

TRAWS-CONT-HBK

Based on company generic template S-486

Issue 10

Trawsfynydd Contingency Handbook

Site in Monitoring and Surveillance during Silent Hours

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NOTES FOR THIS ISSUE	
Impact: Low	Implementation: Once all DM's & DC's fully briefed on changes
Duty Operational Responders and bespoke Maentwrog arrangements added, reference to Radsafe CCP and F-984 removed, and transition between site states further clarified.	

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SECTION 1, ESTABLISHING THE SITE ACCIDENT AND EMERGENCY RESPONSE

1 INTRODUCTION

The Site Contingency Handbook, supported by the Trawsfynydd Accident and Emergency Arrangements (TRAWS-AAEA), specifies how the site shall implement S-074, Contingency & Emergency Arrangements to comply with Site License Condition 11 (LC11), Radiation (Emergency Preparedness and Public Information) Regulations (REPP19) and the Ionising Radiations Regulations (IRR17).

It shall be a guide for personnel, new contingency response team members and an aide memoire for all when responding to foreseeable accidents or emergencies.

References to suites of Contingency Plans are also included to best ensure the safety of the public, personnel, environment, plant and security of the site, whilst enabling business to continue where possible (a Site Counter-terrorism Contingency Plan is available as a restricted document.)

Maentwrog (Hydro) site are also supported by the Trawsfynydd Contingency team (but not subject to LC11). Responses to incidents/alarms at Maentwrog Site shall be as described in bespoke emergency plans AMG/EP/001 and AMG/EP/002.

2 ESTABLISHING THE RESPONSE

Initial Response

On receipt of alarm / notification (direct or via the Security Lodge), the Duty Controller (DC) will assess the situation and initiate the appropriate response during Normal, Extended and Silent Hour Conditions.

Alarm notification from the security lodge will be in accordance with POI-21 during silent hours.

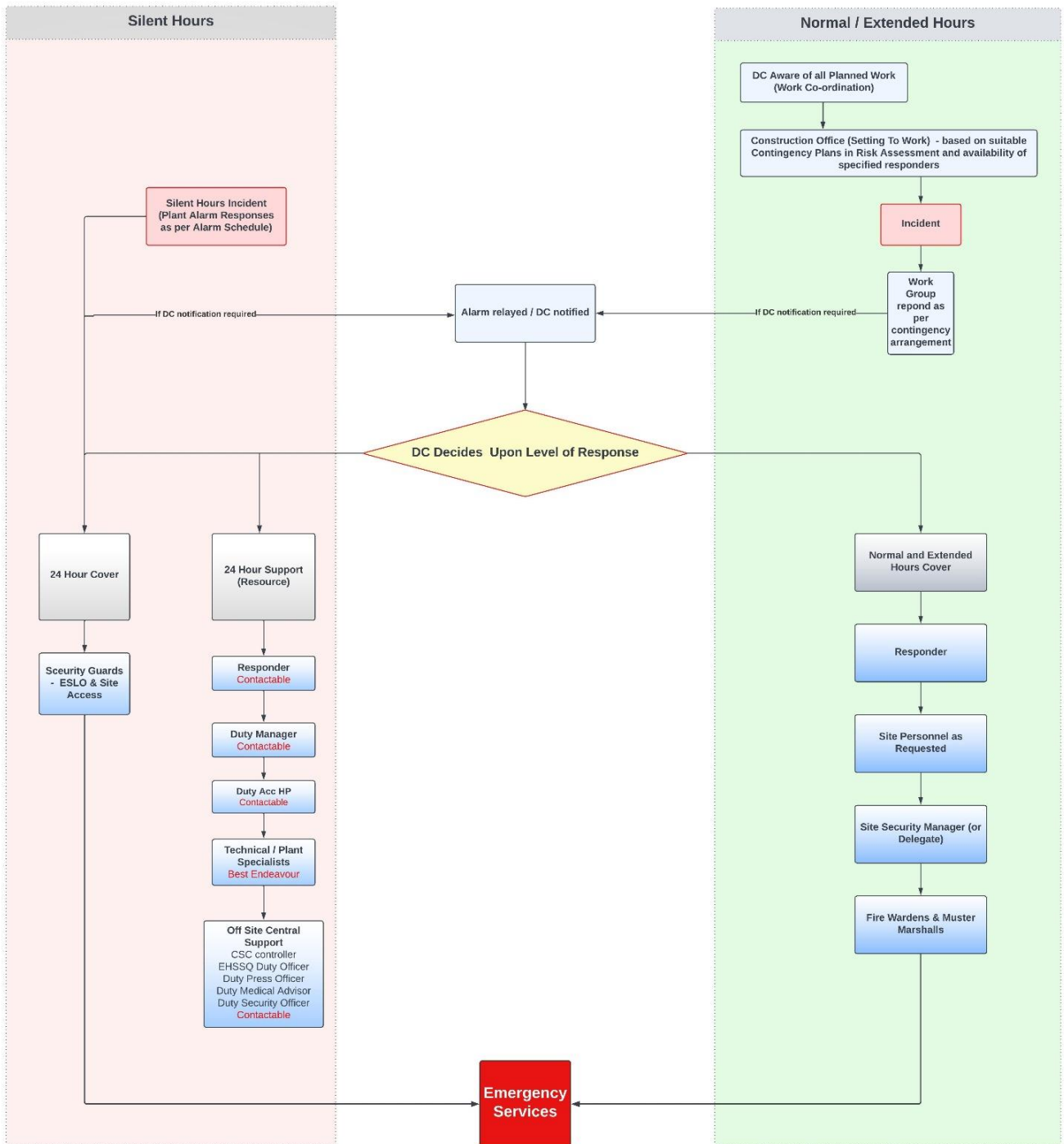
If the situation warrants a Site Incident declaration (see S-495 Categorisation and Notification of Events), the DC will declare it.

As soon as a declaration is made the DC will initiate the following actions as appropriate:

- Notify the DM
- Notify the Lead Guard
- Request suitable personnel to support the response (including Central Support Cell, CSC if applicable).
- Notification (only if required and noting that some notifications are required within 15minutes as per S-495)
- Activation of Muster process, Lockdown or Roll Call (only if required).
- Set up of an incident management area.
- Deploy an Incident Responder to conduct initial investigation and provide information.

3 SITE INCIDENT RESPONSE STRUCTURE

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SECTION 2, ROLES AND RESPONSIBILITIES

1 ROLES

1.1 Duty Controller (DC)

- Appointed by the Site Director to take the lead management role during an incident or emergency on behalf of the Site Director.
- Will be informed of any incident on Site and shall declare a site incident (if required) and initiate an appropriate response to ensure all early actions for the protection of the public, personnel, plant, security, and the environment are taken in a timely and appropriate manner.
- Once notified of an incident, the DC is empowered to utilise all available resources and equipment to bring the situation under control and return the Site to a safe state This may include requesting Emergency Services to attend Site, vacating affected areas or summoning more resource from site or the Company's Central Support Cell (CSC) via the CSC Controller.
- Shall have sufficient understanding of the site, its plant, Company Arrangements and roles to call upon the most appropriate persons for support.
- Call upon the Duty Manager (DM) to assist the DC and consider mobilising of Company resources to support response.

1.2 Incident Responder (IR)

- Investigate initial alarms and provide information to the DC, supporting and informing the DC's response.
- Competent in radiological monitoring and first aid, can assist in a prompt and flexible response to an incident.

Note: Trawsfynydd Site also utilises additional Operational Responders - available to provide support to the DC & IR with plant responses out of hours. These are first aid trained, but do **not** provide radiological support.

1.3 Lead Guard (LG)

- Contacts the DC to inform them if a significant incident occurs in silent hours and prepares the security team to receive emergency services and/or oncoming personnel.
- Maintain site security.

1.4 Emergency Services Liaison Officer (ESLO)

- Ensures Emergency Services are briefed on situation / hazards, can rapidly access / deploy on Site and that dosimetry is provided if required.

1.5 Security Guard (Site Access)

- Remain at the site entry point to maintain site security and aid access / egress of Emergency Services in a timely manner.

1.6 Duty Manager (DM)

- Categorisation of new events & determining necessary follow-on actions.
- Contactable 24/7 to support the DC in a response, organising extra resource, communicating with Company Duty Officers and co-ordinating any recovery or business continuity activities.

1.7 Accredited Health Physicist (AccHP)

- Liaises with DC to provide (expert) radiological advice (by phone or in person) during a site incident.

2 RESPONSIBILITIES & ACTIONS

2.0 Duty Controller

Location	Site
Reports to	Site Director
Staff Controlled	All Site Personnel

Responsibilities

- Assuming a command-and-control function with the objective of restoring site to a compliant condition, maintaining security and minimising detriment to the health of members of the public and workers, and reducing as far as practical impacts on the environment.
- Convening contingency teams (DM, Responder, ESLO, AccHP and other support roles) and enacting relevant Contingency Plans to establish control.

Actions

- Manage Site response to incidents, ensuring that contingency plans, resources and equipment are utilised / deployed.
- On receipt of information (alarms / telephone call etc.) which indicate the need to declare a Site Incident, or notification of a Major Security Incident, decide on appropriate response, record actions and rationale - use F-981 Incident Declaration and Initial Actions as an aide.
- Ensure appropriate Emergency Services are requested and provide advice and information on status and details of event.
- Consider potential radiological escapes and environmental impacts on/off site, deploy radiological monitoring (in consultation with AccHP) at monitoring locations to best ascertain degree / extent.
- Consider an Incident declaration dependent on nature and scale of event.
- Summon site wide resource - retain / deploy to bring situation to a state of passive safety and secure incident area pending investigations or further corrective action.
- Appraise DM of situation and request their assistance if required.
- Maintain security of site - Liaise with Site Security Manager (SSM) or delegate (for security related incidents).
- Maintain safety of all persons on site and inform them at regular intervals of event status and required actions.
- Ensure records or logs of an incident are captured and retained (F-990 Decision / Rationale Record).
- If a formal declaration is made, and if required, notify the DM to ensure appropriate message placed on Site Event Reporting System (SERS) to alert support staff as per S-905 'Emergency Notifications'.
- Ensure staff roll calls conducted efficiently and any missing persons identified / sought.
- Ensure site left in an inert state before entering Silent Hours status.
- If any information requests are received from the media or general public, ask DM to gather and provide information to the Duty Press Officer using Initial Press Statement, F-986. All further enquiries should be directed to the Duty Press Officer.
- Create focus list and delegate tasks to SQEP personnel.
- Maintain F-990 incident log of actions and rationale – enlist help if required.

NOTE: To contact Company support, refer to S-906, Company Staff Details for Incidents and Emergencies. This is a restricted document, available on the company management system. If access is restricted, contact the EPL for access.

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2.1 Responder

Location	Incident Scene
Reports to	DC
Staff Controlled	N/A

Responsibilities

- Provide a prompt, flexible response to an incident or event, including:
 - Supporting DC as required.
 - Investigating / reporting on an incident / event to assist the DC's decision making.
 - Establishing control of access / egress to the incident scene.
 - Assisting the deployment of Emergency Services to the scene.
 - Advance to incident scene under direction of the DC to deliver first aid / radiological monitoring (and any other duties) as required - maintaining personal safety.

Actions

- Report to DC for initial brief.
- Wear appropriate Personal Protective Equipment (PPE) and collect Electronic Personal Dosimeter (EPD).
- Assume any delegated responsibilities and complete allocated tasks.
- Approach incident scene via identified safe route with appropriate radiological monitoring and/or first aid equipment.
- On arrival at the incident scene, report to DC and carry out tasks as directed.

2.2 Lead Guard

Location	Gatehouse
Reports to	DC
Staff Controlled	Security Staff

Responsibilities

- Gather information based on site conditions (e.g. fire or plant alarms) during silent hours.
- Maintain Site Security, perform required duties and present information to DC.
- Brief Security staff and take actions to gather further information (if safe to do so)
- Ensure Security Guards prepare dosimetry and/or PPE as required.
- Manage the Security Gatehouse until the arrival of the DC / DM (if situation demands their presence on site)
- Undertake any actions required to support the DC.

Actions

- Contact DC to provide details of incident and receive instruction.
- Ensure any required Emergency Access Point set up and ready to receive / dispatch Emergency Services and/or responding off-site staff.
- Brief External Company Support Personnel.

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2.3 Emergency Services Liaison Officer (ESLO)

Location	Gatehouse
Reports to	Lead Guard
Staff Controlled	None

Responsibilities

- Receive and brief Emergency Services and other responding personnel with METHANE form (ST-03, available from Security only).
- Issue required dosimetry and/or PPE as required.
- Ensure any Emergency Services (and other responders) are escorted or directed via the nominated safe route to their allocated destination.
- Provide priority passage for Emergency Services vehicles.

Actions

- Liaise with Lead Guard / DC to establish initial conditions and ensure Emergency Access Point set up and ready to receive and dispatch Emergency Services and/or responding off-site staff.
- Provide dosimetry to Emergency Services.
- Brief Emergency Services / External Company Support Personnel.
- Complete and record actions & rationale on F-990.

2.4 Security Staff

Location	Gatehouse
Reports to	Lead Guard / DC
Staff Controlled	None

Responsibilities

- Report any change to tenability of Main Gatehouse.
- Consult with ESLO and ensure priority passage given to emergency service vehicles.
- Maintain site security.

Actions

- Liaise with Lead Guard / ESLO to establish conditions and complete required actions.
- Complete and record actions & rationale on F-990.

2.5 Duty Manager (DM)

Location	N/A
Reports to	DC, Site Director
Staff Controlled	Any staff required to assist.

Responsibilities

- Receive / Request appraisal of situation by DC.
- Organise any additional resource required to support site response. (Site staff and/or CSC)
- On request of the DC initiate Site Event Reporting System (SERS) notification when a formal declaration has been made. Organise any additional resource required to support site response.
- Communicate with Company Duty Officers and inform them of the current situation.
- Contact Duty EHSS&Q Inspector to ensure notifications are cascaded appropriately.
- Communicate with Senior Company Officers and Stakeholders.
- Co-ordinate recovery of incident (documentation, equipment, adequate resourcing).
- If required, enact business continuity activities.

Actions

As required by the DC

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2.6 Accredited Health Physicist (AccHP)

Location	N/A
Reports to	DC
Staff Controlled	Radiological Monitoring Persons (RMPs) / Responders

Responsibilities

- Control RMPs, directing them to sampling locations to best determine extent of any release.
- Calculate and record airborne / deposited radioactivity results from surveys as per standard procedures.
- Ensure any significant airborne radioactivity sample filters are subject to gamma spectrometry analysis.
- Advise DC of any significant abnormal results reported by monitoring persons.
- Advise DC of any off-site radiological impacts and monitoring as per standard site arrangements.
- Advise Police (in consultation with the DC) of potential radiological impacts near site.
- Review available radiological monitoring/advice resource - call in support as required.

Actions

- Provide DC with radiological monitoring advice (by phone or on-site).
- Provide DC with advice on EPR permit compliance to the DC.
- Complete and record actions as required.

2.7 Other Support Staff

The DC may request additional resource to support the site response. In normal working hours, additional resource will be available from personnel on site.

Personnel required to support a site response will be SQEP (e.g. radiological monitoring, first aid, maintenance) as specified in authorisation instructions and respective Company Standards.

Outside normal working hours, certain roles such as DM and AccHP are 24/7 contactable roles (for advice), with further additional resource (to attend site) requested on a best endeavour basis if required.

Contract personnel providing support to site may only perform roles for which they are SQEP.

On call Company duty officers (see [CSC Rota](#)) are available to support the site 24/7.

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SECTION 3, FACILITIES AND EQUIPMENT

1 INTRODUCTION

This section specifies Emergency Response Facilities, their function and associated equipment. Sites may use a bespoke facility to manage an incident, the DC can decide to set up any suitable facility to best manage the response.

2 RESPONSIBILITIES

The roles below shall check, replenish and maintain their facilities & associated equipment:

- Incident Response Centre – Emergency Preparedness Officer (EPO)
- First Aid Rooms and Stores – First Aid Coordinator / Nuclear Occupational First Aider (N-OFA)

3 SITE EMERGENCY FACILITIES

These include Incident Response Centres, Security Lodge, Muster Stations, Contingency equipment Stores, First Aid Facilities - see map in Section 3 (3.2), site alarm notification panels, Health Physics Kiosk, Monitoring Equipment and Radiological Body Monitors.

3.1 Facilities, functions, and equipment

For associated equipment, see TRAWS-F1603.

For the site's First Aid Needs Assessment, see TRAWS-F1583.

Incident Response Centres (IRC's)

There are three IRCs situated at the following locations:

- Security Lodge
- Pen Y Bryn (Ground floor at the south end)

The IRC functions as a centre for management of a Site Incident, providing:

- Means of calling any support groups.
- A location for coordinating the investigation, response, and recovery during the different phases of an incident or event on site and provide overall command and control.

The Security Lodge receives and act upon all emergency calls - initiating contact with the DC at the onset of any reported incident or event.

Muster Stations

Site Muster Stations listed in Section 4 (3.1) provide a:

- Safe location for the roll call and accounting for staff
- A fixed, contactable location for Muster Marshals.
- A staff information point.

First Aid Facilities

- ACP First Aid Room
- Tryweryn Occupational Health
- Pen Y Bryn ground floor lobby Store

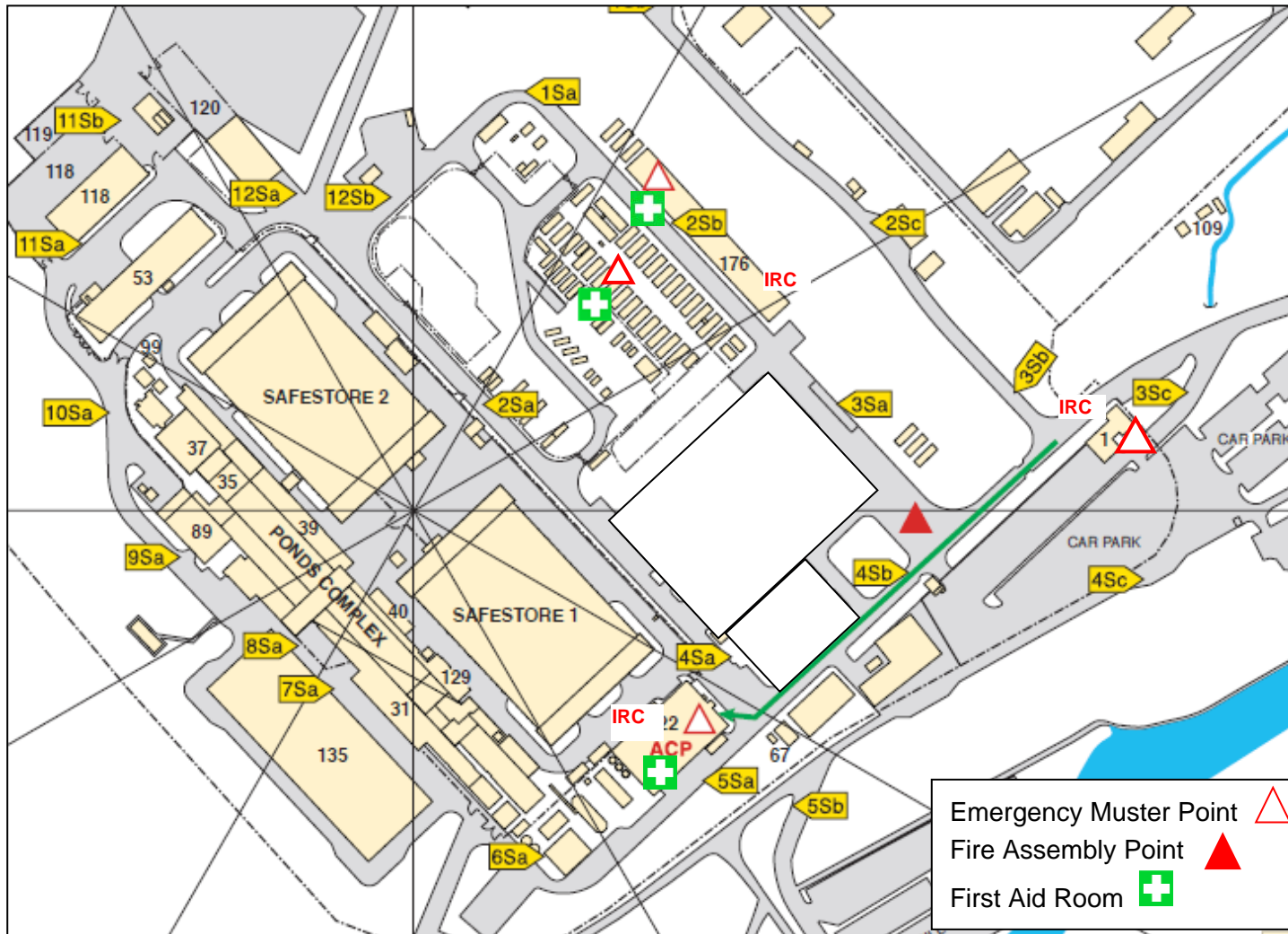
The First Aid Facilities provide a location for:

- Receiving, triaging and treatment of casualties
- Decontamination of casualties / wounds (if required)
- Control and handover of casualties to the Ambulance Service
- Care for unwell persons
- Storage of equipment to be deployed in an event

ACP Equipment Store

A dedicated location for storage of contingency support equipment.

3.2 Site Map Showing Location of all Muster Stations



MUSTER LOCATIONS

Tryweryn (Bldg. 198)

- Canteen Area

ACP (Bldg. 22)

- Clean side
- Dirty side
- IRC (Duty Personnel)

Pen Y Bryn (Bldg. 176)

- 1st Floor North
- 1st Floor South
- Ground Floor North
- Ground Floor South
- IRC (Duty Personnel)

Yr Ysgwrn (Bld. 139)

- Gnd Floor

Security Lodge (Bldg. 1)

- Security personnel
- IRC (Duty personnel)

Fire Muster Point

- Top Turnstile

SECTION 4, ACCIDENT AND EMERGENCY SUPPORT PROCEDURES

1 INTRODUCTION

This section should be used with identified Roles, Responsibilities and actions in Section 2. As site hazards reduce, a proportional reduction in response shall also be applied.

2 ACCIDENT AND EMERGENCY SUPPORT PROCEDURES

2.1 Public Address (PA) Announcements

The PA system may be used by the DC (or delegate) to warn / inform site personnel during a site incident.

Personnel will be notified of a Site Incident by the DC or delegate sounding the Site Alarm and announcing a standard initial emergency message over the PA system. Alarms and messages must also be repeated over the handheld digital radio system (issued to persons entering known areas of limited PA coverage).

In the event of a Major Security Incident, the DC may choose not to sound the alarm and immediately announce/ initiate Site Lockdown Procedures.

Regular announcements should also follow to update staff on developing situations and inform of any action required. (Repeat messages over handheld radio as appropriate)

Announcement templates shown on next pages:

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Standard Initial Emergency Message

ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL
PLEASE LISTEN CAREFULLY TO THE FOLLOWING ANNOUNCEMENT
AN INCIDENT HAS OCCURRED ON SITE AT
(insert plant identification)

.....
A **SITE INCIDENT* or MAJOR SECURITY INCIDENT***
IS NOW IN FORCE
I REPEAT

A **SITE INCIDENT* or MAJOR SECURITY INCIDENT***
IS NOW IN FORCE

ALL STAFF SHOULD PROCEED TO **ROLL CALL* MUSTER* LOCK DOWN* AVOID***
(Specify areas of site to avoid and/or safe route as necessary)

.....
.....

ALL PERSONNEL WITH SPECIFIC RESPONSE DUTIES SHOULD
(Specify instructions as necessary)

.....
ALL PERSONNEL WITHOUT SPECIFIC EMERGENCY DUTIES SHOULD

REMAIN AT MUSTER STATIONS AND KEEP DOORS AND WINDOWS CLOSED*

COMPLETE THE ROLL CALL PROCESS AND AWAIT FURTHER INSTRUCTIONS*

**ALL PERSONNEL WITHOUT SPECIFIC EMERGENCY DUTIES SHOULD REMAIN INDOORS
AND ENSURE BUILDING IS LOCKED DOWN ***

(Specify instructions as necessary)

.....
STAND BY FOR FURTHER INSTRUCTIONS
MESSAGE ENDS

Repeat the instruction after 5 minutes to remind persons arriving at Muster Stations who may not have heard the original message.

(*delete as appropriate)

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Standard Update Emergency Message

ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL
PLEASE LISTEN CAREFULLY TO THE FOLLOWING ANNOUNCEMENT
THIS IS(enter name)..... -(enter position)..... SPEAKING
THE CURRENT SITUATION ON-SITE IS AS FOLLOWS
(insert incident details)

.....
.....

ALL STAFF SHOULD
(specify instructions as necessary)

.....
.....

PLEASE STAND BY AND LISTEN TO PA ANNOUNCEMENTS FOR FURTHER INSTRUCTIONS
MESSAGE ENDS

Stand Down Message

ATTENTION ALL PERSONNEL, ATTENTION ALL PERSONNEL
THIS IS(enter name)..... -(enter position)..... SPEAKING
THE SITUATION IS NOW UNDER CONTROL*

or

THE INCIDENT HAS NOW BEEN TERMINATED*
ALL STAFF SHOULD
(specify instructions as necessary*)

.....
.....

ALL PERSONNEL ARE TO STAND DOWN AND RETURN TO NORMAL DUTIES*
MESSAGE ENDS

(*delete as appropriate)

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2.2 Un-tenability of the Incident Response Centre (IRC)

If an IRC becomes untenable, the DC will instruct evacuation and invoke alternative arrangements by:

- Relocating to an alternative IRC taking advice from the AccHP, Site Security Manager, Security Team Leader or the Lead Guard as appropriate.
- Informing the Security Lodge of the new location and telephone numbers.
- Communicating IRC relocation over PA system (Not during security incidents).
- Informing the DM and Central Support Cell (CSC) [if set up] of any new contact telephone numbers.

2.3 (N/A –not required- number preserved to maintain generic handbook numbering)

2.4 Notification of External Organisations and Site Emergency Personnel

The following forms specify communication chains for notification of external organisations and Site emergency personnel in the event of a Site Incident or Major Security Incident:

Site Incident **F-981**

Major Security Incident **F-985**

These notification calls are made to designated telephone numbers and will use standard messages to initiate action within the external organisation or Site support personnel.

All site-specific calls are initiated by the DC or EHSS&Q Duty Officer (when notified by the Site).

For details of how to initiate SERS, see S-905, Emergency Notifications.

If their services are required, a 999 confirmatory call should be made to confirm that Police have received notification – provide further information if available.

In the event of a Site Incident or Major Security Incident the DC (or delegate) will contact: -

- (i) Emergency Services
- (ii) Duty Manager (DM)
- (iii) Company notification system (SERS)

When making calls ensure the Duty Officer (or person listed) is contacted and has acknowledged and understood the message, using three-way communications.

When contacting Emergency Services, follow METHANE process as detailed below:

M ajor incident declared – not relevant to the Company
E xact Location – location of incident i.e. Site Address
T ype of Incident – Incident type with brief details
H azards Present or Suspected – present and potential any specialised PPE required
A ccess Routes – best access routes to site
N umber, Type, Severity of Casualties
E mergency Services Required – Services present and/or required, consider specialist equipment needed.

2.5 Site Response

Additional personnel may be called in, on a best endeavours basis, when a Site Incident escalates and is declared outside normal working hours. Their assistance may be required immediately or within a few hours depending on their role - to provide additional specialist services and supplement existing response.

Contact details for personnel performing contingency scheme duties are in the Emergency Telephone Directory (TRAWS-CONT-DIR) – held at the Security Lodge.

In the event of a Site/Major Security Incident, the DC shall consider the need to rotate personnel on duty. An early decision will ensure oncoming personnel are appropriately notified, informed, and given access to site. The DC shall ensure a comprehensive hand-over takes place.

Call in Actions

A rota identifies personnel available to support Contingency Arrangements. Security Guards will contact the DC initially and any others as directed.

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ONR Call Back

Once alerted by EHSS&Q Duty Officer via notification process in S-495, Categorisation and Notification of Events, ONR Nominated Inspector will call affected site and / or EHSS&Q Duty Officer to request further information.

2.6 Guidance on Declaration

The Company's primary responsibility is to ensure any hazardous condition requiring initiation of an emergency response is recognised and appropriate declarations made promptly when conditions are met:

Site Incident Declaration

A Site Incident is defined as "hazardous condition confined in its effects to within the boundary of the site security fence".

Site Incidents are not limited to events with radiological hazards. Any significant situation which requires withdrawal of staff to a safe area, assembly of response personnel and accounting for any missing persons should be considered a Site Incident.

Where a hazard is localised to a specific area of site (e.g. indication of a minor leak or fire) - a Roll Call may account for (and control the movement of) personnel, **without** declaring a Site Incident. This decision must be taken with a high degree of situational awareness, with the fall-back position of making Site Incident declaration if this is not achievable or situation escalates.

The DC's prime consideration in reaching this decision must be the safety of personnel on-site.

It is important that members of staff are alerted to any hazard and that all those who may be at risk are accounted for. This may be achieved by a PA announcement to evacuate the plant area in question. Site Incident declarations should be considered for any situation where protection of staff is required, or when assistance is required for incident management.

In addition to mobilising Company resources to assist, the declaration may require radiological surveys around the site perimeter fence for reassurance. This will be assessed initially by the DC with advice from an AcHP and information provided to the Police.

If DC determines that radiological contamination is near the site boundary fence, they shall inform the Police that reassurance monitoring will be undertaken, and results / advice provided.

The Police will decide who to inform of the incident to invoke Local Agency response.

(See S-905 for SERS Template 02 'Site Incident')

Major Security Incident¹

A Major Security Incident is when a Security threat has or is likely to compromise Nuclear Safety or the security of the site, the DC may also declare a Site Incident. The Security Contingency Plan will be enacted in the event of a Major Security Incident.

The DC should contact Site Security Manager for support during normal working hours. Outside of normal hours, a Duty Security Officer is available on call 24/7

The Security Contingency Plan is held / managed by the Site Security Manager and in an official / sensitive document uploaded to Sharepoint and securely stored in all IRC's.

2.7 Immediate Actions on Sounding the Site Alarm

Security staff shall respond to any Site Alarm by:

Lead Guard / ESLO will obtain a briefing from the DC on potentially affected areas, safe routes, condition of entry or exit, whether Emergency Services have been called to deal with fires or casualties, and whether any groups of staff are to be evacuated from site.

¹ Major Security Incident is currently only a reporting category and not a formal declaration state.

Security Guards will close the gate and secure the site and prevent anyone entering or leaving the site. Turnstiles will be locked to prevent access, and advice will be sought on whether egress should also be controlled.

The Lead Guard / ESLO will brief Security Staff on DC's requirements.

2.8 Control of Access to and from Site

On sounding the Site Alarm, Security Guards shall maintain strict control of entry and exit, limiting entry to Essential Staff and those persons authorised by the DC, and providing priority passage to Emergency Services, Medical Staff.

The site's Security Lodge shall be the control point unless untenable - where an alternative control point will be identified/established.

Lead Guard will supervise procedures and ensure Emergency Services are directed / escorted without delay to allocated destinations.

Dosimetry issue and collection for Emergency Services will take place at the Security Lodge, an IRC or the ACP as the situation dictates. Each Emergency Dosimeter issued shall be logged / recorded on Emergency Radiation Dose Control Log using form F-991.

2.9 Entry And Exit Procedures Emergency Services

Arrival / departure times and registration numbers of vehicles will be logged at the Security Lodge and the DC informed.

The ESLO (or other member of Security Team) will direct/escort Emergency Services vehicles to their designated location. Crews may complete emergency dose assessment paperwork during transit to save time; their escort will collect completed form/s and return them to the Security Lodge.

On collecting any casualties, Ambulance Crews will leave site with sirens and flashing lights when priority exit is required. Security staff will allow priority passage from site without halting them for monitoring or dosimeter return.

2.10 Incident Response Centre (IRC) Procedures

Persons involved in response will assume roles and attend IRC for a briefing as requested by DC.

2.11 Setting up the Incident Response Centre

The DC (or delegate) will set up the Incident Response Centre on arrival but may choose to manage the incident from any other area they deem suitable to control an incident instead.

2.12 Responder Dispatch

All persons dispatched to the Incident Area will:

- Collect EPD as required, using Task Code 999 (or as advised by AcCHP) as per TRAWS-RHDI-25-049.
- Receive a brief from DC (or delegate) outlining incident details, known hazards, tasks to be undertaken, required PPE/equipment and safe routes.
- Conduct a radio check with DC verifying the Call-sign.

Radio communications and protocols shall be maintained throughout. Use Phonetic alphabet and 3-Way Communication (Say, Respond, Confirm) for error avoidance.

2.13 Radiological Monitoring for Deployed Teams

An AcCHP will be available to support and advise the DC on Radiological protection. The DC may ask the AcCHP to attend the incident scene to provide direct support to Responders.

Forward Control Point

The DC (and Emergency Services) will determine if a Forward Control Point should be established following their assessment of conditions.

Forward Control Point conditions must be continually assessed/monitored to confirm continued viability - "Clean" and potentially contaminated areas should be clearly demarcated. Transfer of personnel, equipment and PPE between these areas should be minimised and subject to contamination levels having been deemed acceptable by SQEP personnel.

Returning from a Radiological Event

A return route and radiological monitoring / undressing area will be established for persons (including emergency services and except priority casualties) returning from the incident scene. Persons shall be monitored for contamination on arrival and if detected, full undressing and monitoring measures applied.

Regular contamination surveys of areas each side of radiological barriers must be conducted, and regular cleaning of area initiated as necessary to keep contamination levels ALARP.

Any contaminated vehicles, clothing and equipment used by Emergency Services must be decontaminated before leaving site (except ambulances carrying casualties or emergency vehicles responding to another incident). Potentially contaminated equipment may be stored in the incident area until monitoring and/or decontamination carried out. If urgent re-use is required outside of incident area, then an immediate assessment will be made.

2.14 Other Persons

All other persons including Site staff called to assist will enter via security lodge and/or be directed to appropriate areas as per DC's instructions.

2.15 Public Relations

All Public Relations will be managed by the Duty Press Officer (normally via DM) - contact details may be found on the CSC rota on the intranet.

Site Incident Conditions

Sites should initially expect calls from local news media. Response should be an Initial Press Statement prepared by Duty Press Officer in consultation with DC or DM. The Press Officer will agree with DC and/or DM whether Initial Press Statement is to be used proactively with local media or reactively in response to media enquiries. The Police will not normally make their own announcements under Site Incident conditions, however, press statements and updates can be fed to Police Operations Room via Police Liaison Officer attending Site.

2.16 Declaration Cancellation / Stand Down

The Duty CSC Controller (in consultation with DC) may cancel a Site Incident declaration made in error if cancelled within an hour. Once the situation (subject of the declaration) is brought under control, DC will stand-down (end) declaration following consultation with Duty CSC Controller (if CSC was set up). When an event is stood down, evidence preservation measures should **remain** - as should any cordons necessary for radiological safety or security. All parties must be de-briefed and all records collated and retained. Key actions / considerations stages of stand down are:

CONSIDER STAND DOWN	Is source of hazard removed/controlled/isolated?
	Confirm that hazard is removed [Monitor]
	Does the hazard exist anywhere else? Is it stable?
	Can you allow normal or restricted access under Radiological / Emergency Safety Rules?
	Will plant configuration fall within accepted safety case after standing down?
AGREE STAND DOWN	Identify actions taken (& results) to Site Director or nominee
	Seek agreement from Site Director or nominee
	Formally record agreement
INITIATE STAND DOWN	Identify who has been notified
	Initiate production of "Stand Down" press brief (with CSC and Press Office)
	Make stand down notifications
	Public Announcement stand down to Site staff
CSC NOTIFICATIONS (if applied)	Identify who was initially notified
	Make stand down notification
	Issue press brief
	Stand down CSC
	Preserve information
SITE NOTIFICATION	Debrief team
	Identify who has been notified
	Make stand down notification to those notified
	Issue press brief
	Stand down Site
	Preserve information
Debrief Site	

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When standing down (or cancelling) a declaration, the standard Stand Down message should be announced.

2.17 Support for Staff

Following involvement in any serious incident, staff may require follow up support. Staff relieved of their duties, either during or after a serious incident should take part in a debriefing prior to leaving site. The DC is responsible for ensuring this is undertaken effectively.

Staff involved in incidents may require the assistance of a Mental Health First Aider, trained to provide support. Personnel may require some form of post-traumatic stress counselling; best started early after the incident. The DM in consultation with the Line Manager may instigate (as per S-184 Company Attendance Support Procedure) a management referral and Company Human Resources / Medical Advisor/Occupational Health will manage this service. Employee Assist Programme is also available (see intranet).

3 MUSTER PROCEDURES

3.0 Mustering, Roll Call and Lockdown

The DC may decide to muster staff, instigate a roll call, or initiate a lock down:

- **Mustering:** assembling of persons in a place of safety to account for all (electronically/manually).
- **Roll call:** the detection of absentees from a list of persons to establish names and last known positions of any missing persons. Security to provide an up-to-date list of names of personnel in a particular zone or area of site to cross reference against those present at the roll call.
- **Lock-down:** Systematic locking of building and site access points to deny threats from intruder access.

On declaration of a Site Incident a muster may be called, where all Site Staff, Contractors and Visitors report to their nearest Muster Stations, instructed to use routes that minimise hazard exposure.

When staff arrive at Muster Stations the senior person present should assume the role of Senior Muster Marshall and can appoint additional supporting Muster Marshalls to assist.

The Senior Muster Marshall will ensure all doors & windows are closed, unless otherwise instructed. Upon arrival at Muster Stations all personnel will present their Site pass to a Security Pass reader.

The Senior Muster Marshall should ensure all staff have completed electronic and manual muster procedures. Once muster report is complete, security will contact the DC and report all missing personnel. If anyone reported as missing is subsequently found to be safe; their name must be passed on IMMEDIATELY, to avoid unnecessary searches.

Behaviours at Muster Stations

On declaration of a Site Incident the DC may impose an eating and drinking ban to mitigate against ingestion of contamination unless determined otherwise by an AcCHP. This should not be applied indiscriminately. For example, people with medical conditions that require food or medicines to be taken regularly should not be prevented from doing so.

With advice from AcCHP and Occupational Health Advisor (if available) DC may formulate a plan to protect staff from potential contamination while preventing unnecessary distress through thirst, hunger thermal comfort or extended confinement in crowded places.

Staff at Muster Stations should ensure noise levels are minimised, giving full attention to PA and / or Muster Marshall announcements.

Roll-Call Correlation

During Normal Working Hours, the DC, will initiate Rollcall utilising available personnel.

If the Muster System fails, a PA announcement will be made to ensure a manual Roll Call is conducted at each Muster Station. Manual Muster cards will be filled in by all personnel at each designated Muster Points and Muster Marshalls will ensure details are correlated against the Security Lodge 'Roll Call' print-out to identify missing persons.

Outside Normal Working Hours Site will be at minimum staffing levels, however if work is extended, the DC will be informed by delegated Site Engineers of specific working parties and the number of personnel present during the extended working hours.

Personnel Accounting Definitions

The following standard definitions should be used when accounting for personnel / muster:

- MISSING** – have not mustered, (location unknown)
- LOCATED** – location known, but not rescued (ensure location recorded)
- RESCUED** – removed to safety, in transit to safe location (ensure condition recorded)
- RECOVERED** – at safe location receiving treatment or on way to hospital (ensure condition recorded)
- “Electronic/manual Muster complete** – decision taken by DC that all information from this process has been gained. This could be zero missing persons, at any specific time, or when rundown of numbers is stable – other measures are required to account for any missing persons.
- All staff accounted for** – DC satisfied the location of all missing persons has been confirmed.

Muster Stations

Muster Station	Location	Communications
1	Pen Y Bryn (Ground floor – North)	Once a muster is announced, Muster marshal at each muster point shall contact the DC and state the best contact telephone number (fixed or mobile)
2	Pen Y Bryn (Ground floor – South)	
3	Pen Y Bryn (First floor – North)	
4	Pen Y Bryn (First floor – South)	
5	Security Lodge	
6	ACP (clean side)	
7	ACP (dirty side)	
8	Yr Ysgwrn	
9	Tryweryn	

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4 RESPONSE PROCEDURES FOR RADIOLOGICAL PROTECTION

4.0 Radiological Limits for Personnel Outside of Incident Area

The AccHP will advise the DC on appropriate actions to protect personnel (IRR17, Schedule 3 dose limits for radiation accidents).

	Statutory Dose Limits Effective Dose per calendar year
Employee aged 18 years and over	20 mSv*
Trainees aged under 18 years	6 mSv
For any other person	1 mSv
Pregnant women who are at work	1 mSv to the foetus for the remainder of the declared term of pregnancy

*Women of reproductive capacity have an additional dose limit to the abdomen of 13mSv in any consecutive 3-month period. Any employee that is breastfeeding should also be restricted to prevent significant bodily contamination.

In any case, if likely exposure to a person because of an incident exceeds 1mSv then relocation of these personnel shall be prioritised. Consideration should be given to relocating to ensure people are not exposed people to more radiological risk.

Dose Rate Limits

For areas outside an incident area, the dose rate limit should be 7.5 µSv/h. Personnel evacuated from affected areas will also be relocated to areas of acceptable dose rates.

Airborne Activity

AIR CONCENTRATION (Bq.m ⁻³)	
< 2.0 beta < 0.015 alpha	> 2.0 beta > 0.015 alpha
No immediate action - consider need to relocate	Relocate within 2 hours

Surface Contamination

Action levels based on swabs taken of floor area (over 1000cm² using a Whatman 541 filter paper measured using EP15 probe or equivalent (for beta) and AP2 probe or equivalent for alpha) are given below:

SURFACE CONTAMINATION (cps)		
< 8.0 beta < 0.5 alpha	Up to 80 beta Up to 1 alpha	> 80 beta > 3 alpha
No immediate action Monitor on departure	Relocate as soon as practicable. Decontaminate or remove clothing where necessary. Monitor on departure	Relocate immediately. Decontaminate or remove clothing where necessary. Monitor on departure

Evacuation of Staff off site

Non-Emergency vehicles will be checked for contamination before leaving site. Permitted levels & methods determined by AcHP based on circumstances, aiming for a level of <4Bq/cm².

Stocks of Emergency Personal Dosimeters (EPD's)

EPD's are available in the Security Lodge and ACP.

Recording Dose Information During an Emergency

IRR '17 states that dose records of accident exposures must be recorded & retained. The Company's Approved Dosimetry Service (ADS) has produced forms that must be completed if an accident occurs. Exposure received by individuals during a specialist accident, incident or occurrence must be recorded on Form F-992 (PD 52).

F-992 should also be completed for a Site Incident when emergency dosimeters are issued (as per IRR17) to emergency teams, Fire Service personnel, etc. The AcHP shall complete the form to record individual & incident information and email to ADS as required, who'll respond by telephone and return the form with a completed assessment.

Fire and Rescue Service Personnel

Firefighters attending a radiation incident are subject to the limits for an employee - 20mSv if 18 years or over (male and female). Females may be subject to a tighter limit of 13mSv to the abdomen in any three-month period if declared to the employer by the Appointed Doctor. Any pregnant female is subject to a 1mSv dose limit to the foetus for the remainder of declared term of pregnancy and a nursing female must not be exposed to significant contamination.

An initial dose constraint of 5mSv per incident is recommended for operational incidents to:

- Align with alarm setting on EPD's, supplied through the Fire and Rescue Service National Resilience project, which would naturally prompt staff to leave the Hazard Zone
- Align with dose reference levels used by ambulance service.
- Not legally preclude female firefighters with additional dose limits entering Hazard Zone.

Ambulance Service Personnel

Occupational dose limits are detailed in IRR17. For ambulance staff the appropriate dose limit for skin, extremities and eyes apply, even in emergency situations. Apart from lifesaving actions, annual whole body dose limits also apply. Ambulance Service Dose Reference Levels are as follows:

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- **Reference Level One:** - 1mSv total for all staff per event - Applies to general ambulance staff not identified for specialist roles such as HART (see below) or decontamination providers.
- **Reference Level Two:** - Maximum level for CBRN decontamination providers is 5mSv per event. This applies to ambulance staff that volunteer for decontamination roles.
- **Annual Dose Limit (Whole Body) 20 mSv** – Under normal circumstance, only applies to Hazardous Area Response Team (HART). Reference levels 1 and 2 apply to other ambulance staff.

4.1 Personal Accident Dosemeter Assessment

If the effective dose received by an individual is greater than 6mSv or 3/10 of any relevant dose-limit AccHP will notify the Approved Dosimetry Service. Refer to LSI-14-3-021, Unplanned Exposure from an Accident, Incident or Occurrence for specific actions, responsibilities and timescales.

4.2 REPIR Emergency Exposures

Not relevant for Trawsfynydd Site – site Hazard Evaluation and Consequences Assessment has concluded there is no potential for a radiation emergency at this Site.

5 MEDICAL PROCEDURES – MEDICAL CASUALTY/MANAGEMENT

5.0 Management of Casualties Arising from Incidents Involving Radioactivity

Management of contamination or excessive radiation exposure should only be addressed once casualty's condition is stable.

Early initial assessment of a casualty by a N-OFA is crucial, after which they'll decide whether condition warrants:

- Immediate lifesaving treatment which overrides need for radiological decontamination.
- Urgent treatment which enables limited radiation contamination control procedures.
- Non-urgent First Aid treatment in a Medical Decontamination Area (MDA)
- Non-urgent First Aid treatment without the need for an MDA.

First Aiders must ensure Forms F-988 & F-989 are completed for casualties whenever possible. The DC and N-OFA must establish means of communication for updates on casualty situation and to enable N-OFA to prepare for reception or transfer of casualties.

If a casualty requires immediate life saving measures, N-OFA will ensure DC is informed so that 'priority passage' for casualty can be arranged. If in a Radiological Controlled Area 'priority passage' will ensure casualty is decontaminated, as far as reasonably practical prior to being despatched to the ambulance, with minimal delay. If necessary, casualty should be wrapped to prevent spread of contamination.

If casualty requires urgent but not immediate lifesaving treatment, decontamination will normally be restricted to removal of contaminated outer clothing, washing, and limited radiological survey. The casualty can be wrapped before transfer to ambulance / hospital.

Where a casualty's condition does not merit immediate or urgent treatment but is within a controlled area, all contaminated clothing should be removed, and a contamination survey undertaken before the casualty is decontaminated. Initial treatment and personal decontamination should be completed before transfer to ambulance or hospital. If not within an RCA, casualty will be treated at the most appropriate location.

The N-OFA should seek advice from AccHP if casualties are contaminated to assess priorities - treating physical injuries or personal contamination. The contaminated area on the casualty is to be identified and avoided or contained.

If the area (on the body) requiring treatment is contaminated, consideration should be given to decontamination to limit the likelihood of internal doses. THIS SHOULD NOT BE AT THE EXPENSE OF THE CASUALTY'S WELFARE / SAFETY.

Specialist medical advice will be available from the Duty Medical Advisor (DMA) - see CSC rota on the intranet for contact details.

5.1 Casualty Rescue Arising from Incidents not Involving Radiation

Rescue teams (including First Aider) must assess the hazard and injuries before deciding on a method of evacuating a casualty, consider:

- Treating the casualty in-situ until further assistance is available (additional personnel or professional assistance)
- Removing casualty using correct lifting techniques (if trained to do so)

Note: Do not move casualties with suspected spinal injuries unless in immediate danger.

Casualties with minor injuries who do not require priority passage to hospital will, after receiving initial first aid treatment, pass through the return procedure and be monitored and undressed (if required) before being handed over to First Aiders for any further treatment or dispatch to hospital.

Casualties with serious but not life-threatening injuries will, after initial First Aid treatment, be taken directly to a treatment area to await arrival of the ambulance service. Priority will be given to the dispatch of casualties to hospital; treatment should be maintained while waiting.

Casualties with life threatening injuries should be given priority passage and passed directly to Ambulance Crew / Medical Staff for immediate assessment, treatment and dispatch to hospital.

5.2 Personal Protective Equipment for First Aiders

Under normal conditions, clinical urgency takes priority over PPE requirements for first aiders. (The contamination of a casualty is unlikely to lead to harm to a first aider.)

First Aiders responding to an incident outside of an MDA should ensure personal protection is considered. Gloves should always be worn as a minimum, and disposable suits and shoes if appropriate and time allows.

First Aiders performing treatment inside an MDA shall wear gloves, disposable suits, and overshoes. Handling and touching contaminated casualties should be minimised. All used PPE should be placed into labelled bags / bins.

If in any doubt seek advice from the AcHP.

5.3 Ambulance Service Support

First Aiders must ensure completed F-988 & F-989 forms are handed over to the Ambulance Service. The destination hospital for casualties will depend on type and extent of injury and / or contamination as advised by Ambulance staff or Ambulance Liaison Officer (ALO).

5.4 Fatalities

All necessary first aid should be provided for moribund (near death) casualties during their evacuation and/or rescue. Details of moribund casualties must be passed to the Ambulance Service (via the ALO if possible). Ambulance Service will arrange for a Registered Medical Practitioner and / or Paramedic to attend site to assess such casualties and, if necessary, declare death. In the event of a death being declared, DC must ensure local Police, Coroner, and Duty Medical Advisor are informed at the earliest opportunity.

If there are multiple fatalities, it may be necessary to temporarily retain bodies on site at the request of the Police. DC should consider identification and establishment of an appropriate facility for this purpose.

NOTE: The DC or DM shall consult with Police before any movement of fatalities - Police will have the ultimate decision.

5.5 Medical Decontamination Area (MDA)

On hearing the Site Alarm (or when notified), the nominated N-OFA shall proceed to the designated MDA and prepare the facility for reception of contaminated casualties.

The MDA will be attended by the nominated N-OFA and RMP if available. If on site, Occupational Health Advisor (OHA) will assist.

Wearing protective clothing, they'll set up the MDA and any contamination control features. Contamination monitoring equipment must be selected / established - including air sampler. The DC and / or AccHP shall ensure nominated N-OFA at the MDA is briefed on the following as information becomes available:

- a) Number of casualties
- b) Extent of each casualty's injuries
- c) Degree of each casualty's contamination
- d) Requirement for respiratory protection for MDA staff

Contamination monitoring of casualties and their clothing will be undertaken at the incident scene & MDA and should not interfere with first aid treatment. Casualties should be instructed not to touch any contaminated part of their body.

Skin, wound or internal contamination must be reported promptly to AccHP.

After undertaking urgent first aid remove all contaminated clothing from the casualty.

Clothing should be cut as necessary (by the NoFA in conjunction with RMP), taking care to avoid creating any airborne hazard or further harming the casualty. All contaminated waste, including dirty clothing, table covering, irrigation fluids, swabs and gloves should be retained for further monitoring in separate polythene bags, labelled as contaminated waste.

After removal of contaminated clothing, casualty should be resurveyed. If "clean", casualty can pass to the 'Clean Area' of MDA for further treatment and transfer. If contamination remains, decontamination should be undertaken as set out below.

5.6 Medical Decontamination Procedures

Before proceeding with medical decontamination, N-OFA's shall ensure:

- a) Contamination levels are measured before & after decontamination and AccHP informed
- b) Suitable protective clothing is worn.
- c) There is a sufficient supply of rubber gloves for changing during decontamination.
- d) Clean clothing / blankets / stretchers are available.
- e) All decontamination agents, equipment, dressings, bandages, etc. are available.
- f) Patients are instructed not to touch any part of their body.
- g) Every effort is made to completely decontaminate the casualty. If not achieved, cover area, seal and inform Ambulance Service. All loose contamination must be removed. N-OFA's are trained in decontamination procedures (assisted by Monitoring Staff).

Area	Agent	Procedure	Comments
Skin	Soap (tablet or liquid)	Using lukewarm water and a soft nail brush, the area of contamination should be scrubbed gently, rinsed in lukewarm water, dried using paper towels and monitored.	Each wash should take as long as required. Avoid spread of contamination. Cover any wounds with a waterproof occlusive dressing before wash commences.
	Wet Wipes Exfoliating pads	Same procedure as above.	Pay particular attention to creases, folds of skin, fingernails, inter-digital spaces, and outer edges of the hand. Avoid skin abrasions from prolonged / over vigorous scrubbing.
Contamination Remains If contamination is not removed, apply hand cream and an occlusive dressing to the contaminated area (plastic gloves may be used on the hands). The casualty should then be sent home (if no further treatment required) and reviewed the following day. If contamination remains, contact the OHA or DMA.			
Nails	-	Use scrubbing brush, soap, and water. If brush fails, cut nails.	Take care not to cut nails too short.
Mouth Dentures Teeth	Water	Dentures should be removed. Warn casualty not to swallow. Give mouthwashes and swab regularly. Swabs should be monitored. Using soft nail brush, scrub the dentures, rinse, dry and monitor. Using a soft toothbrush, gently scrub the teeth, away from the gums, rinse, and swab. Swabs to be monitored at regular intervals	Refer to OHA/DMA. Advise patient not to swallow. May require bowl to spit into. Abrasive materials not to be used on Dentures. Refer to OHA/DMA. Warn patient not to swallow during treatment. Avoid harsh brushing to exclude the possibility of abrasions to the gums.
Nose	Paper Tissue	Encourage casualty to blow nose into paper tissue, contents discharged to be monitored. If this fails, use nasal swabs, continuing to monitor regularly.	Advise to mouth breathe. If contamination remains, contact OHA
Eyes	Sterile Water of Saline	Place casualty in a position so that fluid will run off the face.	Facial injuries should be covered with a waterproof dressing before de-contamination. If contamination is not removed, refer casualty to OHA or DMA.
Ears			Refer to OHA/DMA.
Hair or Beard	Shampoo/ Scissors /clippers	Place casualty in a position so that the hair is washed away from face. If breathing is not impaired, use non-porous material to mask the face. The hair should then be rinsed, dried, and monitored.	If contamination is not removed by washing, hair may be trimmed. Obtain casualty's consent before cutting hair. Only remove what is necessary
Minor Wounds	Swabs Gloves	Clean wound using gloves and swabs being careful to avoid spreading contamination. For 1 swipe use 1 swab, monitor swabs, retain first and last for gamma spec. Label and with multiple wounds, add position from which swab was obtained.	OHA/DMA advice must be sought. All wounds occurring in a controlled zone should be: a. Reported to the AccHP b. Treated in MDA.
Wound Contamination Remains If simple cleaning techniques do not remove contamination, wound may be stimulated to bleed by running warm tap water over wound. Dry, monitor and refer to the OHA or DMA.			
Moderate Injury or Moderate Medical Condition	If general condition is satisfactory, and whilst waiting for the ambulance: a. Advise casualty not to touch any part of the body with hands. b. Monitor casualty for contamination levels. c. Take selected swabs from contaminated areas. d. With minimal disturbance to wounds/fractures, if necessary, remove any contaminated dressings, bandages, and re-apply with clean sterile dressings/bandages. e. If necessary, remove outer clothing. f. Wipe exposed skin areas with damp towel, dry, place clean limbs on paper towels. g. Using a suitable technique, remove all contaminated clothing, dressings and coverings, place in a suitable container away from the patient area and monitor casualty. h. Repeat steps (a-f) for the underside of the body. i. Place casualty on clean blanketed stretcher.		Contaminated casualties requiring hospital treatment should be referred to the designated hospital for the area (see Emergency Directory). Wounds must be subjected to full decontamination procedures prior to leaving site. The skin should be wiped to remove loose contamination. AccHP will be advised on contamination levels before, during and on completion of decontamination and particularly prior to removal of casualty from site by ambulance.
Immediate Life Saving or Urgent Treatment	Medical condition takes priority over any contamination. a. Treat casualty to preserve life. b. Monitor External clothing and record results. c. Once casualty stabilised, if safe, decontaminate as necessary following advice of the OHA/DMA. d. Inform DC of casualty situation, contamination levels and seek advice. e. Whilst waiting for Ambulance, conduct observations of casualty's general condition and record details. These will accompany casualty to hospital.		

5.7 Management of Radiation Exposures

External

An initial assessment should be made of whole-body exposures received by a casualty - via direct reading of casualty's EPD. If malfunctioned, or not available, it should be calculated using dose rate in affected area and occupancy time.

If result indicate that individual may have received an exposure above statutory dose limits (20mSv), initial advice should be sought from an AccHP, with follow up advice sought from the Head of Profession, Radiological Safety. The DMA should also be informed.

Where skin has been in contact with radioactive material, a skin dose assessment should be performed by an AccHP - if results indicate exposure above statutory dose limits the Head of Profession, Radiological Safety and DMA should be informed.

Internal

Intake of radioactive material into the body is most likely by inhalation, injection, or ingestion, although entry through a contaminated wound or by absorption through the skin may occur.

Early management of a casualty with potential internal contamination must involve Radiological Protection staff & N-OFA, and include:

- Basic first aid support including removal from contaminated area.
- Removal of external contamination
- Notification to Company's DMA
- Assessment of isotope(s) likely to have been involved.
- Estimation of potential radiological dose from both external and internal contamination.

Appropriate biological sampling (bioassay) may be requested at the discretion of an AccHP who'll consult with the DMA for advice on further measures, including use of chelating agents and transfer to hospital if necessary. The DMA will consult with the Ambulance Service to ensure casualty is transferred to the most appropriate local hospital facility.

Casualty Triage

Triage is a system for dynamically assessing casualties so that available care is prioritised based on:

- Their need for care
- Nature of illness or injury
- Severity of the problem
- Facilities/resources available to treat their condition(s)

SECTION 5, CONTINGENCY ARRANGEMENTS

1 INTRODUCTION

Where “Radiation Accidents” are reasonably foreseeable (Reg. 8, IRRs) sites have prepared radiological contingency plans (Reg. 13, IRRs) to restrict exposure so far as reasonably practicable. NRS have also produced suites of:

- Conventional Contingency Plans to support response to an industrial incident on site.
- Security Contingency Plans to support the sites response in a security event by providing Security related guidance.

Radiological, Conventional Contingency and Security Contingency Plans are, are aide memoires to ensure consistent incident responses - - saved in the Company Document Library and should be displayed and easily accessible in various key locations on site.

Details of how to ensure contingency plans are implemented effectively can be found in S-074.

Beyond Design Basis events are addressed by Accident Management Guidelines in TRAWS-AMG. These are high-level guidelines to restore order and re-establish safety of operations on site following a beyond design basis incident. Application of the guidelines require a high degree of judgement to be exercised due to the conditions which culminated in undesirable outcomes, namely:

- Responding to fires involving Fuel Element Debris (FED) material
- Site Flooding and Major Water Ingress onto Site legacy storage facilities
- Solid Waste: Significant Loss of Containment
- Active Liquids: Significant Loss of Containment

2 RESPONSIBILITIES

The Construction Office is responsible for:

- Ensuring appropriate Conventional and or Radiological Plans are briefed to working parties as part of initial setting to work, including initial actions in an incident.
- Ensuring appropriate resource (If highlighted on risk assessment) available within working party to perform stated initial contingency responses (e.g. First Aider, RMP).

The DC is responsible for:

- Applying appropriate Contingency and/or Response Plan actions in the event of an incident.
- Informing the DM of the incident and which Contingency and/or Response Plan applies.

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3 CONTINGENCY PLANS

3.0 Conventional Contingency Plans

Form	Conventional Contingency Plan Number & Title	
F-787	Conventional Contingency Plan 1	Fire
F-788	Conventional Contingency Plan 2	Environmental Incident
F-789	Conventional Contingency Plan 3	Medical Emergency / Injury / Illness
F-790	Conventional Contingency Plan 4	Confined Space Emergency
F-791	Conventional Contingency Plan 5	Working at Height
F-792	Conventional Contingency Plan 6	Loss of External Electrical Supplies
F-793	Conventional Contingency Plan 7	Loss of Communications
TRAWS-F-733	Conventional Contingency Plan 10	Snow and Ice
F-1006	Conventional Contingency Plan 10A	Injury or Medical Emergency in an Asbestos Enclosure
F-1007	Conventional Contingency Plan 10B	Asbestos Contaminated Person Outside of an Asbestos Enclosure

3.1 Radiological Contingency Plans

Form	Radiological Contingency Plan Number & Title	
TRAWS-F1549	Rad Contingency Plan 1	Contaminated Person
F-779	Rad Contingency Plan 2	Injury or Medical Emergency in a Controlled Area
F-780	Rad Contingency Plan 3	Respiratory Protective Equipment Failure
F-781	Rad Contingency Plan 4A	Accidental Spread of Contamination Within a Contamination Controlled Area
F-782	Rad Contingency Plan 4B	Accidental Spread of Contamination Outside of a Contamination Controlled Area
F-783	Rad Contingency Plan 5	Unexpected Increase in Airborne Radioactivity
F-784	Rad Contingency Plan 6	Discovery of Unplanned Radiation Dose rates
F-785	Rad Contingency Plan 7	Potential Increase in Off-site Doses or Potential to Affect the Environment Beyond the Site Boundary
TRAWS-F-732	Rad Contingency Plan 8	Injury or Medical Emergency within an Asbestos Enclosure (Outside of Contamination Controlled Areas)
F-081	Rad Contingency Plan 8B	Radiological Transport Accident Emergency/Contingency Plan Aide Memoire RADSAFE Recovery for a Magnox Consigning Site (Level 3 Response)

3.2 Security Contingency Plans

The Security Contingency Plan is held / managed by the Site Security Manager and is an official / sensitive document uploaded to Sharepoint and (securely) stored in all IRC's.

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4 CONTINGENCY ARRANGEMENTS / PROJECT RELATED ACCIDENT AND EMERGENCY ARRANGEMENTS

This section identifies actions to be taken when a declaration is not warranted.

The DC will be made aware of all alerts / alarms before deciding the most appropriate location for the co-ordination of response, rescue, and recovery operations to the incident.

Dependent on the initial information/alert, the DC will decide on one or more of the following responses:

- Despatch a Responder to assess situation / conditions.
- Deploy any other appropriate resource required.
- Call Emergency Services

When a Responder is deployed, an Incident Support Team (IST) may be established to provide support and specific advice to the DC, prioritising the protection of Public, Personnel, Plant, Environment & Security (initially focusing on safety of personnel on site). The IST will normally consist of a DC, DM and AcCHP if on site. Any additional staff (and specialism) may be called upon to assist where required, dependent on the nature of the incident or plant affected.

4.0 Duty Controller Location

The DC's location may vary, and suitable means of communications are always available. The 2222 / 01766543333 phone will be staffed 24/7, and alerts / messages are immediately relayed to the DC (mobile phone or radio).

See Section 5 (4.6) for specific arrangements in Silent Hours

4.1 Response Management for Each Defined Site Status

Adequate response shall be available dependant on site status and nature of tasks undertaken. Site status is split into three categories, defined as:

Normal working hours	Routine/Planned work activities conducted within site working hours of: Mon-Thurs, 0625-1745
Extended working hours	Routine/Planned work activities outside normal working hours.
Silent Hours	Status when routine/programmed work activities have ceased, and activities limited to security related monitoring and surveillance.

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Transitioning between each Site Status

The Construction Office shall oversee each transition in Site Status i.e. when moving to/from Normal & Extended Hours to/from Silent Hours.

The Site Status) shall be formally announced over the PA system.

There is no requirement to formally record (verbal) handovers or transitions, but those responsible shall:

- Consult with lead guard and confirm work areas are safe before sanctioning transition from Silent Hours to Normal or Extended Hours status.
- Confirm all personnel have left site, report to Lead Guard before sanctioning transition from Normal or Extended Hours to Silent Hours status.

4.2 Normal Working Hours

During normal working hours (Mon-Thurs, 0625-1745) minimum cover available on site shall be:

- Day Operations Lead (undertaking role of DC in Normal Working Hours)
- Responder
- Security Guard x 3

In Normal working hours, the Individual Planning the Work (IPW) is responsible for developing a Task Risk Assessment (F-038) that clearly identifies contingency responses and any additional personnel or training / authorisation to (mitigate risk and) allow work to proceed. Contingency response for each work package determined by the risk assessment must be communicated while setting to work (Pre-Job Brief).

Any other persons on site may be called upon to assist in returning the site to normal operational state. Any personnel utilised for a response will be SQEP to perform allocated tasks.

The Construction Office shall confirm with the Day Operations Lead that Contingency Plans and associated resources are in place / available before planned work may proceed. Planned high hazard works shall be coordinated and communicated at the Daily Delivery (Works Co-Ordination) Meeting.

Nominated Responders should not be allocated to tasks that prevent them from responding rapidly to a site incident - without detriment to their own safety, or the safety of others.

4.3 Extended Working Hours

The business requirement to complete any work packages in extended working hours (rather than in normal hours) should be agreed at the planning phase.

*See 4.6 for further detail on Principal Contractors arrangements

For each work package to be carried out during extended working, the Person Responsible For the Work (PRFW) is responsible for ensuring its subject to a Task Risk Assessment, which clearly identifies any (immediate) contingency responses and any personnel or training / authorisations to (mitigate risk and) allow work to proceed. This information will be communicated while setting to work (Pre-Job Brief).

The Construction Manager shall confirm Contingency Plans and associated resources are in place / available before planned work may proceed.

4.4 Contingency Plans and Risk Assessment for extended working

The PRFW must complete a F-987 'Contingency Arrangements for Extended / Silent Working' form for ANY planned work outside Normal Hours.

Where two or more work packages are being undertaken simultaneously, each with specified contingency arrangements, consideration should be given to any conflict of resource and opportunities for providing mutual support without detriment.

The Construction Manager, CM (or delegate's) signature is for work approval (including the stated contingency plans and resources allocated to enact them).

The DC signs to confirm their awareness of the (CM Approved) works and of the resources / contacts identified to enact any specified contingency arrangements.

4.5 Silent Working Hours (all times outside Normal & Extended hours)

Tasks are limited to those required for (minimal risk, security related) Monitoring and Surveillance outside Controlled Areas in silent hours.

Any other activities during silent hours are planned, and therefore change the site status to Extended Working and assessed as per 4.4 (above).

During Monitoring and Surveillance in Silent hours Security Staff will respond to site alarms as per Alarm Schedule **TRAWS-F1475** and associated **POI-21**.

Security Guards are empowered to respond to situations as detailed in the relevant Security Assignment Instructions or Security Plans.

4.6 Principal Contractors (PC's)

The interface between the site construction office and other PCs emergency/contingency arrangements will be fully established during the initial period of PC mobilization (prior to commencement of physical work activities). PC's undertaking work on sites will have produced (and are responsible for acting upon) their own suite of emergency arrangements.

Where a PC's work activities are undertaken within a clearly demarcated boundary there is no requirement for direct involvement (or site attendance) of the DC & responder (for initial response) regardless of site status.

In the event of an incident within a PC area, the PC should **respond as per their own arrangements*** and notify the site that they have done so by calling the site emergency telephone number. Once information relayed to DC, they will determine the level of assistance required (if any).

Note: This also applies to (PC) vehicle, plant and pedestrian movement between PC areas and to / from site entry points. Any PC works or significant traffic movements likely to adversely affect those outside PC demarcated boundaries shall be risk assessed to determine the level of (NRS) contingency cover required.

*Note: For the Safe Store Height Reduction Project, an agreement has been made that NRS will provide Radiological Monitoring cover for the PC **where working in Controlled areas** within their wider Supervised area (areas defined in IRR 2017, Reg. 17). Any Radiological incident therefore, shall be subject to NRS' radiological contingency plans and LSI-14-3-047 (resources to enact these must be accounted for on an F-987 completed by a member of the Radiological Protection Team)

SECTION 6, RESPONSE UNDER OTHER ARRANGEMENTS

1 INTRODUCTION

The company maintains a proportionate RADSAFE response. Most sites (including Trawsfynydd) are RADSAFE Consigners only, and so **do not** respond to incidents via the NAIR scheme. Adequate contingency arrangements should be in place to ensure a swift and efficient response to any reasonably foreseeable incidents / events during Radioactive Materials Transport (RMT) operations prior to consignment.

To maintain a proportionate response, four sites (Harwell, Oldbury, Winfrith and Wylfa) provide the entirety of RMT emergency responses to fulfil NRS obligations to RADSAFE (L2 Responder as well as the legal duty as a Consignor). Trawsfynydd Site will respond on a 'best endeavours' basis (see TRAWS-F-734) to support responding sites to maximise prompt coverage across the UK.

2 RESPONSIBILITIES

Site Movement Liaison Officer (SMLO) / Radioactive Materials Transport Officer (RMTRO) is responsible for ensuring relevant consignment documentation for Radioactive Materials is scanned & emailed to magnox.rmt@nrsvices.uk (use headings: CONSIGNING SITE / DESTINATION / DATE).

Site specific details can then be promptly gathered following an RMT incident by DC / Duty AcHP for the National Chemical Emergency Centre (NCEC) / Initial Responders. Once notified, DC (or delegate in silent hours) shall confirm incident details and implement appropriate actions and notifications, as per S-463 Radioactive Materials Transport Emergency Arrangements.

3 RADSAFE / RADIOACTIVE MATERIALS TRANSPORT INCIDENTS

Refer to S-463, Radioactive Materials Transport Emergency Arrangements.

4 NATIONAL ARRANGEMENTS FOR INCIDENTS INVOLVING RADIOACTIVITY (NAIR)

Trawsfynydd is a RADSAFE Consignor-only site and therefore does not participate in the NAIR Scheme and should not receive requests for NAIR assistance from CNC CCC.

Should the site be **contacted** directly by the Police, they should be referred to NAIR Helpline to ensure NAIR Call-out is recorded (and responded to) by the nearest NAIR Responding Site.

4.0 Response to Other Nuclear Sites & Operators

Not relevant at Trawsfynydd Site.

4.1 Assistance to Other Operators

If an external organisation requires general assistance from NRS, they'll utilise the Company notification system (SERS) which alerts the CSC Controller. If CSC deems that additional resource or response is required from Trawsfynydd Site (and makes contact), the DC will consult DM and decide how to respond to the assistance request.

4.2 Response to an Adjacent Site Declaration – If Applicable

Not applicable at Trawsfynydd site.

SECTION 7, FORMS & ADMINISTRATION

1 INTRODUCTION

This Section specifies administrative arrangements for approval, issue, amendment, administration and distribution of Site Accident and Emergency Arrangements and Site Contingency Handbook.

2 RESPONSIBILITIES

Security Team Leader and Site EPO are responsible for ensuring all forms within this section are reviewed and replacing / withdrawing all physical copies on site accordingly.

3 FORMS

Incident Declaration and Initial Actions	F-981
Major Security Incident Notification Check Sheet	F-985
Site Incident Initial Press Statement Form	F-986
Contingency Arrangements for Extended/Silent Hours	F-987
Casualty Monitoring Results Form	F-988
Casualty Assessment & Handover Form	F-989
Decision / Rationale Record	F-990
Emergency Radiation Dose Control Log Form	F-991
Results for Exposure Received During a Special Accident, Accident, Incident or Occurrence Form (PD52)	F-992
Briefing Agenda	F-993
METHANE Briefing	ST 03 (From Security only)

4 ADMINISTRATIVE INFORMATION

4.0 Approval, Issue and Amendment of Generic Accident and Emergency Arrangements

The Emergency Planning Lead (EPL) provides expert level advice to Sites on contingency arrangements and may undertake independent assessments. Amendments to the AAEA are subject to assessment by the EPL. The ONR no longer expects that aspects of the emergency plan are supplied to them for primary power approval.

4.1 Amending Generic Accident and Emergency Arrangements and Generic Contingency Handbook

As per S-486 Generic Contingency Handbook

4.2 Amending an Existing Site Contingency Handbook

As per S-486 Generic Contingency Handbook

4.3 Frequency of Amendments

Continuous review (and no longer than 2 years) to incorporate company amendments, best practice, rectify shortcomings identified during any exercises, references, or site changes.

4.4 Guidance on Agreements to Site Contingency Handbook Amendments

As per S-486 Generic Contingency Handbook

5 DEFINITIONS

None

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6 References

LC 11	EMERGENCY ARRANGEMENTS
REPP19	Radiation (Emergency Preparedness and Public Information) Regulations 2019
IRR17	Ionising Radiations Regulations 2017
F-787	Conventional Contingency Plan 1
F-788	Conventional Contingency Plan 2
F-789	Conventional Contingency Plan 3
F-790	Conventional Contingency Plan 4
F-791	Conventional Contingency Plan 5
F-792	Conventional Contingency Plan 6
F-793	Conventional Contingency Plan 7
F-1006	Conventional Contingency Plan 10A
F-1007	Conventional Contingency Plan 10B
TRAWS-F1549	Rad Contingency Plan 1, Contaminated Person
F-779	Radiological Contingency Plan 2
F-780	Radiological Contingency Plan 3
F-781	Radiological Contingency Plan 4A
F-782	Radiological Contingency Plan 4B
F-783	Radiological Contingency Plan 5
F-784	Radiological Contingency Plan 6
F-785	Radiological Contingency Plan 7
F-081	Rad Contingency Plan 8B, RADSAFE Recovery for a MX Consigning Site (Level 3 Response)
F-981	Incident Declaration and Initial Actions
F-985	Major Security Incident Notification Check Sheet
F-986	Site Incident Initial Press Statement Form
F-987	Contingency Arrangements for Extended/Silent Hours Form
F-988	Casualty Monitoring Results Form
F-989	Casualty Assessment & Handover Form
F-990	Decision / Rationale Record
F-991	Emergency Radiation Dose Control Log Form
F-992	Results for Exposure Received During Special Accident, Accident, Incident or Occurrence Form (PD52)
F-993	Briefing Agenda
TRAWS-AAEA	Trawsfynydd Site Accident and Emergency Arrangements
TRAWS-F1603	Trawsfynydd Site Contingency Facilities and Equipment.
TRAWS-F1583	First Aid Needs Assessment for Trawsfynydd Site
LSI-14-3-021	Unplanned Exposure From an Accident, Incident or Occurrence
TRAWS-RHDI-25-049	The Management of Dosimetry Services
TRAWS-F-733	CCP 10, Snow and Ice
TRAWS-F-732	Rad Contingency Plan 8, Injury or Medical Emergency, Asbestos Enclosure (Outside Contamination Controlled Areas)
TRAWS-F1475	Alarm Response Schedule
POI-21	Security Guard Alarm Protocol – Silent Hours
TRAWS-F-620	Trawsfynydd Site Record Schedule
AMG/EP/001-008	Maentwrog Emergency Plans

7 Document Control

As in references above which are held in the company management system.

Review / Revision Register

A review/change of this document was carried out as follows:

Date	Carried Out By	Amendments / Brief Reason
Feb 2021	P O'Hanrahan	Section 3, covering facilities and equipment updated to provide a detailed equipment list by reference to supporting form, TRAWS-F1603. Reference to TRAWS-MCP-026 removed. Re-formatted to improve accessibility – references and section headings. Navigation side bar added.
Dec 2023	P O'Hanrahan	DPAF-3184 The first aid room [Page 26] (ION11318) Reference to TRAWS-F1583, First Aid Needs Analysis, in Section 3, (3.1) Reference to the AMG added in Section 5, Part 1.
Apr 2024	H Edwards	Full Review to limit content to that which is relevant to end users on site and rationalise language / content.
May 2025	H Edwards	Ops responders and bespoke Maentwrog arrangements added, reference to Radsafe CCP and F-984 removed, and Status transition further clarified.