (JESIP) for joint working as in Picture 1 and the [Joint Decision Model](#) as represented in Picture 2 to formulate and continuously assess the response and the Principles for Joint Working.









**Picture 2**



**Picture 1**



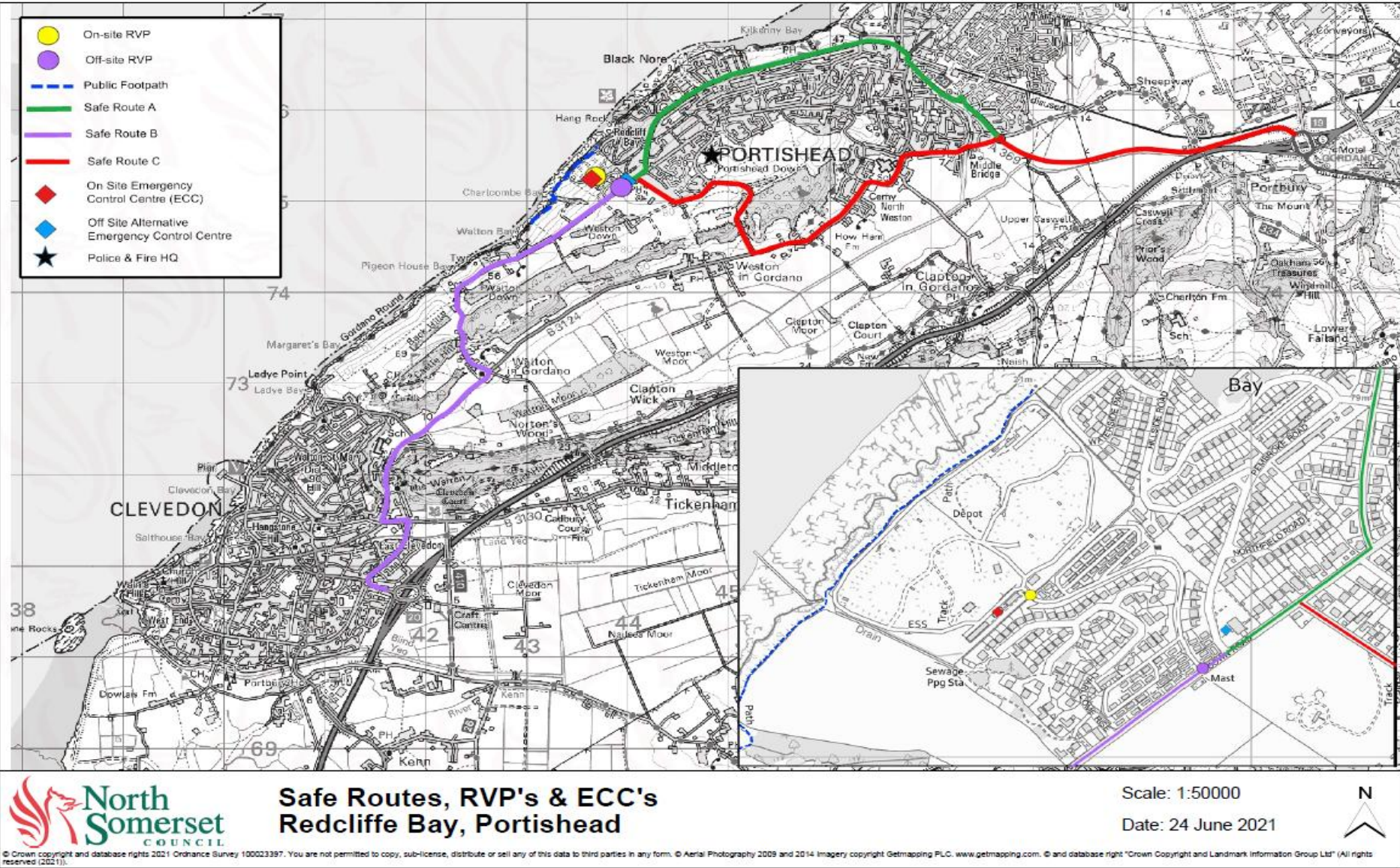
#### 4.1 Key Locations & Safe Routes Table

|   | Location Details   | Notes   |
|---|--|---|
| On Site RVP                                      | Redcliffe Bay Site Main Gate<br>Grid 437 753<br><a href="#">What Three Words ///tungsten.hikes.bolsters</a>                                | Limited parking   |
| Off Site RVP                                     | Down Rd, Junction with site access road<br>Grid 439 752<br><a href="#">What Three Words ///composed.piled.presides</a>                     | Cordon likely staffed by Police                         |
| Safe Route A                                     | From A369 Wyndham Way, Nore Rd, Down Rd  |   |
| Safe Route B                                     | Junction 20 M5 (Clevedon), Northern Way, Tickenham Rd, Walton Rd (B3124), Walton St, Down Rd   |   |
| Safe Route C                                     | Junction 19 M5 (Portishead), A369 (The Portbury Hundred), B3124 (Clevedon Rd), Valley Rd   |   |
| On Site Emergency Control Centre (ECC)           | Site Office Buildings, Redcliffe Bay PSD, through main gate and to the left.<br><a href="#">What Three Words carpeted.fastening.points</a> |   |
| Off Site Alternative Emergency Control Centre  | Ship Inn Public House, Down Road, Portishead, BS20 8JT.<br><a href="#">What Three Words Indoor.forgiven.unsettled</a>                      |   |
| Police & Fire HQ                               | Valley Rd, Portishead, BS20 8JJ  | Multi-Agency Tactical & Strategic Co-ordinating Centres |

#### Safe Routes

Three pre-identified safe routes to approach the site are described in the table above and [mapped](#). The initial M/ETHANE notification report from the Site Operator will indicate the safest route to take. This may be subject to change for the duration of the incident response and will be assessed and monitored by emergency responders.

4.2 Safe Routes, RVPs and Emergency Control Centre (ECC) Locations Map



### 4.3 Information for Responders attending Site

**Note: there is limited parking and mobile telephone reception is poor in the area.**

The **On-Site Rendez Vous Point (RVP)**, where initial responders will attend and be met (if possible) by a representative of the site operator, is located at the **site main gate** (Grid 437 753 / [What Three Words ///tungsten.hikes.bolsters](#)).

The **on site Emergency Centre** is located in the site buildings on the left through the main gate; responders will be met by a site representative and briefed on arrival. Responding agencies should be equipped with appropriate resources relevant to their role, such as being self-sufficient in ICT, plans and/or equipment that they may require.

**All personnel should wear their Agency tabard for identification purposes.**

**Any personnel deployed to the site outside of the administrative buildings should ensure that appropriate PPE is worn and any electronic devices (including smart watches) are intrinsically safe.**

### 4.4 Off site Response

The **Off-Site RVP** is located on **Down Road** at the junction for the site access road and Charlcombe Park residential area - Grid 439 752 / [What Three Words ///composed.piled.presides](#).

**The alternative Emergency Centre has been identified as The Ship Inn, 310 Down Road, BS20 8JT**

### 4.5 Multi-Agency Response Groups

#### **Multi-Agency Tactical Co-ordination Group (TCG)**

Where an incident is sufficiently large or complex, a multi-agency (Local Resilience Forum based) TCG will be convened to co-ordinate the multi-agency response in addition to the onsite co-ordination group. These meetings may take place physically, in which case a Tactical Commander from each responding agency would be deployed (likely at Police & Fire HQ, Valley Road, Portishead, BS20 8JJ) or, virtually via MS Teams, to be advised at the time.

#### **Multi-Agency Media Advisory Cell**

Avon & Somerset Police will co-ordinate the initial multi-agency media response in accordance with the ASLRF Media & Comms Guide which identifies protocols to ensure the following:

- Timely and accurate information is passed to the media by each organisation
- The flow of information is co-ordinated between agencies
- Suitable facilities are made available for the media
- The provision of trained spokespersons from each organisation
- All members of the media are treated equally
- Photo opportunities for the media.

## Multi-Agency Strategic Co-ordination Group (SCG)

If activated, a multi-agency Strategic Coordination Group (SCG) may physically meet at Police & Fire HQ, Valley Rd, Portishead, BS20 8JJ (or an alternative location nominated at the time) with a representative (Gold Commander) from each responding agency (empowered to make decisions and commit resources on behalf of their organisation). A virtual SCG may be convened instead via MS Teams, to be advised at the time.

## Multi-Agency Science and Technical Advice Cell (STAC)

A STAC provides scientific, technical, environmental and public health advice to the Strategic Co-ordinating Group (SCG). The SCG Chair can request that a STAC is established. Full details are in the South West ASLRF STAC Plan.

An Air Quality Cell (AQC) may be formed by the Environment Agency, UKHSA and the MET Office to assess the impact of any smoke / releases of any chemical. A Local Authority specialist representative may be asked to join the cell. The cell will report to / inform the STAC.

These groups are well established within the Avon and Somerset Local Resilience Forum (ASLRF) and further information can be found regarding their structure, leadership and reporting mechanisms within the ASLRF Major Incident Response Guide (Resilience Direct).

## 5. Public Information & Public Safety

### 5.1 Notifying the public of an incident

Avon and Somerset Police will, if appropriate, activate the [Sevenside Sirens](#) to provide an audible warning signal to residents and businesses and arrange for the advisory message to be broadcast to the public via local radio, TV and all other information channels without delay.

The Sevenside Sirens all sound as a group, they cannot be sounded individually according to the incident location, so it is important to communicate with all communities within the audible ranges of all the sirens and to target information, instructions and reassurance as appropriate.

The Police will issue further warnings and information to the public, [including the initial emergency message to the public](#), in conjunction with other agencies where necessary through agreed channels, including social media.

### 5.2 Public Information During an Incident

**Consideration will be given to the request of an [Emergency Alert](#) message.**

An initial public information message should be issued using the agreed [Emergency Message to the Public](#) template below:

| <b>Emergency Message to the Public</b>   |  |
|--|--|
| <p>At ..... (enter time) am/pm* there was an incident at ..... (enter company name and address).</p> <p>If you are in a vehicle do not drive near or past the site.</p> <p>The Severnside Sirens have been sounded in the area as a warning to all members of the public around the site to take immediate shelter indoors.</p> <p>Staff at ..... (site name) and the emergency services are working to resolve the incident. There will be a further update on the situation as soon as possible.</p> <p>In the interests of your own safety the Police and Fire Service urge everyone in the area to comply with the following instructions:</p> |  |
| <b>Go In</b>   | <p>Go Indoors. If you're in a building stay indoors. Close all doors and windows. Do not collect children from school they will be properly cared for.</p>   |
| <b>Stay In</b>   | <p>Stay away from windows, curtains and doors. Switch off any ventilation and heating appliances. Stay Calm. Extinguish all flames. Do not relight. Do not smoke. If you are in a vehicle do not use roads around the ..... (enter site name). Road diversions will be put in place as soon as possible.</p>                         |
| <b>Tune In</b>   | <p>Follow instruction given by the emergency services. Please do not use your telephones (landline or Mobile). This will keep lines free for emergency use only.</p> <p>Wait inside until the all clear is given or you are given other advice.</p> <p>Stay tuned to local radio for further information and please remain calm.</p> |

The public will be kept informed through **broadcasts on the following radio stations, BBC Radio Bristol and Heart. These should be approximately every 30 minutes.**

The initial media message and subsequent updates will also be made available through [North Somerset Council's communications channels](#) – website, contact centre, social media feeds.

### 5.3 Notification of the 'all clear'

The incident will reach a stage where an 'All Clear' message should be issued. The decision to issue an 'All Clear' message will be made by the appropriate Police Commander.

The methods chosen to notify the 'All Clear' for the site will depend on the type and nature of the incident and the public's perception of it.

If the sirens have been sounded, the all clear tone should be activated (batteries permitting).

## 5.4 Non-Emergency Warning & Informing

**Site Operator** - COMAH Regulations require the operator to provide the public with specified information about the establishment, major accident hazards and the safety measures that are in place.

It is for the Competent Authority (HSE) to determine the area around the establishment to which this duty applies, known as the Public Information Zone (PIZ). In determining the PIZ, account is taken both of the likelihood and effects of possible major accidents. The PIZ does not cover areas where a major accident might cause only environmental damage. For Redcliffe Bay, the PIZ only extends to include some properties in Waterside Park.

The Site Operator provides the following every three years to all properties within the PIZ:

- Resident's Letter
- Businesses' Letter
- Background Site Information Sheet
- Emergency Instruction Card
- Copy of the 'Resident Requires Assistance to Evacuate' sign



Residents within the PIZ and all properties within the audible range of the Severnside Sirens also receive a [major emergency safety advice booklet](#) every three years containing COMAH site information and advice on actions to take should the sirens sound (Go In, Stay In, Tune In). This is produced by the [Severnside Emergency Planning Forum](#).

## 6. Evacuation & Transport

### 6.1 Evacuation

Any decision to evacuate would be made by the Police in consultation with Avon Fire & Rescue Service, site operator and the local authority. In all circumstances the primary concern is that of public safety. It is important to note that residents in the [public information zone](#) are informed to 'Go In, Stay In, Tune In' so the communications strategy for any subsequent actions will need to be clear and concise.

The production of a [CHEMET Report](#) (requested by the Fire or Police Service) will provide key information on the likely external impacts of any smoke plume on the surrounding areas and guide any decisions to evacuate or advise residents / businesses of any further preventative actions (such as closing windows / turning off air-conditioning units).

[Annex A](#) identifies those areas likely to be affected according to the wind direction (note, the predominant wind direction in this location is south westerly) by zones of 100m, 200m and 500m radius from the site.

For each area, streets names, approximate numbers of properties and evacuees are provided at [Annex A](#), along with suggested evacuation routes and pick-up-points. **However, these figures are indicative only**, the most appropriate response will be determined by the emergency responders given the situation and conditions presented at the time.

No reliable register is maintained of persons who may require **additional assistance to evacuate** their home. Maintaining such a register would be impractical given that any inaccuracy would, in the event of an evacuation, inevitably lead to the emergency services calling at premises where those registered have since moved or are no longer vulnerable. By far the most practicable solution is for all residents in the [Public Information Zone \(PIZ\)](#) (Zone around the site determined by the Competent Authority) to be issued with a [card identifying their need for assistance](#). (These have been distributed to all properties within the PIZ).

## 6.2 Transport

For those less able-bodied residents and where time allows (many residents would have to evacuate up steep hills) suggested minibus pick up points are identified, along with suggested coach pick up points, in the Evacuation Tables at [Annex A](#).

The use of the bus service serving the Redcliffe Bay area of Portishead to facilitate an evacuation should be considered.

<https://journeyplanner.travelwest.info/routes/service/X4/39-X4-%25-y10-1/3> Note: there is no pre-existing arrangement with transport providers for emergency use; transport requests will be made on best endeavours; therefore, will take some time to arrange and be in place.

## 7. Agency Actions, Roles and Responsibilities

### Avon & Somerset Constabulary (ASC)

- Notify Bristol and Cardiff Airports
- Activate Severnside Sirens, if appropriate
- Activate Operation Link mass notification system
- Provide the initial operational and tactical incident response leads
- Co-ordinate the actions of the emergency services and other organisations using the JESIP Principles.
- Protect life in conjunction with other emergency services
- Prevent disorder and crime
- Protect and preserve the scene
- Investigate the incident, in conjunction with other agencies where applicable
- Collate and disseminate casualty information
- Identify the deceased on behalf of His Majesty's (HM) Coroner

### Avon Fire & Rescue Service (AFRS)

- Notify North Somerset Council and Utility Companies
- Rescue of casualties
- Prevent further escalation of the incident
- Deal with released chemicals or other contaminants in order to save life and rescue or protect people from imminent danger
- Responsible for the Health and Safety of **all** personnel working within the incident inner cordon
- Assist with body recovery, if required
- Mitigate and minimise the environmental impacts of the incident

- Participation in appropriate investigations and preparation of reports and evidence.

### **Environment Agency (EA)**

- Environmental protection of land, water and air
- Assess the site's Environmental Risk Assessment (part of the Site Safety Report)
- Prevent and mitigate the effects of an incident on the environment
- Provide specialist advice including decontamination methods and specialist waste disposal
- Monitor the effects of an incident and investigate the cause.

### **Health and Safety Executive (HSE)**

- Provide specialist advice in respect of the health and safety risks to responders and others as a result of an emergency
- Provide specialist advice about appropriate control measures to prevent or reduce the risks of exposure, including engineering controls and personal protective equipment
- Inspect plant, equipment and processes in industry
- Instigate statutory investigations post incident as to causes and possible future preventive measures
- Monitor all safety aspects at industrial sites (for this reason the HSE needs to be informed at a very early stage of the emergency)
- Offer advice to emergency services
- Liaise with police to prevent removal of plant or other material, which may be required later
- In conjunction with surveyors and site personnel, determine when on-site buildings and other parts of the site, together with off-site areas have been affected, when they may be safe to re-enter

### **Maritime & Coastguard Agency (MCA)**

- Minimise the loss of life amongst seafarers and coastal users – warning and informing via VHF Channel 16
- Respond to maritime emergencies 24 hours
- Develop, promote and enforce high standards of maritime safety and pollution prevention for ships
- When pollution occurs, minimise the impact on UK interests.

### **NHS – Bristol, North Somerset and South Gloucestershire (BNSSG) ICB**

- Liaise with Local Healthcare Providers regarding immediate and longer-term healthcare requirements of persons affected by any incident.
- Provide Representatives for the TCG and SCG, if convened.
- Support UKHSA

### **NHS England South West**

- Represent the NHS at Tactical and Strategic Coordinating Groups
- Support the coordination of mass casualty response arrangements
- Work with NSC to support the recovery arrangements

OFFICIAL SENSITIVE  
North Somerset Council

- Liaise with BNSSG to assess the impact on NHS resources and mobilise assets

**North Somerset Council (NSC)**

- Notify Bristol and South Gloucestershire Local Authorities if Op Link not yet issued
- Activate the North Somerset Council Corporate Emergency Response
- Support the emergency services
- Continue normal support and care for the community
- Use resources to mitigate the effects of the emergency
- Co-ordinate the response of organisations other than the emergency services
- Provide the public with information regarding the incident
- Lead the Recovery Phase.

**Site Operator (Exolum)**

- Raise the alarm for any actual or potential incident onsite
- Notify all emergency services and Environment Agency priority line as per the notification diagram
- Mitigate the effects of the emergency
- Meet arriving responders and brief on incident details
- Cooperate with Emergency Responders to facilitate the containment of and response to any emergency incident on site
- Ensure site security
- Provide representation on incident response coordinating groups
- Provide expertise and information regarding the substances and operations of the site, their effects off site and resources to effect clean-up operations.
- Provide information to residents within the public information zone (peacetime)

**South Western Ambulance Service NHS Trust (SWAST)**

- Mobilise the initial response (2 Operational Commanders, NILO and a DCA) to site
- Mobilise additional response to the Ship Inn Public House (due to parking issues on site)
- Save life together with other emergency services
- Establish effective triage points and systems and determine the priority evacuation needs of those injured
- Provide treatment, stabilisation and care for those injured at the scene
- Provide appropriate transport, medical staff, equipment and resources
- Provide a focal point for NHS resources at the scene
- Nominate and alert the receiving hospitals
- Inform the Local Health Authority on-call officer.
- Provide transport for the medical incident officer and mobile medical teams and their equipment.
- Transport the injured to hospitals.
- Maintain emergency cover throughout the ambulance area and return to a state of normality as the earliest time.

**UK Health Security Agency (UKHSA)**

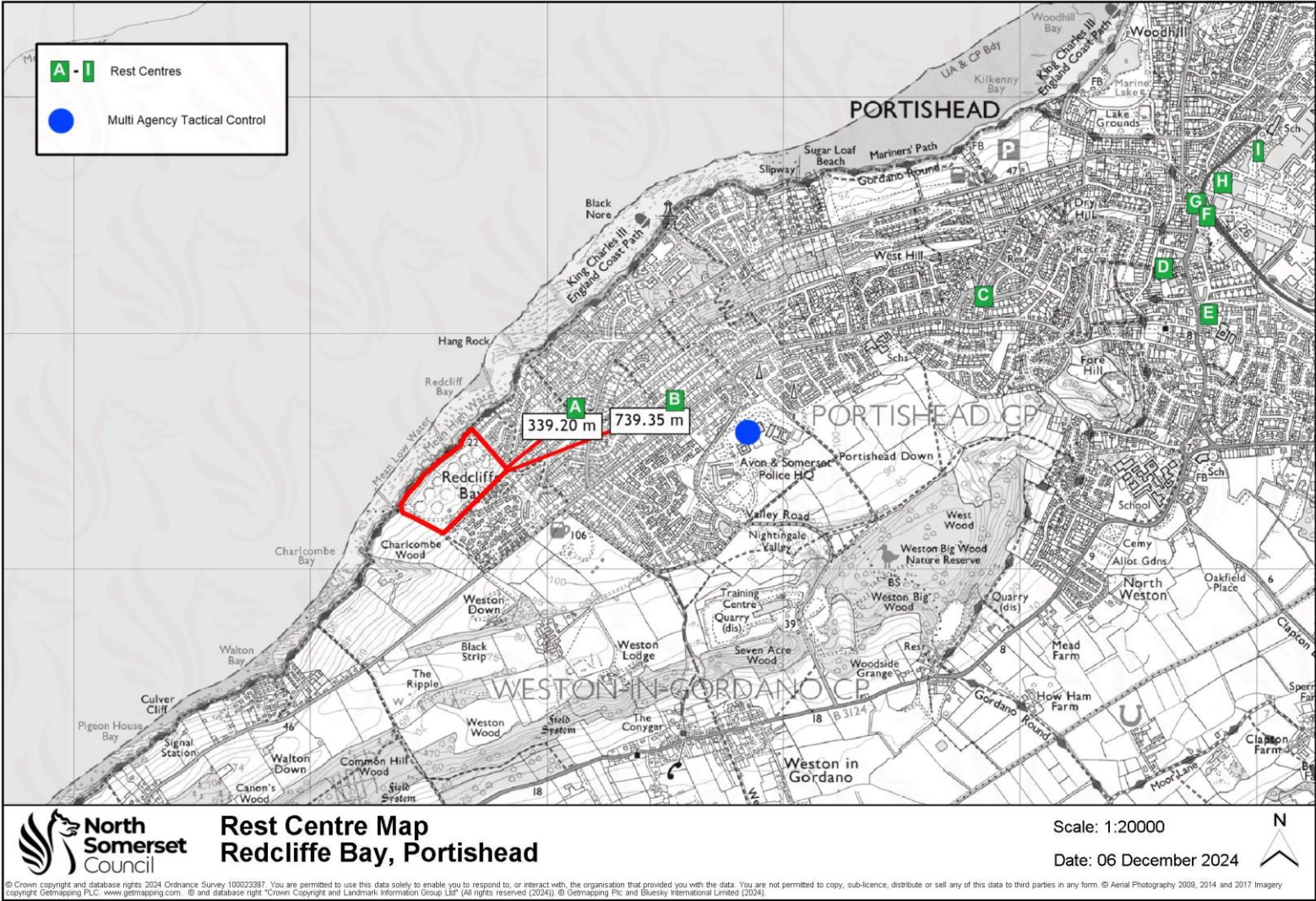
- Support the NHS response and provide advice as required
- Support the management role of NHS England and provide advice as required
- Initiate and maintain incident log
- Ensure specialist expertise is made available to the STAC
- Streamline access to national resources and ensure rapid response
- Provide a local, regional and national perspective on the population impact
- Provide appropriate personnel to attend SCG/TCG
- Notify and update National Team, Department of Health & Social Care, other Government departments and the NHS.

## 8. Welfare & Shelter

[Figure 1](#) and [Table 1](#) give an overview of potential premises that could be used for shelter in the **Portishead** area. NSC's Welfare and Shelter Plan contains arrangements for opening a shelter and contact should be made at the earliest opportunity with a Welfare and Shelter Coordinator to instigate operations. (Contact details are kept with the NSC Welfare and Shelter documents for NSC use). ***Consider if Portishead is suitable as a shelter location – could areas be affected by a smoke plume?***

| Table 1 Potential Rest Centre Premises listed by closest proximity to site |                                |                                     |                          |  |
|--|--------------------------------|-------------------------------------|--------------------------|--|
| Key  | Premise                        | Address                             | Total Capacity (Daytime) | Contact  |
| <b>A</b>   | Redcliffe Bay Hall             | Newhaven Rd, BS20 8LH               | 60                       | Via NSC Community Emergency Shelter Scheme (Portishead Town Council) |
| <b>B</b>   | Redcliffe Bay Methodist Church | 18 Queens Road, BS20 8HT            | 55                       | Via NSC Community Emergency Shelter Scheme                           |
| <b>C</b>   | Avon Way Hall                  | Avon Way, BS20 6LT                  | 100                      | Via NSC Community Emergency Shelter Scheme                           |
| <b>D</b>   | Jubilee Hall                   | 49 Slade Road, BS20 6BE             | 50                       | Alliance Homes T: 03000 120 120                                      |
| <b>E</b>   | The Folk Hall                  | 95 High Street, BS20 6PR            | 125                      | Via NSC Community Emergency Shelter Scheme (Portishead Town Council) |
| <b>F</b>   | Somerset Hall                  | The Precinct, High Street, BS20 6AH | 250                      | Via NSC Community Emergency Shelter Scheme (NSC managed premise)     |
| <b>G</b>   | Portishead Methodist Church    | High Street, BS20 6EN               | 196                      | Via NSC Community Emergency Shelter Scheme                           |
| <b>H</b>   | Portishead Library             | Horatio House, BS20 7AL             | 70                       | Via NSC Community Emergency Shelter Scheme                           |
| <b>I</b>   | Parish Wharf Leisure Centre    | Harbour Rd, BS20 7DD                | 195                      | Via NSC Community Emergency Shelter Scheme (NSC managed premise)     |

Figure 1 Potential Rest Centre Premises – Redcliffe Bay and Portishead Area



## 9. Health and Environmental Impact Considerations

An incident at Redcliffe Bay could present any of the following hazards to the built and natural environment:

- Ground Pollution
- Air Pollution (if ignition)
- Grass and other vegetation fire
- Surface and ground water pollution

**Major Accident Scenarios have been identified as:**

| Scenario  | Possible Effects   |
|---|--|
| Ignited release – pool or jet fire                                  | <ul style="list-style-type: none"> <li>• Effects may extend beyond the site boundary.</li> <li>• Damage to buildings</li> <li>• Casualties</li> <li>• Smoke inhalation</li> <li>• Deposition of soot</li> <li>• Ignition of surrounding biological and built environments</li> </ul> |
| Fire as a result of a lightning strike on equipment containing fuel |  |
| Fire as a result of a discharge of electrostatic charges            |  |

**Major Accident to the Environment (MATTE) Scenarios are:**

| Major Accident Event                                       | Environmental Receptor(s) that could be impacted at MATTE Consequence Level A (Lowest Level) following release of dangerous substance(s)-<br>Type and name   |
|--|--|
| Unignited release of Jet A1                                | <ul style="list-style-type: none"> <li>• Designated Land/Water –National (Severn Estuary SSSI). High and low tide impact.</li> <li>• Designated Land/Water –International (Severn Estuary SAC, SPA and Ramsar Site) High and low tide impact.</li> <li>• Scarce Habitat (discreet areas of UKBAP Mudflats Priority Habitat) High tide impact.</li> <li>• Widespread Habitat– Non-designated Water (Severn Estuary).</li> <li>• Soil or sediment (sediment within the Severn Estuary). Low tide impact (worst case scenario).</li> <li>• Marine (Severn Estuary) High tide impact.</li> </ul> |
| Release of firefighting water containing firefighting foam | <ul style="list-style-type: none"> <li>• Designated Land/Water –National (Severn Estuary SSSI). High and low tide impact.</li> <li>• Designated Land/Water –International (Severn Estuary SAC, SPA and Ramsar Site). High and low tide impact.</li> </ul>  |

OFFICIAL SENSITIVE  
North Somerset Council

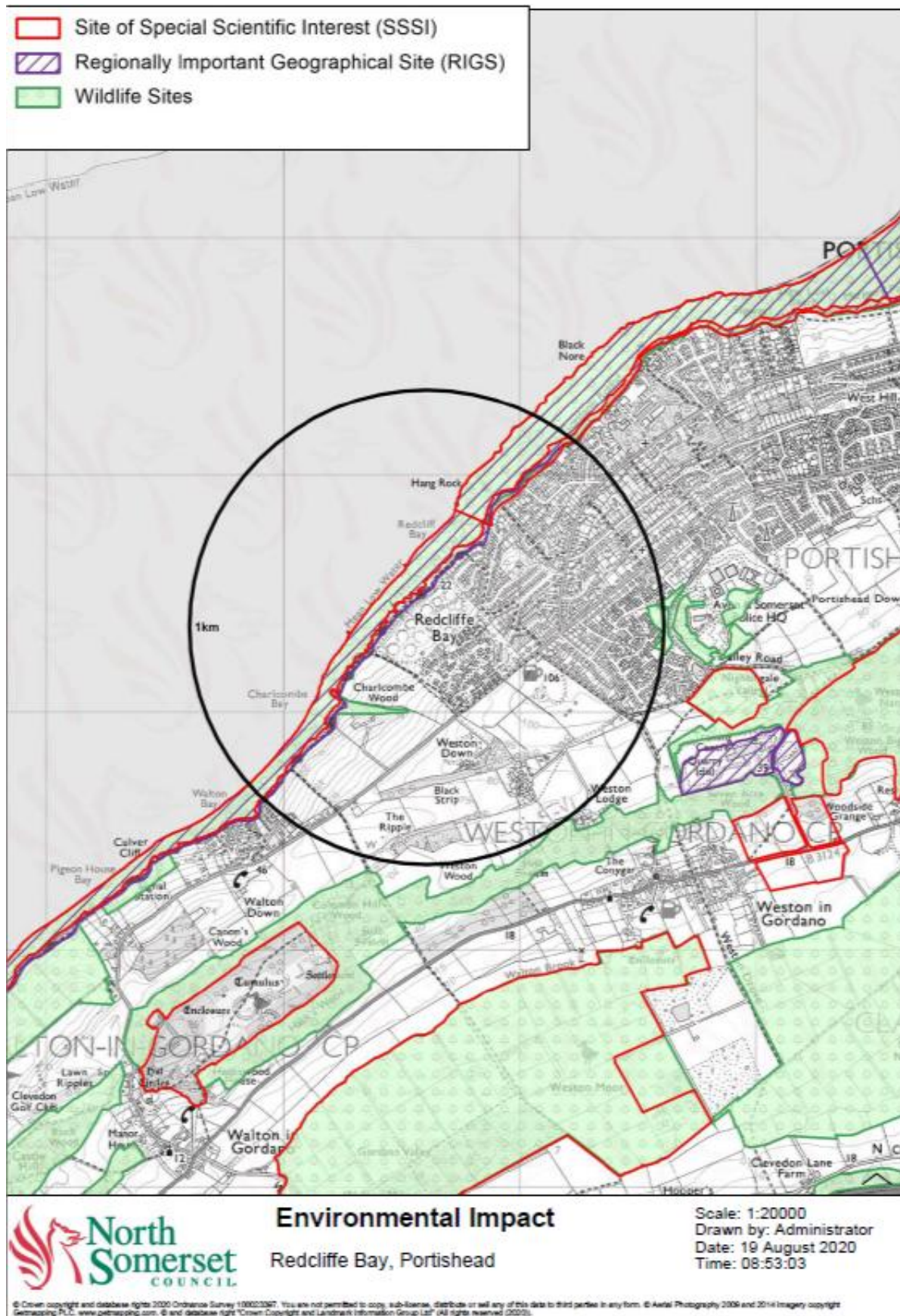
|  |  |
|--|--|
|  | <ul style="list-style-type: none"><li>• Scarce Habitat (discreet areas of UKBAP Mudflats Priority Habitat) High tide impact</li><li>• Widespread Habitat – Non-designated Water (Severn Estuary).</li><li>• Soil or sediment (sediment within the Severn Estuary).</li><li>• Low tide impact (worst case scenario).</li><li>• Marine (Severn Estuary) High tide impact.</li><li>• Fresh and Estuarine Water Habitats (Severn Estuary).</li></ul> |
|--|--|

An Environmental Impact Assessment will be carried out as soon as reasonably practicable following an incident at Redcliffe Bay and a suitable clean up strategy formulated and monitored through the recovery group.

The Site Operator have a contract in place with a specialist clean up company.

[Figure 2](#) visually depicts the environmental classification of the land and waters surrounding the site and [Table 2](#) lists sites of interest up to several kilometres from site.

Figure 2 Environmental Designations at Redcliffe Bay



**Table 2 Environmental Designations up to 5km from site**

| <b>Up to 1km from site</b>                  |                              |   |                          |   |
|---|------------------------------|---|--------------------------|---|
| <b>Site Type</b>                            | <b>km / Dir</b>              | <b>Name &amp; Location</b>                | <b>Grid Ref</b>          | <b>Other Info</b>   |
| Special Protection Area (SPA)               | 500 m to S                   | Weston Down                               | ST 438 749               | Ref – Landmark Envirocheck Report<br>Water Use not specified (expired) - 5,000 m3/year  |
| Special Protection Area (SPA)               | 100 m to NE                  | Severn Estuary                            | ST 321 748               | Estuaries<br>Sandbanks which are slightly covered by sea water all the time. (Subtidal sandbanks)<br>Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats)<br>Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> )<br>Reefs |
| Regional Wildlife Site (RWS)                | 1 km to E                    | Police HQ, Portishead Down                | ST 446 753               | Unimproved neutral grassland  |
| <b>Up to 5km from site</b>                  |                              |   |                          |   |
| <b>Site Type</b>                            | <b>km / Dir</b>              | <b>Name &amp; Location</b>                | <b>Grid Ref</b>          | <b>Other Info</b>   |
| Sites of Special Scientific Interest (SSSI) | 1.3km / to E                 | Nightingale Valley, Portishead,           | ST 449 751               | Geological interest for Pleistocene deposits  |
| SSSI  | 1.5 km to NE to 3.4 km to NE | Portishead Pier to Black Nore, Portishead | ST 444 765 to ST 463 774 | Geological interest for Carboniferous & Devonian eras   |
| SSSI  | 1.8 km to SW                 | Walton Common, Walton-in-Gordano          | ST 428 737               | Ancient semi-natural broad-leaved woodland, unimproved neutral & calcareous grassland with scrub  |
| SSSI  | 1.9 km to E                  | Weston Big Wood, Portishead               | ST 455 750               | Ancient semi-natural broad-leaved woodland  |

OFFICIAL SENSITIVE  
North Somerset Council

|      |                         |  |            |  |
|------|-------------------------|--|------------|--|
| SSSI | 2.2 km to S             | Gordano Valley, Walton-in-Gordano                  | ST 435 732 | Wet meadow, fen, rhynes, ditches & carr habitats with diverse invertebrate fauna & breeding birds  |
| SSSI | 2.5 km to SW on estuary | Severn Estuary, Walton-in-Gordano                  | ST 416 737 | Intertidal habitats & estuarine fauna; geomorphologic features                                     |
| SSSI | 3 km to S               | Court Hill, Clevedon                               | ST 436 723 | Geological site of Carboniferous Limestone   |
| SSSI | 3.1 km to S             | Court Hill, Tickenham                              | ST 438 722 | Geological site of Carboniferous Limestone   |
| SSSI | 3.2 km to NE on estuary | Severn Estuary, Portishead                         | ST 462 771 | Intertidal habitats & estuarine fauna; geomorphologic features                                     |
| SSSI | 3.3 km to SW            | Holly Lane, Walton-in-Gordano                      | ST 419 726 | Geological interest  |
| SSSI | 4.8 km to S             | Tickenham, Nailsea & Kenn Moors                    | ST 433 705 | Low lying agricultural land with rhynes & ditches supporting rich plant & invertebrate communities |
| SSSI | 4.9 km to SW            | Clevedon Shore, Clevedon                           | ST 401 718 | Geological interest for Dolomitic Conglomerate   |
| SSSI | 5.4 km to NE on estuary | Severn Estuary, Portbury                           | ST 485 776 | Intertidal habitats & estuarine fauna; geomorphologic features                                     |
| RWS  | 1.2 km to E             | Police HQ, Portishead Down                         | ST 448 753 | Semi-improved neutral grassland & scrub  |
| RWS  | 1.5 km to SW            | Walton Common – Seven Acre Wood, Walton-in-Gordano | ST 429 740 | Ancient semi-natural broad-leaved woodland, scrub & neutral/calcareous grassland                   |
| RWS  | 2.2 km to E             | Weston Big Wood & Nightingale Valley, N Weston     | ST 458 755 | Ancient semi-natural broad-leaved woodland & neutral/calcareous grassland                          |
| RWS  | 2.6 km to E             | Fore Hill, Portishead                              | ST 462 757 | Semi-improved neutral grassland  |
| RWS  | 2.9 km to SE            | Woodland at Clapton Wick                           | ST 447 728 | Semi-natural broad-leaved woodland   |
| RWS  | 3 km to SW              | Walton Castle area, Walton-in-Gordano              | ST 418 730 | Replanted ancient semi-natural woodland, neutral grassland & scrub                                 |

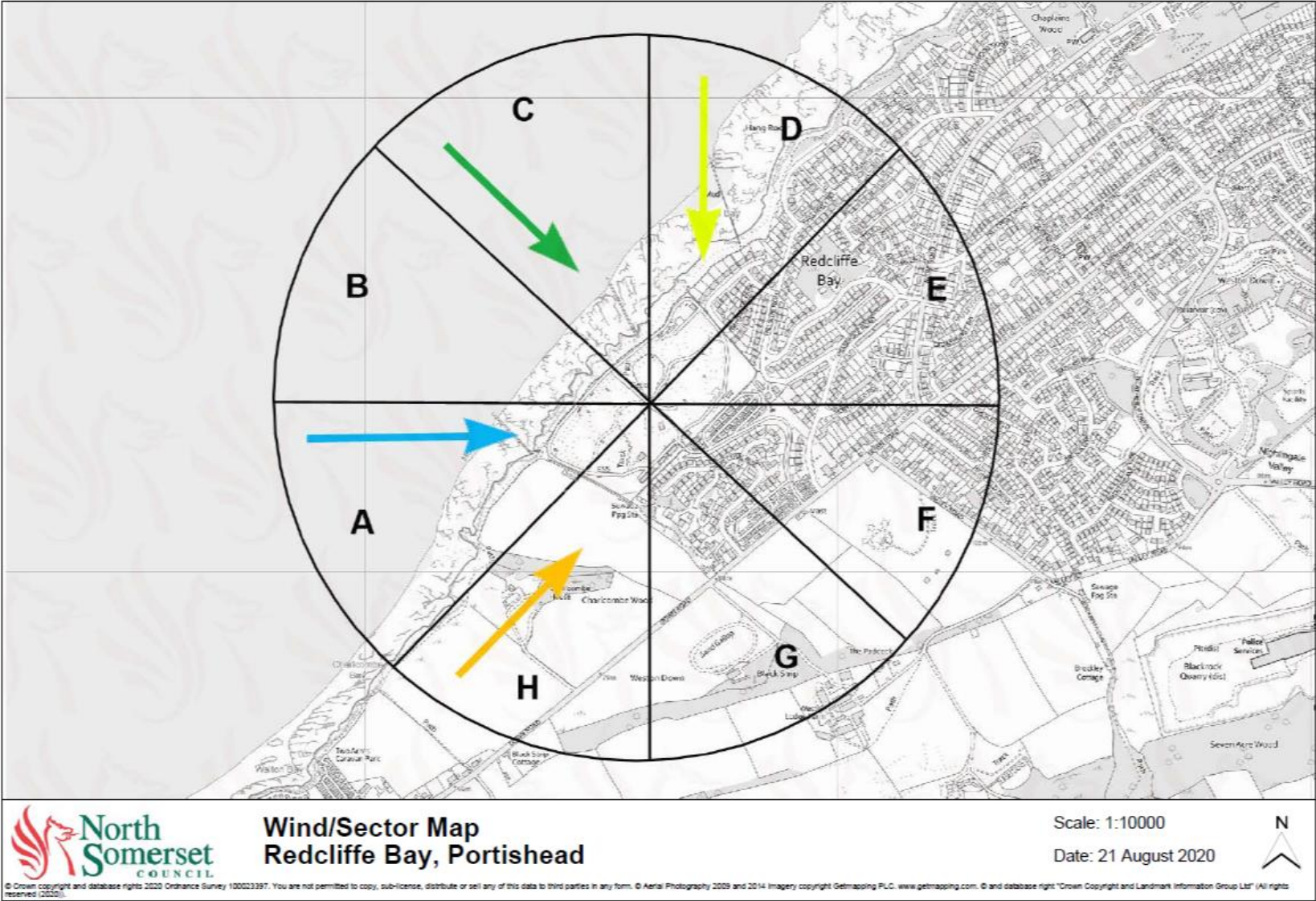
OFFICIAL SENSITIVE  
North Somerset Council

|                  |                        |   |            |  |
|------------------|------------------------|---|------------|--|
| RWS              | 3.1 km to SE           | West Park Wood, Clapton-in-Gordano  | ST 456 730 | Ancient semi-natural broad-leaved woodland                                       |
| RWS              | 3.2 km to SE           | Field at Clevedon Lane, Clapton-in-Gordano                                | ST 470 740 | Unimproved calcareous grassland  |
| RWS              | 3.5 km to SE           | Tickenham Hill, Cadbury Camp, Chummock Wood Complex                       | ST 456 724 | Ancient semi-natural broad-leaved woodland, scrub & neutral/calcareous grassland |
| RWS              | 3.5 km to SW           | Clevedon Court Estate, Clevedon   | ST 426 720 | Ancient semi-natural broad-leaved woodland                                       |
| RWS              | 3.8 km to SE           | Nicholas Wood, Clapton-in-Gordano   | ST 469 736 | Semi-natural broad-leaved woodland   |
| RWS              | 3.9 km to SE           | Cockheap Wood Complex, Clapton-in-Gordano                                 | ST 469 732 | Ancient semi-natural broad-leaved woodland                                       |
| RWS              | 4 km to SE             | Black Horse Field, Clapton-in-Gordano                                     | ST 473 738 | Semi-improved acidic grassland with scrub  |
| RWS              | 4 km to SW             | Strawberry Hill Wood, Clevedon  | ST 413 720 | Semi-natural & replanted ancient semi-natural woodland                           |
| RWS              | 4.4 km to SE           | Abbot's Horn, Tickenham   | ST 469 724 | Semi-natural broad-leaved woodland   |
| RWS              | 4.4 km to E            | Fields at Lower Caswell House, Portbury                                   | ST 480 748 | Marshy grassland   |
| RWS              | 4.7 km to SE           | Summerhouse Wood, Tickenham   | ST 469 720 | Ancient semi-natural broad-leaved woodland                                       |
| RWS              | 4.7 km to E            | Fields at Upper Caswell Farm, Portbury                                    | ST 483 750 | Marshy grassland   |
| RWS              | 4.9 km to E on estuary | Land at Severn Estuary, Portbury  | ST 484 766 | Marshy grassland   |
| Ancient Monument | 1.5 km to SW           | Univallate hill fort, avenues, field system & earthworks on Walton Common | ST 431 739 |  |
| Ancient Monument | 1.5 km to SE           | Manorial settlement at Weston Manor                                       | ST 444 740 |  |
| Ancient Monument | 1.6 km to SE           | Moated site, Weston-in-Gordano  | ST 445 740 |  |
| Ancient Monument | 2.3 km to SE           | Duck decoy, Weston-in-Gordano   | ST 456 742 |  |
| Ancient Monument | 3 km to E              | Roman building S of St Mary's Lane, North Weston                          | ST 465 754 |  |
| Ancient Monument | 3.5 km to SE           | Cadbury Camp – Small multivallate hill fort on Cadbury Hill, Tickenham    | ST 454 724 |  |




OFFICIAL SENSITIVE  
North Somerset Council

|     |              |                   |            |  |
|-----|--------------|-------------------|------------|--|
| SPA | 2.2 km to SE | Weston-in-Gordano | ST 456 745 | Refs – Dames & Moore Report & Landmark Envirocheck Report<br>Water Use - agricultural & domestic use – 227 m3/year |
| SPA | 2.2 km to SW | Walton-in-Gordano | ST 423 736 | Ref – Dames & Moore Report Water Use - golf course irrigation – 4,545 m3/year                                      |
| SPA | 2.6 km to E  | Portishead        | ST 462 757 | Ref - Dames & Moore Report Water Use - agricultural use – 331 m3/year  |
| SPA | 3.7 km to SW | Clevedon          | ST 429 716 | Refs – EA website & BGS Memoir (Ref 25)<br>Water Use - drinking Water  |

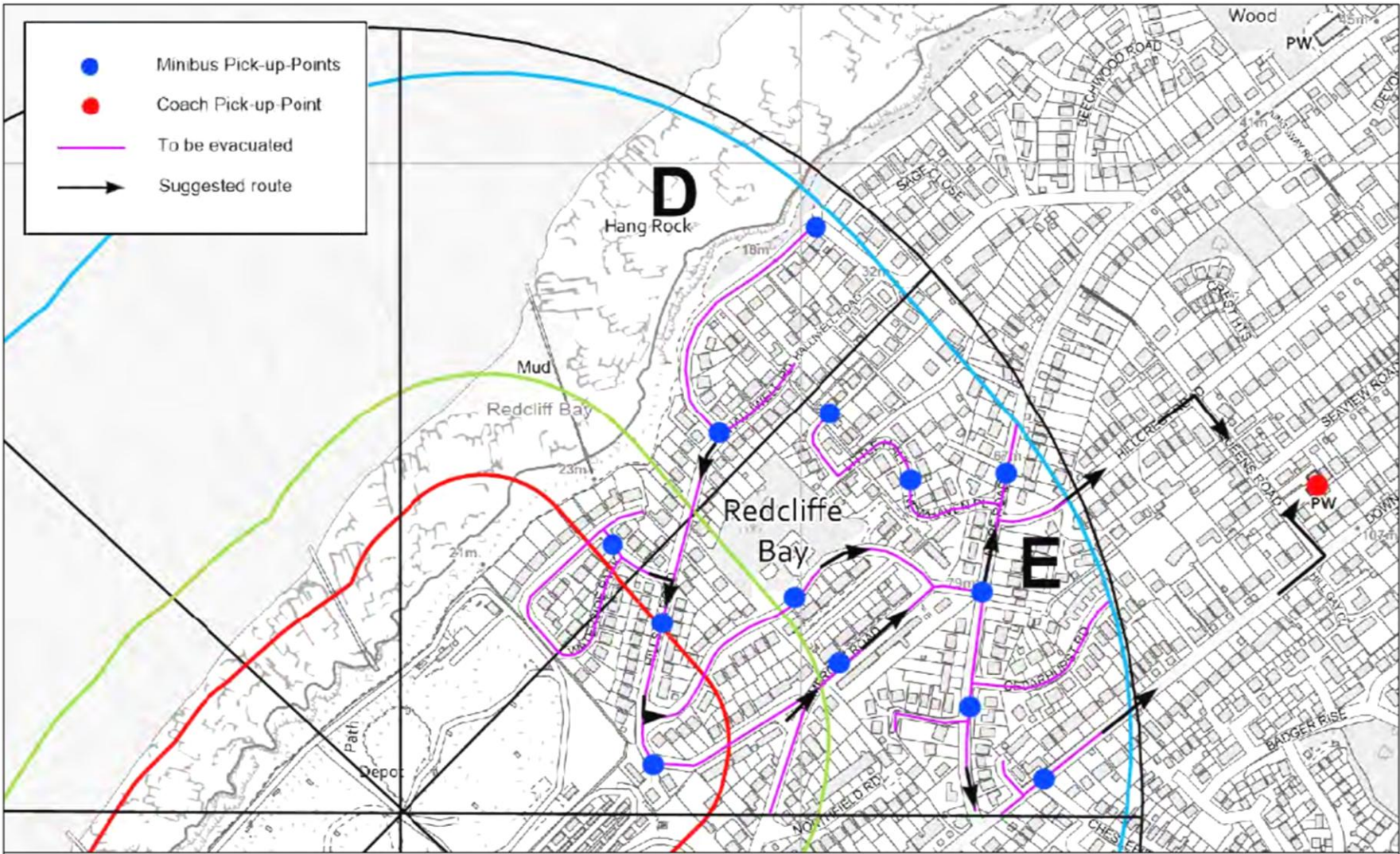
ANNEX A - Evacuation and Pick Up Points by Wind Sector



OFFICIAL SENSITIVE  
North Somerset Council

| Sectors D&E Impacted  |  |                           |                             |   |
|---|--|---------------------------|-----------------------------|---|
| Distance From Site  | Roads/Areas to be Evacuated  | Number of Houses (Approx) | Number of Evacuees (Approx) | Suggested Coach Pick-Up-Point                               |
| 100m<br> | <ol style="list-style-type: none"> <li>1. Right-hand bend of Hillside Road (Newhaven Road junction)</li> <li>2. Waterside Park bend</li> </ol>   | 56                        | 85                          | Redcliffe Bay Methodist Church,<br>18 Queens Road, BS20 8HT |
| 200m<br> | <ol style="list-style-type: none"> <li>1. Waterside Park</li> <li>2. Hillside Road (Northfield Road junction to Waterside Park junction)</li> <li>3. West end of Newhaven Road</li> </ol>  | 114                       | 210                         |   |
| 500m<br> | <ol style="list-style-type: none"> <li>1. Hillside Road to the sharp right bend before Sage Close</li> <li>2. Halliwell Road</li> <li>3. Little Halt</li> <li>4. Newhaven Close</li> <li>5. Pembroke Road</li> <li>6. East end of Newhaven Road</li> <li>7. Redcliffe Close</li> <li>8. Cedarhurst Road</li> <li>9. Nore Road (Down Road to Newhave close junction)</li> </ol> | 407                       | 731                         |   |

OFFICIAL SENSITIVE  
North Somerset Council






Sector D/E  
Redcliffe Bay, Portishead

Scale: 1:5000  
Date: 27 August 2020

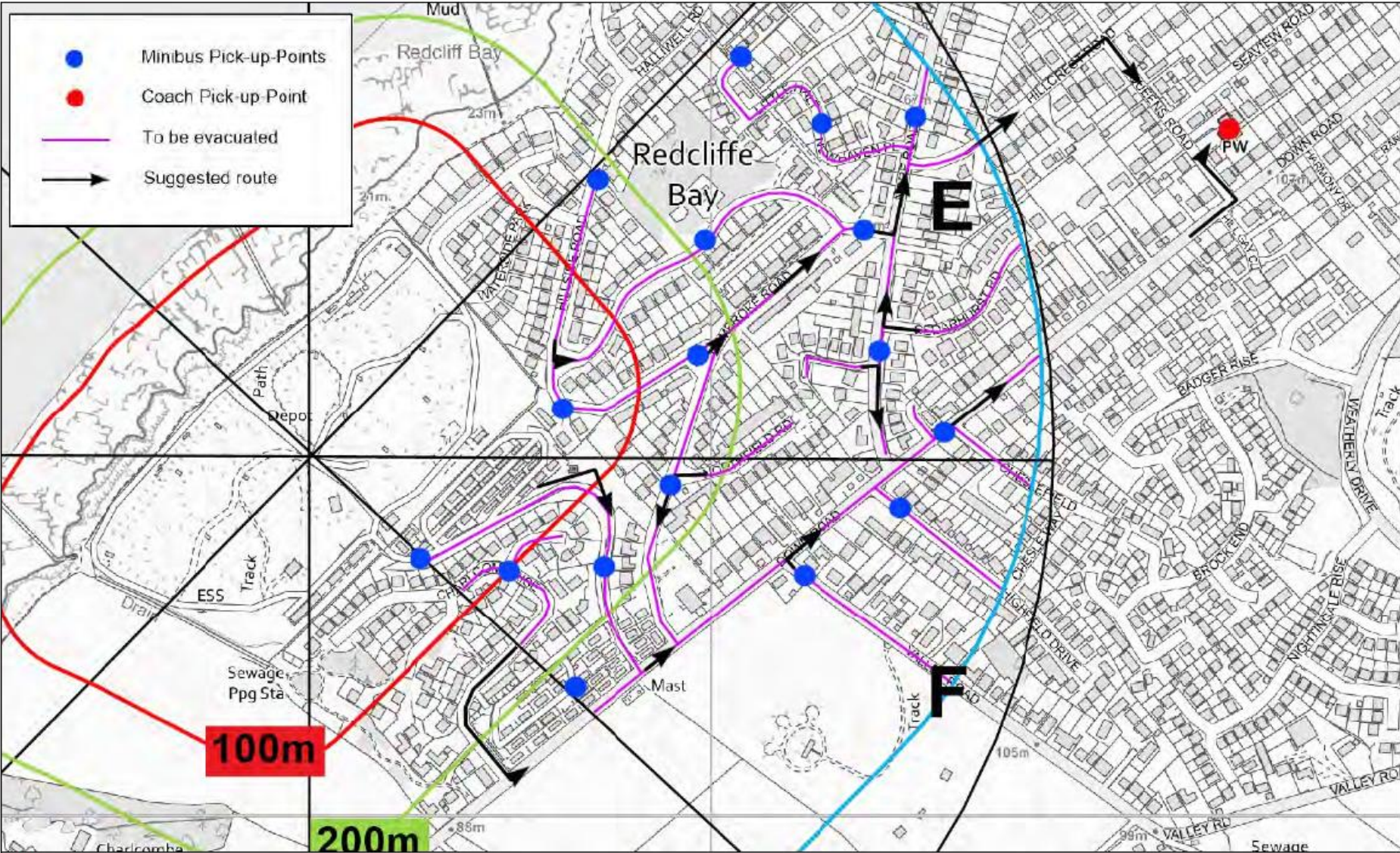


© Crown copyright and database rights 2020 Ordnance Survey 100023397. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form. © Aerial Photography 2009 and 2014 Imagery copyright Getmapping PLC. www.getmapping.com. © and database right "Crown Copyright and Landmark Information Group Ltd" (All rights reserved) (2020).

OFFICIAL SENSITIVE  
North Somerset Council

| Sectors E&F Impacted  |  |                              |                                |   |
|---|--|------------------------------|--------------------------------|---|
| Distance From Site  | Roads/Areas to be Evacuated  | Number of Houses<br>(Approx) | Number of Evacuees<br>(Approx) | Suggested Coach Pick-Up-Point                               |
| 100m<br> | <ol style="list-style-type: none"> <li>1. Waterside &amp; Trailer Park</li> <li>2. Lower central section of Charlcombe Rise</li> <li>3. Right-hand bend of Hillside Road (Newhaven Road junction)</li> </ol>   | 70                           | 156                            | Redcliffe Bay Methodist Church,<br>18 Queens Road, BS20 8HT |
| 200m<br> | <ol style="list-style-type: none"> <li>1. Central section of Charlcombe Rise</li> <li>2. Upper section of Hillside Rd</li> <li>3. West end of Newhaven Road</li> <li>4. Lower section of Hillside Road (to Waterside Park junction)</li> </ol>   | 153                          | 369                            |   |
| 500m<br> | <ol style="list-style-type: none"> <li>1. Little Halt</li> <li>2. Newhaven Place</li> <li>3. East end of Newhaven Rd</li> <li>4. Pembroke Road</li> <li>5. Northfield Road</li> <li>6. Redcliffe Close</li> <li>7. Cedarhurst Road</li> <li>8. Valley Road</li> <li>9. Highfield Drive</li> <li>10. Cheslefield</li> </ol> | 488                          | 979                            |   |

OFFICIAL SENSITIVE  
North Somerset Council






Sector E/F  
Redcliffe Bay, Portishead

Scale: 1:5000

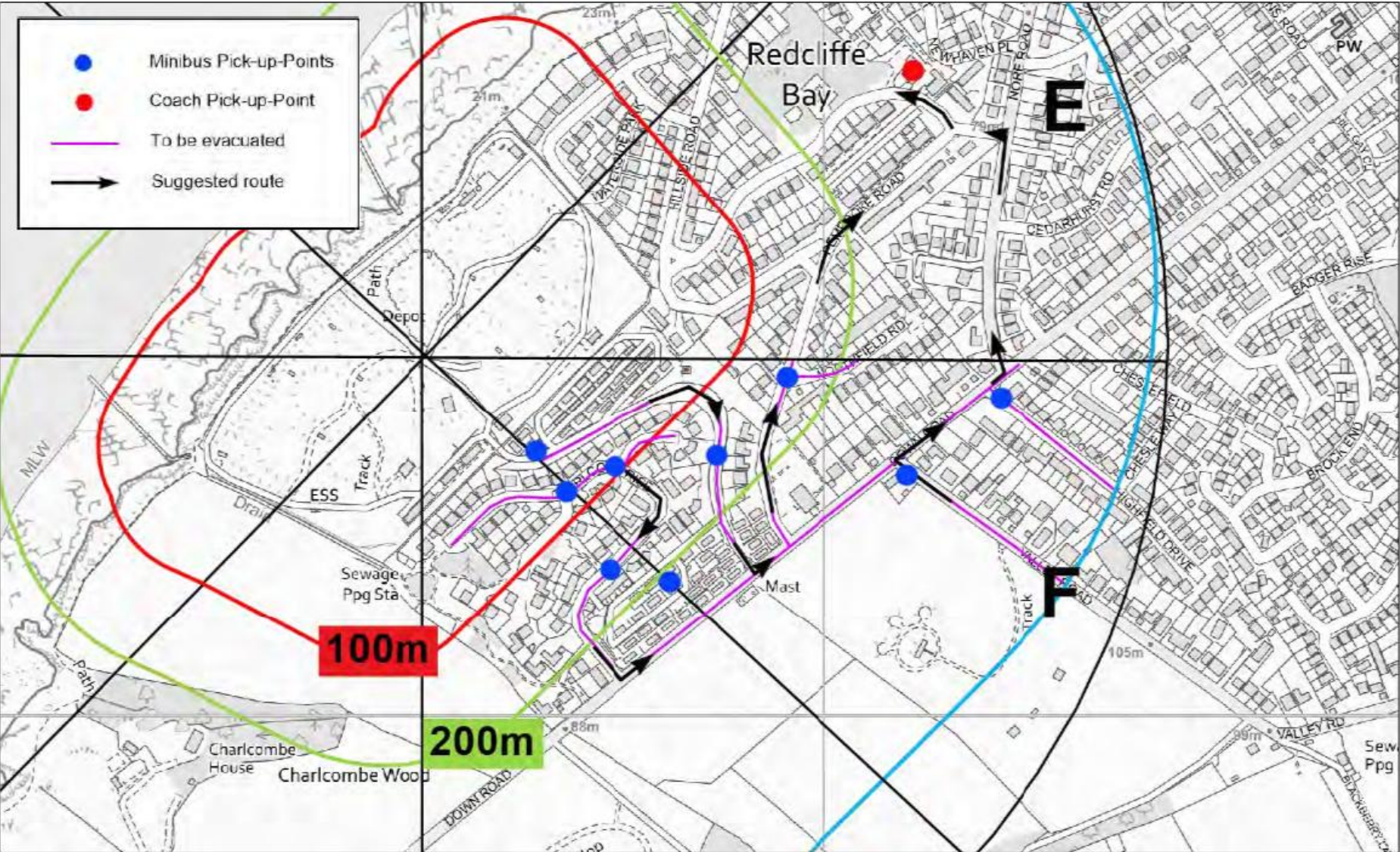
Date: 27 August 2020



© Crown copyright and database rights 2020 Ordnance Survey 100023397. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form. © Aerial Photography 2009 and 2014 Imagery copyright Getmapping PLC. www.getmapping.com. © and database right "Crown Copyright and Landmark Information Group Ltd" (All rights reserved) (2020).

| <b>Sectors F&amp;G Impacted</b>   |  |                                      |  |   |
|---|--|--------------------------------------|--|---|
| <b>Distance From Site</b>   | <b>Roads/Areas to be Evacuated</b>   | <b>Number of Houses<br/>(Approx)</b> | <b>Number of Evacuees<br/>(Approx)</b> | <b>Suggested Coach Pick-Up-Point</b>        |
| 100m<br>   | 1. Trailer Park<br>2. Bottom stretch of Charlcombe Rise  | 55                                   | 161                                    | Redcliffe Bay Hall, Newhaven Road, BS20 8LH |
| 200m<br>   | 1. Middle section of Charlcombe Rise<br>2. Upper section of Hillside Road (Down Road junction to Northfield Road junction)   | 114                                  | 350                                    |   |
| 500m<br> | 1. Top of Charlcombe Rise<br>2. Charlcombe Park<br>3. Down Road (between Hillside Road and Nore Road junctions)<br>4. Section of Valley Road<br>5. Highfield Drive | 230                                  | 550                                    |   |

OFFICIAL SENSITIVE  
North Somerset Council






Sector F/G  
Redcliffe Bay, Portishead

Scale: 1:5000

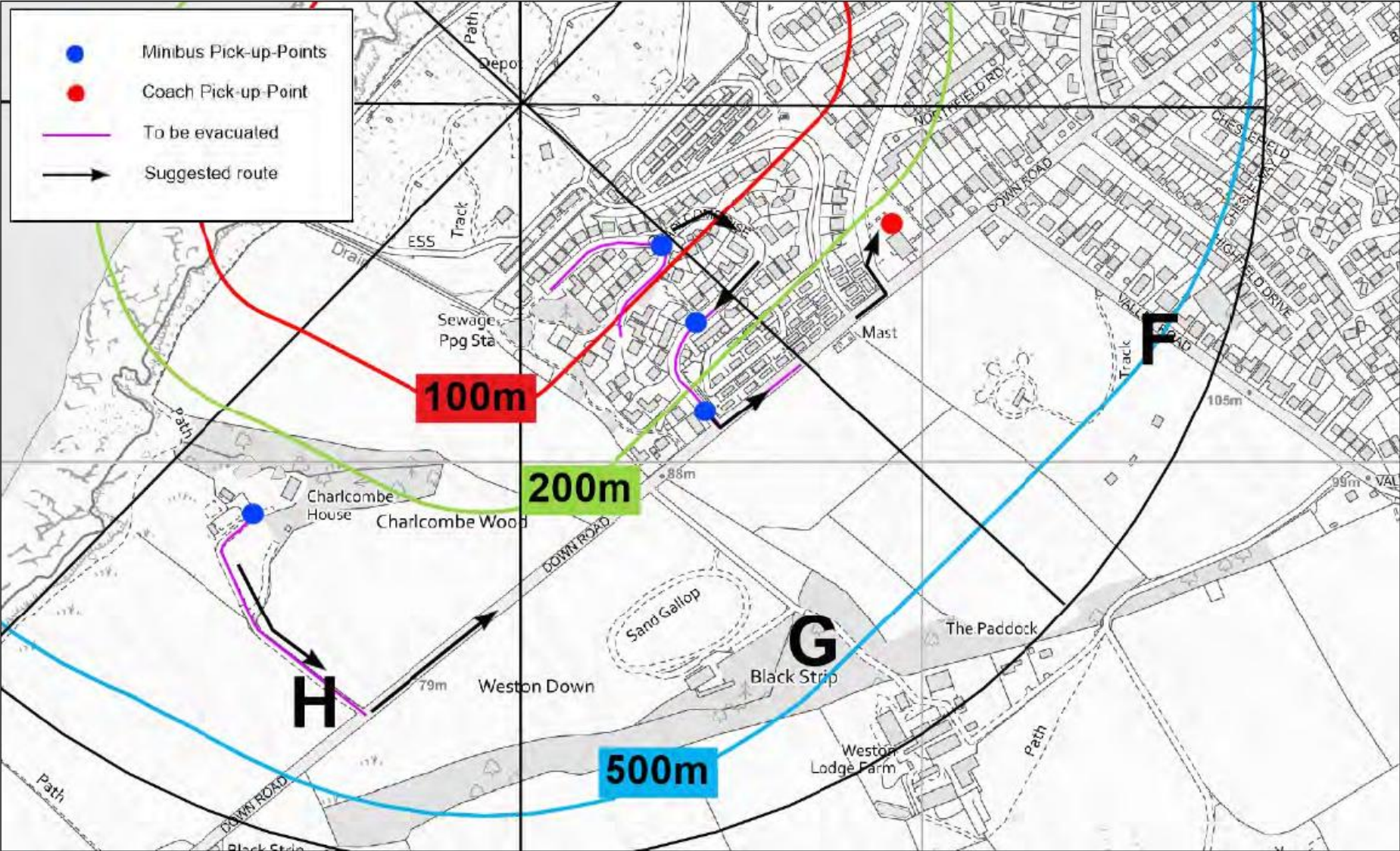
Date: 27 August 2020



© Crown copyright and database rights 2020 Ordnance Survey 100023397. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form. © Aerial Photography 2009 and 2014 Imagery copyright Getmapping PLC. www.getmapping.com. © and database right "Crown Copyright and Landmark Information Group Ltd" (All rights reserved) (2020).

| Sectors G&H Impacted  |  |                                     |                                       |  |
|---|--|-------------------------------------|---------------------------------------|--|
| Distance From Site  | Roads/Areas to be Evacuated                        | Number of Houses<br><u>(Approx)</u> | Number of Evacuees<br><u>(Approx)</u> | Suggested Coach Pick-Up-Point                  |
| 100m<br> | 1. Bottom fork of Charlcombe Rise                  | 23                                  | 68                                    | The Ship Public House, 310 Down Road, BS20 8JT |
| 200m<br> | 1. Top section of Charlcombe Rise                  | 50                                  | 150                                   |  |
| 500m<br> | 1. Dunvegan House<br>2. Small section of Down Road | 71                                  | 166                                   |  |

OFFICIAL SENSITIVE  
North Somerset Council



Sector G/H  
Redcliffe Bay, Portishead

Scale: 1:5000

Date: 27 August 2020



© Crown copyright and database rights 2020 Ordnance Survey 100023397. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form. © Aerial Photography 2009 and 2014 Imagery copyright Getmapping PLC. www.getmapping.com. © and database right "Crown Copyright and Landmark Information Group Ltd" (All rights reserved (2020)).

OFFICIAL SENSITIVE  
North Somerset Council

ANNEX B - Product Data Sheet

All dangerous substances at Redcliffe Bay PSD are held in storage as finished products and are liquid mixtures. The classification of these mixtures under CLP Regulations including the CAS numbers and chemical names (IUPAC names) for component substances of the mixtures are:

**The firefighting foam held in storage at Redcliffe Bay PSD is SOLBERG® VERSAGARD™ AS-100.**

Table 2: Identification and Classification of Dangerous Substances

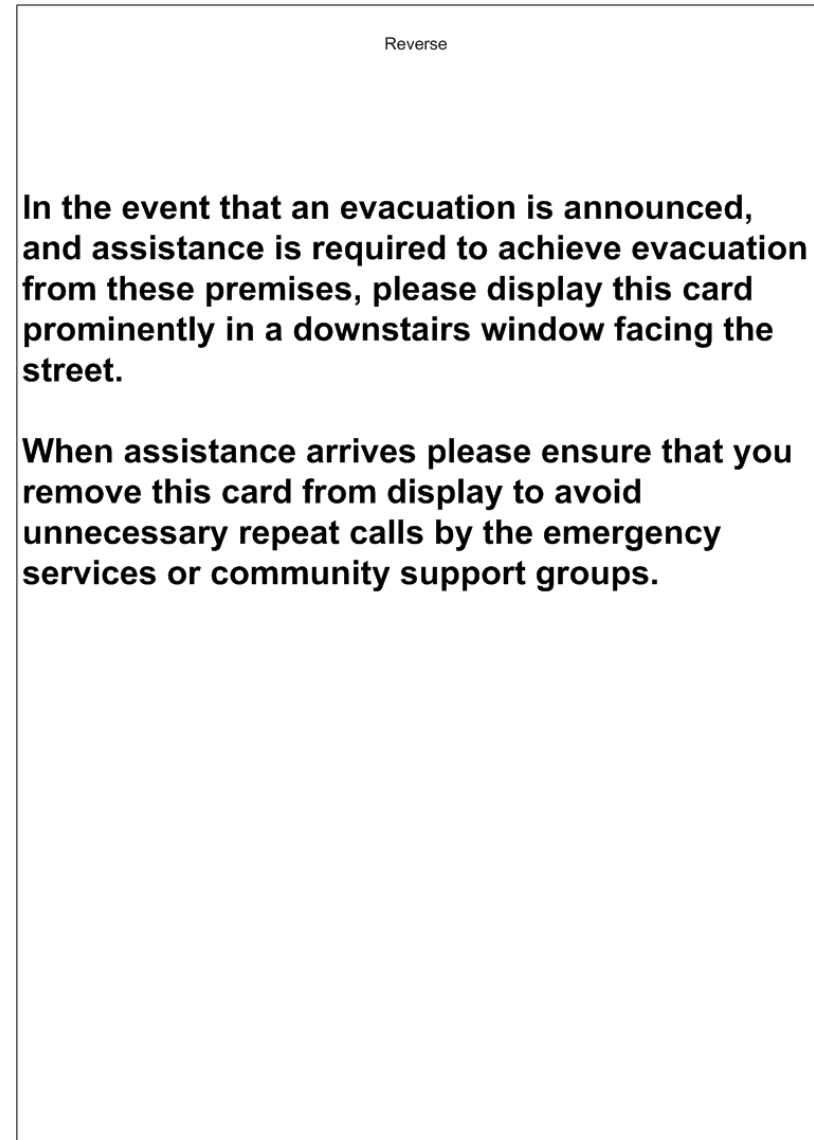
| Mixture                  | Description  | Chemical Name for each Component                 | CAS Number | CLP-Mixture Hazard Class and Category | CLP-Mixture Hazard Statement   | CLP Class |
|--------------------------|--|--|------------|---------------------------------------|--|-----------|
| JetA1, Aviation Kerosene | Kerosene is a complex mixture of hydrocarbons consisting of paraffin's, cycloparaffin's, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C16 range. Although Jet A1 fuel comprises a mix of kerosene's, the substances denoted by the three CAS numbers are all represented within the C9 to C16 range | Kerosene (petroleum), hydrodesulfurised.         | 64742-81-0 | **Flam Liq.3                          | Flammable Liquid and vapour.   | H226      |
|                          |  | Straight run kerosene.                           | 8008-20-6  | Asp. Tox. 1                           | May be fatal if swallowed and enters airways.                                      | H304      |
|                          |  | Kerosene (petroleum), sweetened.                 | 91770-15-9 | Skin Irrit. 2                         | Causes skin irritation.  | H315      |
|                          |  |  |            | STOT SE 3                             | May cause drowsiness or dizziness.   | H336      |
|                          | **Aquatic Chronic 2  | Toxic to aquatic life with long lasting effects. | H411       |                                       |  |           |
| Kerosene                 | Kerosene is a complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C16 range.  | Straight run kerosene.                           | 8008-20-6  | **Flam Liq.3                          | Flammable Liquid and vapour.   | H226      |
|                          |  |  |            | Asp. Tox. 1                           | May be fatal if swallowed and enters airways.                                      | H304      |
|                          |  |  |            | Skin Irrit. 2                         | Causes skin irritation.  | H315      |
|                          |  |  |            | STOT SE 3                             | May cause drowsiness or dizziness.   | H336      |
|                          |  |  |            | **Aquatic Chronic 2                   | Toxic to aquatic life with long lasting effects.                                   | H411      |
| Diesel Fuel/Gas Oil      | It consists of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C10 to C16 range   | Fuels, Diesel                                    | 68334-30-5 | **Flam Liq.3                          | Flammable Liquid and vapour.   | H226      |
|                          |  | Fatty acids, vegetable oils, Me esters           | 68990-52-3 | Asp. Tox. 1                           | May be fatal if swallowed and enters airways.                                      | H304      |
|                          |  | Fatty acids, tallow, Me esters                   | 61788-61-2 | Skin Irrit. 2                         | Causes skin irritation.  | H315      |
|                          |  | Naphthalene                                      | 91-20-3    | STOT RE 2                             | May cause damage to organs (liver, Thymus) through prolonged or repeated exposure. | H373      |
|                          |  |  |            | Acute. Tox. 4                         | Harmful if inhaled.  | H332      |
|                          |  |  |            | Carc. 1B                              | May cause cancer.  | H350      |
|                          |  |  |            | **Aquatic Chronic 2                   | Toxic to aquatic life with long lasting effects.                                   | H411      |

OFFICIAL SENSITIVE  
North Somerset Council

Toxicological effects of the substances are:

| Product (1) | Route/Immediate, Delayed and Chronic Effects to Human (2)   | Toxicological Data (3)   | Ecotoxicology Data (4)  |
|-------------|---|--|---|
| Jet A1      | Inhalation: Vapour, mist or fumes from Jet A1 may irritate the nose, mouth and respiratory tract.<br><br>Inhalation: inhalation of high concentrations of hydrocarbon vapours may cause central nervous system (CNS) depression such as headaches, drowsiness or dizziness. | LC50 Inhalation >5.28mg/l, rat.<br>LC50 Data relates to Kerosene component of JetA1 mixture  | Jet A1 is toxic to aquatic life with long lasting effects.<br>Short term toxicity data for fish:<br>LL50 (4 days) 2 - 5 mg/L<br>LL50 (72 h) 2 - 5 mg/L<br>LL50 (48 h) 2 - 5 mg/L<br>LL50 (24 h) 5 - 17 mg/L<br>Short term toxicity data for aquatic invertebrates:  |
| JetA1       | Dermal contact: On contact with the skin, JetA1 will cause irritation, redness and pain.<br><br>Repeated exposure of JetA1 may cause skin dryness or cracking (Chronic effect).   | Toxicity data based on exposure to thermocracked kerosene<br>LD50(dermal): >2000mg/kg, rat.  | EL50 (48 h) 1.4 mg/L<br>EL50 (24 h) 4.6 mg/L<br>Toxicity data to aquatic algae:<br>EL50 (72 h) 1 - 3 mg/L<br>EL50 (48 h) 1 - 3 mg/L<br>EL50 (24 h) 1 - 3 mg/L.  |
| JetA1       | Oral: If ingested Jet A1 will cause irritation to the gastric mucous membranes which can lead to vomiting and aspiration into the lungs can result in chemical pneumonitis which can be fatal.  | Toxicity data based on exposure to thermocracked kerosene<br>LD50 (Oral): >5000mg/kg, rabbit   | Long term toxicity data for aquatic invertebrates:<br>EL50 (21 days) 810 - 890 µg/L<br>Jet A-1 is not considered a PBT (persistent, bioaccumulative or toxic) and a vPvB (very persistent and very bioaccumulative).<br>JetA1 is considered inherently biodegradable  |
| JetA1       | Eye contact: On contact with the eye Jet A1 may cause slight irritation, watering, redness and pain   |  |   |
| Diesel      | Inhalation: may cause drowsiness or dizziness   | Toxicity data based on exposure to Fuels, diesel<br>LC50 (inhalation/rat (male and female/mist) >4.1 mg/L (analytical), 4 h<br>LC50 (inhalation/rat (male/mist) >5.4 mg/L (analytical), 4 h<br><br>LC50 inhalation/rat(female/mist) >3.6mg/L (analytical), 4 h<br>Toxicity data based on exposure to Naphthalene<br>LC50 (inhalation/rat(female/mist) >0.4mg/L (analytical), 4 h | Diesel is toxic to aquatic life with long lasting effects.<br>Toxicity data for Daphnia magna based on exposure to Fuels, Diesel:<br>EL50: 210 mg/L, 48 hr (WAF)<br>NOEL: 46 mg/L, 48 hr (WAF)<br>NOEL: 0.2mg/L, 21 days (WAF) (estimated using Petrotox computer model)<br>Toxicity data for rainbow trout (Oncorhynchus mykiss) on exposure to Fuels, diesel:<br>LL50: 21 mg/L, 96 hr (WAF)<br>NOEL: 10 mg/L, 96 hr (WAF) |
| Diesel      | Dermal: On contact with the skin, Diesel will cause irritation.<br>Repeated exposure may cause skin dryness or cracking   | Toxicity data based on exposure to Fuels, diesel<br>LD50(dermal): > 4,300 mg/kg, rabbit<br>Toxicity data based on exposure to naphthalene<br>LD50(dermal): > 2,500 mg/kg, rabbit   | NOEL: 0.083 mg/L, 14 days (WAF) (estimated using Petrotox computer model).<br>Toxicity data for microalga Pseudokirchnerella subcapitata based on exposure to Fuels, diesel:<br>EL50 (72 h) 10 mg/L (biomass)<br>NOEL (72 h) 1 mg/L (biomass)   |
| Diesel      | Oral: If ingested Diesel will cause irritation of the mouth and digestive system.<br>If swallowed, aspiration into the lungs can result in chemical pneumonitis which can be fatal.   | Toxicity data for based on exposure to Fuels, diesel<br>LD50 (oral/rat): > 5,000 mg/kg<br>Toxicity data based on exposure to Naphthalene<br>LD50 (oral/rat): > 2,000 mg/kg   | EL50 (72 h) 22 mg/L (growth rate)<br>NOEL (72 h) 1 mg/L (growth rate)<br>Toxicity data for Tetrahymena pyriformis based on exposure to Fuels, diesel:<br>EL50: >1000 mg/L, 40 hr (estimated using Petrotox computer model)  |
| Diesel      | Eye: On contact with the eye Diesel may cause slight irritation.  |  | NOEL50: >3.217 mg/L, 40 hr (estimated using Petrotox computer model)<br>Toxicity data for the freshwater fish, Pimephales promelas based on exposure to Naphthalene.  |

Annex C Assistance Card Issued to Residents in Public Information Zone



## ANNEX D – Consultees

The following **External** Agencies were consulted on this Plan:

- Avon Fire & Rescue Service
- Avon & Somerset Constabulary
- Environment Agency
- Exolum (Operator)
- Health & Safety Executive
- HM Coastguard
- South Western Ambulance Service Trust

**Public** Consultation Consultee:

- Elected Member(s) for Portishead West Ward.

**Internal** Consultation:

- Selected Officers / Job Roles within NSC.

Glossary

| <b>Abbreviation</b> | <b>Explanation</b>                                   |
|---------------------|--|
| AFRS                | Avon Fire & Rescue Service                           |
| AOD                 | Above Ordnance Datum                                 |
| AQC                 | Air Quality Cell                                     |
| ASC                 | Avon & Somerset Constabulary                         |
| ASLRF               | Avon and Somerset Local Resilience Forum             |
| BBC                 | British Broadcasting Corporation                     |
| CAS                 | Chemical Abstracts Service                           |
| CCTV                | Closed-circuit television                            |
| CHEMET              | Chemical Meteorology service                         |
| CLP                 | Classification, Labelling and Packaging              |
| COMAH               | Control of Major Accident Hazards                    |
| E                   | East   |
| EA                  | Environment Agency                                   |
| ECC                 | Emergency Control Centre                             |
| HM                  | His Majesty's  |
| HQ                  | Headquarters   |
| HSE                 | Health and Safety Executive                          |
| ICT                 | Information and Communications Technology            |
| JESIP               | Joint Emergency Services Interoperability Principles |
| m                   | Metres   |
| MATTE               | Major Accident to the Environment                    |
| MCA                 | Maritime & Coastguard Agency                         |
| MS Teams            | Microsoft Teams                                      |
| N                   | North  |
| NHS                 | National Health Service                              |
| NHSEI               | NHS England & Improvement                            |
| NSC                 | North Somerset Council                               |
| Op LINK             | Operation LINK                                       |
| PIZ                 | Public Information Zone                              |
| PPE                 | Personal Protective Equipment                        |
| PSD                 | Petroleum Storage Depot                              |
| RVP                 | Rendez Vous Point                                    |
| RWS                 | Regional Wildlife Site                               |
| S                   | South  |
| S. Glos             | South Gloucestershire                                |
| SAC                 | Special Areas of Conservation                        |
| SCG                 | Strategic Co-ordination Group                        |
| SPA                 | Special Protection Area                              |
| SSSI                | Sites of Special Scientific Interest                 |
| STAC                | Science and Technical Advice Cell                    |

OFFICIAL SENSITIVE  
North Somerset Council

|       |   |
|-------|---|
| SWAST | South Western Ambulance Service NHS Trust   |
| TCG   | Tactical Co-ordination Group                |
| UK    | United Kingdom                              |
| UKBAP | The United Kingdom Biodiversity Action Plan |
| UKHSA | UK Health Security Agency                   |
| VHF   | Very High Frequency                         |
| W     | West  |