



THE ROYAL MINT®
THE ORIGINAL MAKER

Subject SMP 4.9.4 - SITAD Fire Prevention Plan

Author / Martyn Grant

Reviewer

Date 8 January 2025

Version 1

CELEBRATE | COLLECT | INVEST | CURRENCY | SECURE | DISCOVER

The Royal Mint, Llantrisant, Pontyclun, CF72 8YT, United Kingdom t: +44 (0)1443 222111 w: royalmint.com / royalminbullion.com

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1- Introduction

1.1 Fire Prevention Plan Objectives

This Fire Prevention Plan (FPP) has been designed to meet the following three objectives:

- To minimise the likelihood of a fire happening.
- That in the event of a fire any action taken will reduce the impacts as far as possible on the environment. and,
- To minimise the spread of a fire within the Secure IT Asset Disposition (SITAD) site and to surrounding Royal Mint site.

All site staff and contractors working within SITAD must be aware and understand the contents of this Fire Prevention Plan (FPP) and what they must do during a fire.

A copy of this FPP document will be kept within the SITAD building, building twenty-nine and the Security Lodge Building (emergency response room), building five on The Royal Mint's site plan.

The plan it is also held electronically in order to be accessed externally if required by employees of The Royal Mint.

The SITAD fire prevention plan will be reviewed annually and updated sooner if any changes to the site are made which would affect the Fire Prevention Plan.

1.2 Site Information

The Royal Mint was first issued an environmental permit in 2004 for surface treatment processes and a number of variations have occurred over the years to vary the permit, also the site has processes covered by the COMAH regulations 2015.

This document considers the risks associated with fire within the SITAD operation of The Royal Mint Site. The document supplements the emergency arrangements that are in place for the remainder of the site, the Emergency Management Plan and is managed and operated in accordance with The Royal Mint's ISO accredited Health and Safety and Environmental Management Systems.

The SITAD operation receives Waste Electrical and Electronic Equipment(WEEE), from various sources, which is initial assessed and items deemed unsuitable for reuse are broken down to constituent parts and the printed circuit boards are used The Royal Mint's precious metal recovery processes.

1.3 Staffing and Management

The SITAD operation will have a dedicated team of staff who will undertake operations following documented operating procedures. Staff will be competency assessed against the documented procedures every three years or following any update / revision.

The overall management of SITAD will fall under the operations management structure that exists for The Royal Mint site.

1.4 Plant and Equipment

The SITAD operation will be a manual disassembly operation. Hand tools will be used in the area, to take apart the received waste. There will be limited electric fork truck / hand truck activity in the area, for moving and locating the waste pallets. Charging of the fork truck / hand truck equipment takes place in the building away from any production or storage areas.

1.5 Hours of operation

The STID operation will mostly be undertaken between the hours of 6 am to 10 pm Monday to Friday. Outside of these hours the STID building will be monitored by the onsite Security via CCTV.

2- Managing common causes of fire

2.1 Details

The following table outlines common causes of fire and outlines examples of these sources, the associated risks and the mitigation measures in place to manage them:

Source	Risk	Specific mitigation
Arson or vandalism	Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage/containment measures	The site has 24 hours security 365 days of the year. There is double lined security fence in place with cameras at strategic locations. CCTV covers the site in full and is monitored as part of the 24/7/365 security measures.
Plant and Equipment	Ignition of waste from faulty or damaged plant and equipment. Plant and equipment of this nature may combust, potentially causing a fire outbreak	All plant and equipment are subject to the site's routine maintenance and inspection programme. All plant or equipment identified as being fault or damaged will be repaired as soon as it is practicable. Plant and equipment of this nature will not be used until repaired or replaced.
Electrical faults including damaged or exposed electrical cables	Accidental fire caused by damaged or exposed electrical cables. Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	All electrics on site are fully certified by a qualified electrician and with written procedures in place that set out the regular maintenance.
Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully distinguished	The site has a strict no smoking policy. Smoking paraphernalia are not permit passed the Security lodge. Employees who wish to smoke may do so in their own time during lunch breaks at a location outside of the operational site.

Hot Works	Ignition of wastes, plant, equipment, cabling or any other combustible or flammable materials as a result of hot works	Hot work is generally carried out in a designated area, covered by a rigorous risk assessment. When not carried out in a designated area, all hot work is covered by a permit-to-work. See section 2.3 below.
Industrial Heaters	Not applicable – no industrial heaters in the waste storage area	
Hot exhausts	Not applicable – no hot exhausts will come into contact with stored waste.	
Ignition Sources	Not applicable – no ignition sources used in the waste storage area	
Batteries	Ignition of waste from damaged batteries found in the WEEE products (e.g. laptops)	Batteries are removed from waste electronics and equipment as soon as possible to minimise the risk of ignition. All incoming waste is inspected and damaged batteries will be removed immediately. Any remaining batteries-containing waste will be processed as a priority as always within 1 month.
Leakages and Spillages	Fire may arise from the accidental ignition of chemicals that have accidentally spilled or leaked through their container	Spill kits are located across site to manage a variety of spill, including chemical and oils, and cover internal and external areas. The waste storage area will be covered by a variety of spill kits to manage this risk.
Build-up of loose combustible waste, dust and fluff	Loose combustible waste has a higher potential to ignite	The site does not accept vast quantities of loose combustible waste. The majority of waste will be WEEE products with little dust or fluff associated with it
Reaction between wastes	Not applicable – there are not expected to be any adverse reactions between wastes. Inspections of incoming waste will be carried out to remove damaged batteries prior to storage.	
Wastes acceptance and deposited hot loads	Not applicable – no hot loads will be accepted on site	
Hot and dry weather	Combustion of wastes due to ignition from environmental conditions	All waste will be stored indoors and away from direct sunlight. Waste will only come into contact with prolonged sunlight when transported from storage to use.

2.2 Flammable Liquids on Site

The site stores the following liquids on site, which are all located in excess of forty metres away from the SITAD area:

- Glacial Acetic Acid up to 30,000 litres.
- Diesel up to 4,000 litres. Used in back up generators (2 x 1,000 litres) and for powering 1 on site forklift truck (2,000 litres), which is not used in the SITAD building.
- Various small amounts of flammable liquids (paints, solvents etc.) in dedicated storage area.

2.3 Hot Works Procedure

Unless being carried out in an area designated for hot work and covered by a risk assessment then hot work is considered a high-risk activity. As a high-risk activity it will be covered a permit to work.

Where a hot work permit to work is issued, where possible the area will be cleared of any combustibles and flammables within a 12m radius, fire extinguishers will be available where the hot work is taking place. This will also be a two- person job: One person doing the hot work and a second watching where the sparks land. Fire checks are undertaken on completion of hot work, 1 hour from completion and 4 hours from completion.

3- Preventing Self Combustion

3.1 Storage Time

The Royal Mint propose to operate in such a manner as to maintain waste piles as low in size as possible. Given the small-scale nature of this waste storage operation, and the limited storage locations available on site, it is within the site's best interest to only store waste that is proposed for use in the near future as to minimise fire risk and allow greater capacity for new stockpiles to be received.

The site operates in line with the Fire Prevention Plan Guidance and will remove waste from site, by use in processes or onward transfer, within a maximum of three months upon arrival on site, although the site will aim to remove waste within 1 month of initial receipt. This is to minimise, as far as possible, the risk of fire and work towards meeting the 3 objectives of this FPP.

3.2 Managing Storage Time

Electronic records of incoming and outgoing waste quantities, as well as waste type, time of arrival of empty container and time of departure are recorded by the weighbridge operator for all wastes been transferred offsite. Where waste is used in on-site processes, details of its transfer to the processing area will be recorded.

Details of waste type, date of receipt and approximate quantity will be labelled on to each container of waste stored (pallet, boxes of flexible IBC).

By recording these details, it allows the site to accurately track waste storage time and for the appropriate measures to be undertaken to manage the storage time of waste.

3.3 Monitor and Control of Temperature

As waste will be stored for 3 months or less, no additional monitoring or temperature control measures have been proposed.

4- Waste Acceptance

The SITAD area will accept a range of Electronic / WEEE equipment. Amongst the waste received will be items such as laptops, IPADs and telephones, which will be considered potentially combustible due these contain batteries.

A summary of the proposed EWC codes accepted on site is as follows:

Waste Code	Description
16 01 21*	Hazardous waste other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 02 13*	Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12.
16 02 15*	Hazardous components removed from discarded equipment
16 02 16	Components removed from discarded equipment other than those mentioned in 16 02 15
19 02 04	Premixed waste composed of at least one hazardous substance
19 12 11*	Other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 12 12	Other waste (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11.
20 01 35*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

Hazardous waste codes listed above are not relevant for this FPP, and the Fire Prevention Plan only covers non-hazardous waste types. This has not been listed as it is classed as hazardous waste and is not deemed to be WEEE waste. Therefore, it is not covered by the FPP.

All waste received on site requires pre notification and the contents of the waste will be known in advance. Upon receipt the on-floor storage area is used to quarantine the incoming material, here inspection is undertaken to establish if the waste is as described and to identify items potentially containing batteries.

The expected storage time will be a maximum of 1 month from receipt for waste contain batteries.

All staff have been instructed to be vigilant regarding any signs of a fire, so that the suspect materials are dealt with rapidly, to prevent any minor fire becoming a more significant fire.

5- Managing Waste Piles

Managing waste piles is important in helping to prevent self-combustion for waste and will aid in limiting the scale of fire should one occur.

The site aims to process and remove printed circuits boards (PCBs) as soon as reasonably practicable. Where possible this will be on a first in first out basis but always prioritising items containing batteries. This reduces the risk of fire significantly.

The site will not actively reduce particle size by treatment means, other than to remove the printer circuit boards. Waste will therefore be kept in its largest form necessary to undertake the PCB removal.

The SITAD area is designed to store low volumes of materials, between 30 to 50 tonnes per month (not all of which will be considered potentially combustible). The received waste is stored / segregated into lots based on the date of the receipt.

The SITAD building can store up to 90m³ of waste, stored in various packaging types such as pallets, boxes, and flexible IBCs. All waste will be stored in racking and within the dedicated waste storage area.

As waste will be stored in 1m³ “units” creating up to 90 individual waste “piles” stored in one building. There will be minimal separation distances between racked waste, and no fire walls or bays creating.

For the purpose of this Fire Prevention Plan, all waste stored within the same building will be considered as one, single, non-continuous pile. The FPP guidance states that, for all particle sizes, WEEE waste should be stored in pile sizes of no larger than 450m³. The proposed storage volume, and the storage arrangement, means that the waste storage activity falls far below the requirements of the FPP guidance and as such, minimises the risk of fire greatly.

Given the storage arrangement of waste on site, waste will not be stored at heights greater than 4m. The storage arrangement of racking will greatly improvement the access to stored waste for a fire to be extinguished more easily.

6- Preventing Fire Spread

6.1 Separation Distances

As mentioned above, each “pile” (i.e. pallet, boxes, or flexible IBC) will contain a maximum of 1m³ of waste, with up to 90 piles stored in one building, creating an effective volume of 90m³.

As waste will be stored on pallets in racking, the separation distances between piles will be minimal, and therefore does not meet the FPP requirements of 6m distances.

Given that waste is not stored in one continuous pile, as well as stored in quantities far below the FPP maximum limits and stored for less than 3 months, the risk of fire has been reduced to the point where separation distances need not apply.

6.2 Fire walls and bays

There are no fire walls or bays constructed on site. All waste is stored on racked pallets, in individually labelled bags.

6.3 Quarantine Areas

The site will develop and implement a quarantine policy for burning waste prior to new waste being accepted on site.

In the event of a small fire, or a fire that has been recently detected, the site will attempt to extinguish the fire in-situ providing it is safe to do so. Where possible, surrounding waste piles (in the form of pallets, boxes or flexible IBCs) will be removed from the immediate vicinity to prevent fire spreading.

Where this is not possible, or it is not safe to do so, surrounding waste piles as described previously will dampened with the use of fire extinguishers to prevent fire spread.

As a last resort, the whole building will be quarantined and access will be restricted to all staff and visitors, with access only granted to the South Wales Fire and Rescue Service. As the building is isolated, there is minimal chance of fire spreading to other non-affected areas and therefore the site as a whole will remain relatively safe from the effects of fire.

It is highly unlikely, given the storage arrangement of the waste, that the whole building will be affected in the case of fire outbreak in any one of the individual waste “piles”.

7- Detecting fires

At the start and end of each working day the building and storage areas are visually inspected to identify if any potential ignition sources are present. At the end of each day, following a documented checklist, all fixed equipment is turned off as part of daily fire check.

Outside working hours, the building is monitored by the onsite security team using CCTV and there are smoke detectors located in the building. The smoke detectors in this area are linked to the main central detection system, meaning security staff will be notified

8- Suppressing Fire

Given the small-scale nature of the waste storage activity, Royal Mint will operate a manual suppression system in the form of extinguishers and fire blankets to be used by on-site staff if it is safe to do so until the Fire and Rescue Service arrives.

Fire extinguishers, and where appropriate, fire blankets will be fitted near the entrance to the waste storage buildings. Appendix A at the end of this plan details the locations of all fire extinguishers on site, including the ones added as part of this fire prevention plan. Appendix B also details the locations of fire hydrants to be used in the event of a fire from waste storage.

In the event of a small fire, personnel are trained in the use of fire extinguishers if it safe to do so. Also, at the end of each disassembly line lithium fire blankets are located.

In the case where it is not safe for site staff to attempt to extinguish the fire, the Fire and Rescue service will be called and the site evacuated. In the event of a fire The Royal Mint’s site emergency procedures will be followed. For the current version of these procedures refer to the Safety Management System – SMP 4.9.3 Emergency Management Plans.

All fire suppression measures will be covered and certified by a third-party certification scheme and regular tested and maintained in-line with the manufacturer’s requirements.

To ensure the site is covered during out-of-hours, security staff will be trained in the safe operation of all fire suppression methods. Security staff will be trained in the site’s fire prevention plan and be subject to the same standards as operational staff when it comes to firefighting techniques and the site’s own procedures.

9- Site Security

The Royal Mint is a high security site, with minimal entrances and elaborate security systems that reduce the chances of illegal entry to a minimum.

Road access to the site is from the Llantrisant Business Park dual carriageway at the south boundary. This road joins the A4119 at the Ynysmaerdy roundabout. The main entrance is security controlled 24/7.

There is also an alternative access point located to the west side of the site, in the event of the main entrance to the site being compromised.

The entire site is surrounded two lines of fencing at 2.4 m high with CCTV cameras within the fence lines at various locations within the site. The site cameras are monitored 24/7 by the onsite security.

10- Firefighting Techniques

The site has been designed to allow active firefighting, in line with the FPP Guidance. Active firefighting means having the resources available at all times to fight a fire during operating hours and when the site is closed.

The site has a variety of plant and equipment that can be used to move unburnt waste piles to a suitable location to prevent further combustion, as well as the appropriate level of staff and available water supplies to manage a fire outbreak in the moment. If required, the site also has the financial provisions to fulfil their obligations in cleaning up the area following a fire and repairing/replacing the necessary infrastructure to allow future safe storage.

11- Water supplies

The FPP requirements state that water supplies must be provided for the equivalent of 2000 litres per minute for a 300m³ pile for at least 3 hours. The site, for the purpose of this FPP, has one single, non-continuous pile of 90m³. This means, the site is required to supply, at a minimum, 600 litres of firefighting water per minute, or 108,000l (108m³) over 3 hours.

Effective Pile Size	Water Requirement per minute (l)	Water Requirement per hour (l)	Water Requirement for 3 hours (l)
90m ³	600	36,000	108,000

The Royal Mint has a dedicated fire ring main, fed via a 150mm diameter spur from a 300mm diameter trunk main in Heol-y-Sarn Road outside of the site. Site data provided indicates that the site ring main can provide a minimum total discharge of 30,000 litres/hour (l/hr) up to 50,000l/hr which equates to an average of around 500 - 833 litres per minute. This figure is a maximum flow shared between however many hydrants are used. Over three hours, as per the FPP requirements, this water supply can feed up to 150,000 litres of water to site

There is a fire hydrant (FH22 on The Royal Mint site plan) located 40 m due south of the SITAD waste building.

In a severe fire event additional flow can be obtain directly from the external trunk main B, via lengthy hose extensions into the site. This main is recorded as being able to provide up to 2,000l/min, or 360,000l over 3 hours, from which the site network flow will be taken. This is also equivalent to the maximum discharge of two ground monitor hydrants or the supply of two South Wales Fire and Rescue Service pumps.

As a combined water supply, the site therefore has over 500,000 litres of water available over a 3-hour period, meaning a vast excess of fire-fighting water at their disposal in a worst-case scenario outcome of all 90 waste stockpiles being involved in a fire.

It is highly unlikely, given the storage arrangement of the waste, that all 90 waste piles will be affected in the case of fire outbreak in any one of the individual waste “piles”.

12- Managing fire water

The site is required to store all contaminated firewater generated on site. This means the site must provide a minimum of 108m³ storage for contaminated, inline with the minimum water supply requirement.

The building in which the SITAD waste is handled is within the area deemed the COMAH area, and there are four penstocks situated at locations throughout the site to catch all the potentially contaminated surface water and act as the final defence against release of environmentally unfriendly material offsite.

The COMAH water catchment area is split naturally into two parts, the east side and the west side. To cover this split, the tertiary containment operates as two separate systems. Both these systems are split into two, each dealing with various sections of the storm water network. These flow into distinct holding or discharge sumps that are under conductivity and pH control (two conductivity probes for each sump) of a penstock gate which is normally held closed.

Where high conductivity above six hundred micro siemens or pH out of range is detected, valves in the discharge line from the contaminant sumps are closed and the effluent is directed to either of the catchment tanks. In addition, an alarm is sounded. The level in the drain or sump rises until the effluent overflows into one of the two off-line tanks. Each tertiary containment system has been sized such that there is more than 1 hour's capacity for a once-in-five-year storm event.

The measures described above provide a fire water holding capacity of 160 m³. Made up of 2 holding tanks each of 80m³ capacity.

13- During and after an incident

In the event of an emergency that significantly disrupts the business activities of site, the on-site security closes the site to all vehicle traffic, with the exception of emergency response vehicles.

On site personnel are trained in spill and emergency response and the responses are tested periodically.

In the event of any incident the impact on receipt of SITAD waste would be very small and it is expected alternative collection arrangements can be easily made.

Any waste material generated from an incident will be disposed of in a manner appropriate to the nature of the material via an authorised waste carrier.

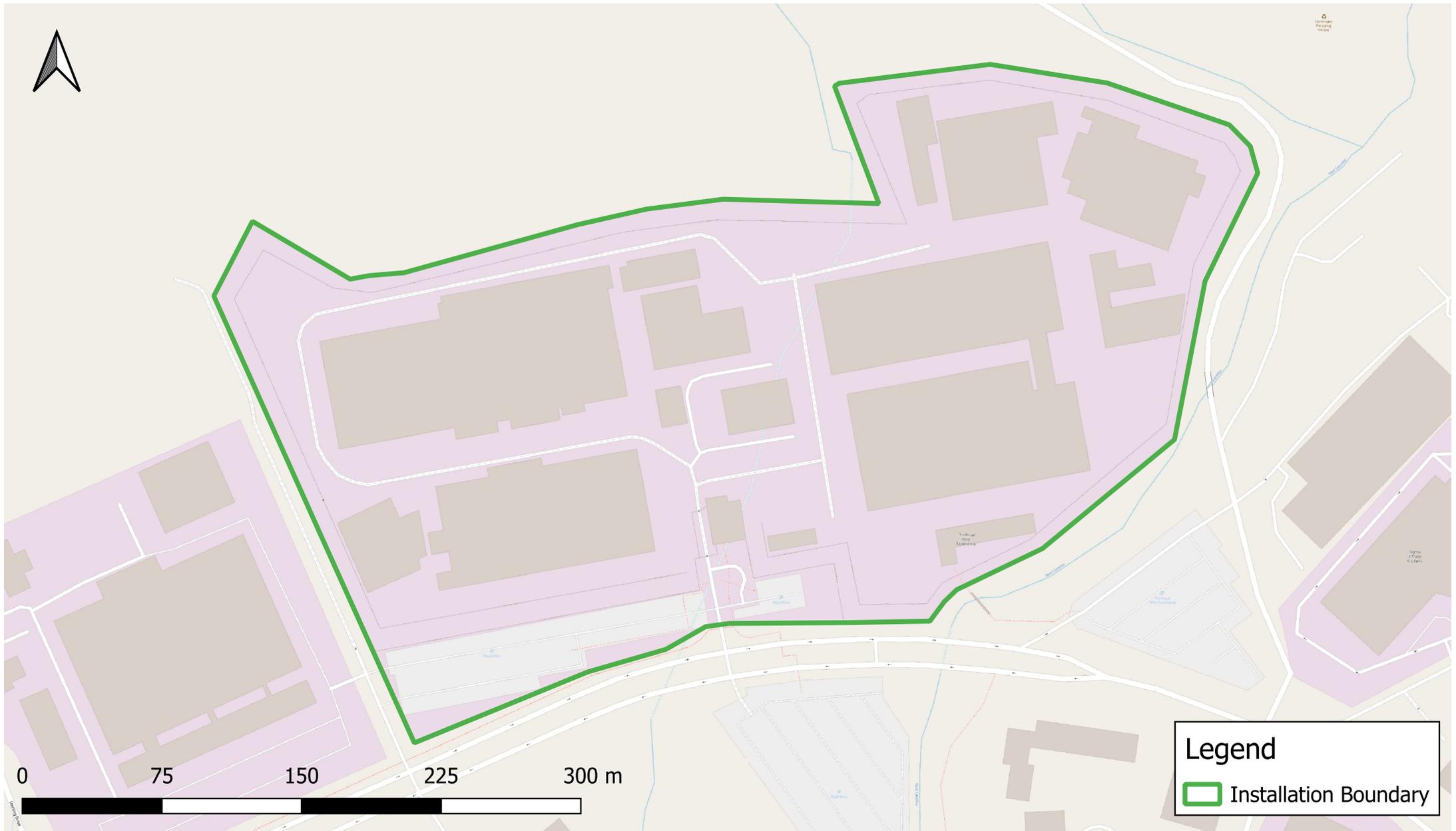
Any damage to the infrastructure will be fully repaired before the commencement of waste acceptance. In the unlikely

Any incident which occurs at the site will be fully investigated by senior members of staff.

14- Appendix A – Site Plans

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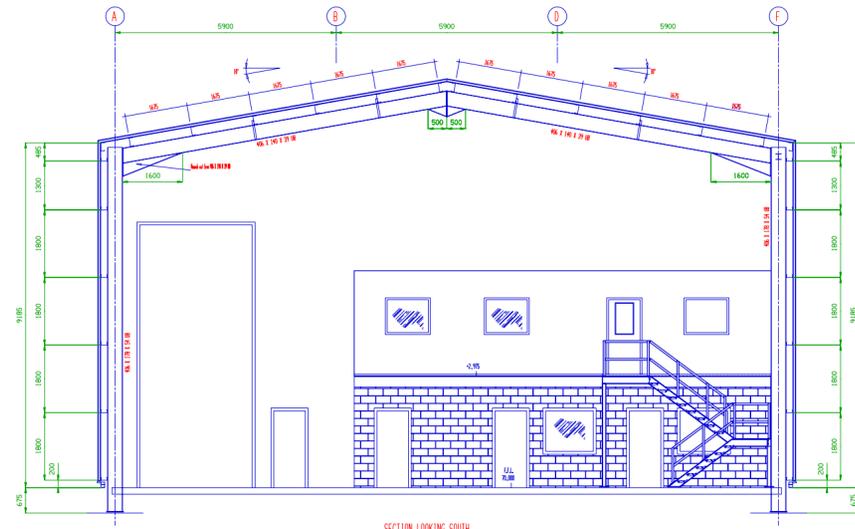


Project Number: SOL_24_P061_RYM
Doc Ref: Annex B_Site Plans
Map Title: Royal Mint - Installation Boundary
Date: 03/01/2025
Drawn by: RM
Checked by: SR

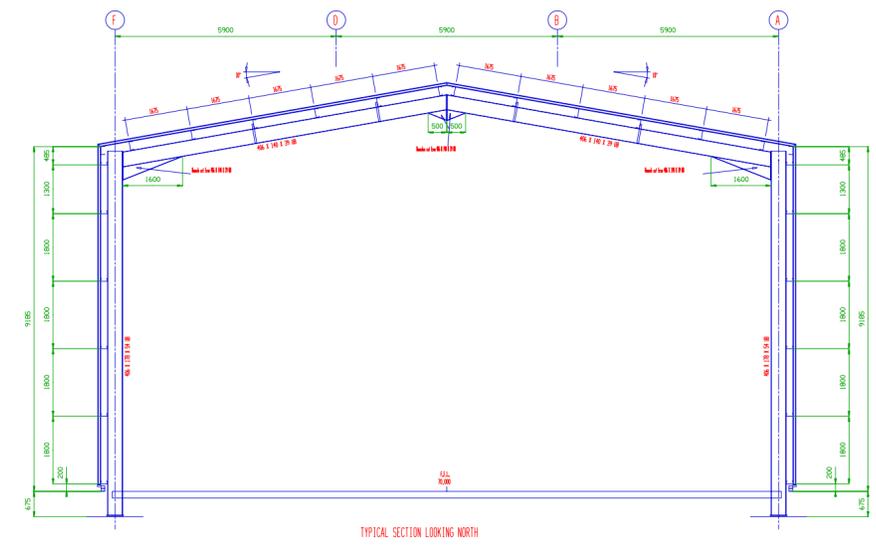
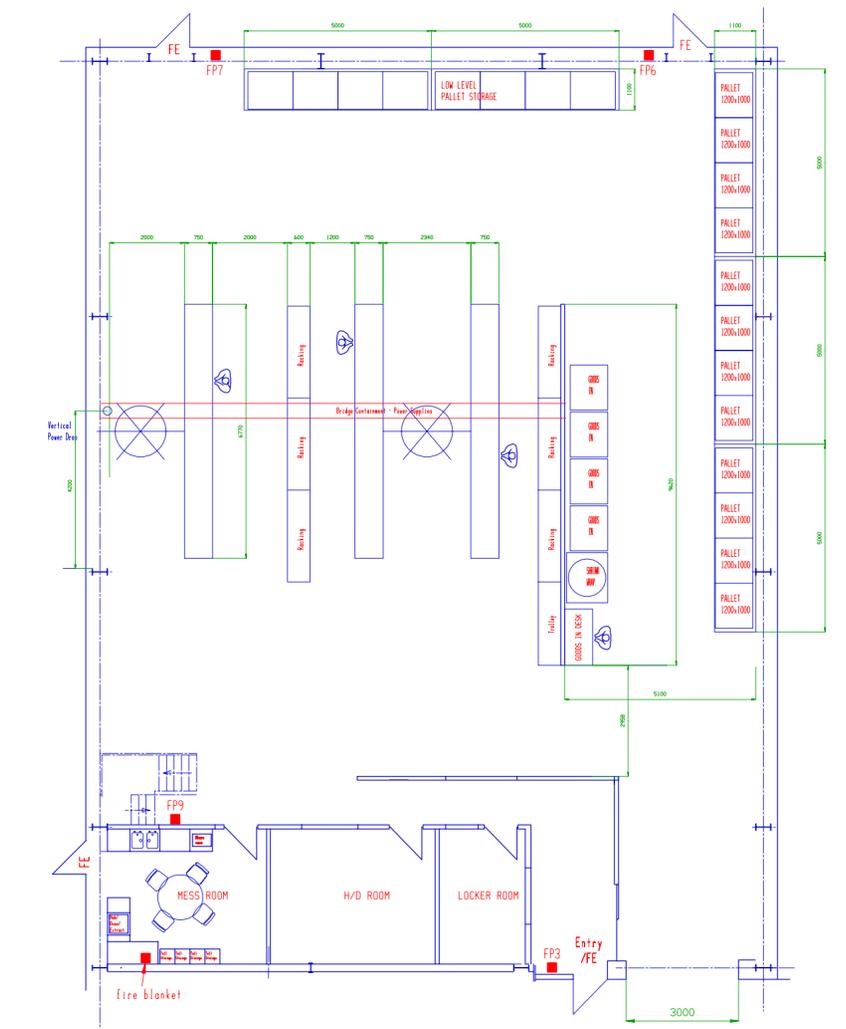
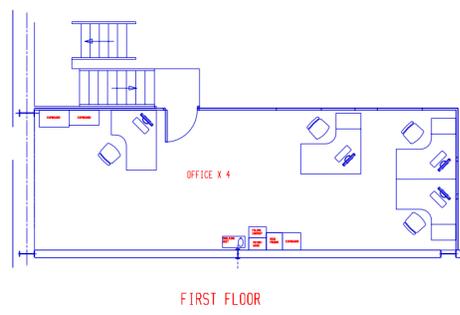
Site Address:
The Royal Mint
Pontyclun
Llantrissant
South Wales
CF72 8YT



a: Unit 5.3 The Paintworks, Bath Road, Bristol, BS4 3EH
w: www.sol-environment.co.uk
e: enquiries@sol-environment.co.uk
t: 01684 572727



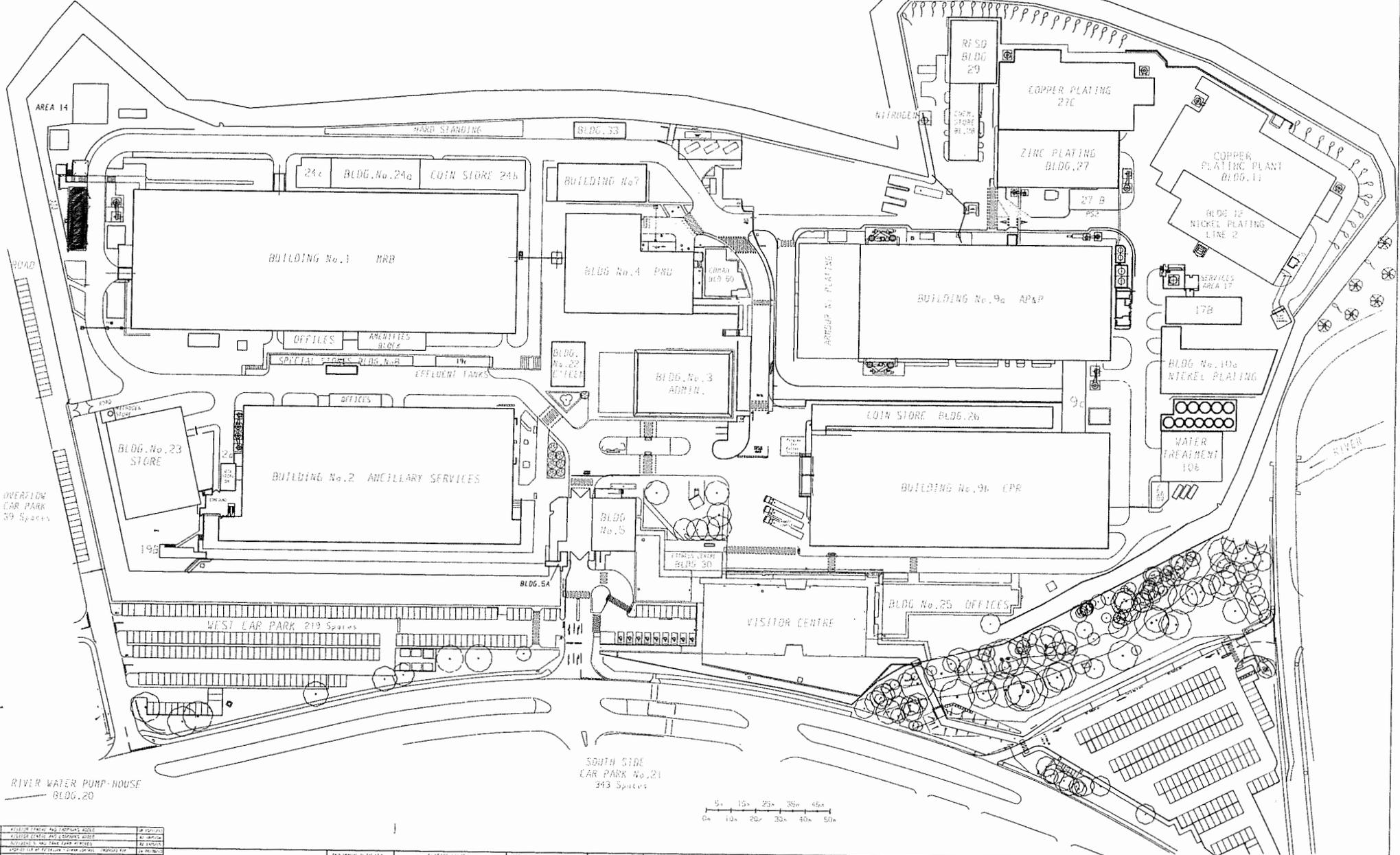
FIRE POINTS
 FP3 - 1x POWDER, 1x CO2
 FP6 - 1x CO2
 FP7 - 1x CO2
 FP9 - 1x CO2



H	Fire Points added	JH 03/12/24
G	Updated Layout	SD 26/11/24
F	UPDATED LAYOUT (FIRST FLOOR)	CC 06/12/16
E	Scale reduced - Elevated section added	JH 30/10/13
D	Updated Layout	JH 30/03/11
C	Updated Layout	RHS 01/10/07
A	INITIAL ISSUE	
ISSUE	REVISION	SIG.&DATE

THIS DRAWING IS THE SOLE PROPERTY OF THE ROYAL MINT AND MUST NOT BE WHOLLY OR PARTLY REPRODUCED WITHOUT PERMISSION	SURFACE FINISH MICROMETRE SYMBOLS ARE TO BS.1134 $\mu m Ra$ SYSTEM SURFACES MARKED THIS TO BE MACHINED TO FINISH INDICATED	NOTE SURFACE FINISH TO BE OR UNDER UNLESS OTHERWISE STATED	3.2	THREADS TO BS.3643 PT. 2, NUTS CLASS 6H BOLTS CLASS 6.9	TOLERANCE UNLESS OTHERWISE STATE	0-50+0.1 50-100+0.2 100-300+0.3 300-1000+0.5 CASTINGS +2.0 ANGULAR +0.25°	DRWG No. HERE	SEE G.A	SCALE	1/100	DRWN	RHS 11/06/03
					MATERIAL	TREATMENT OR FINISH	TITLE	VOCAB No	DRWG No.	90400/29/00/001 -1	ISSUE	XXXXXXXXX

TOWN/RIVER WATER TANKS AREA 'E'

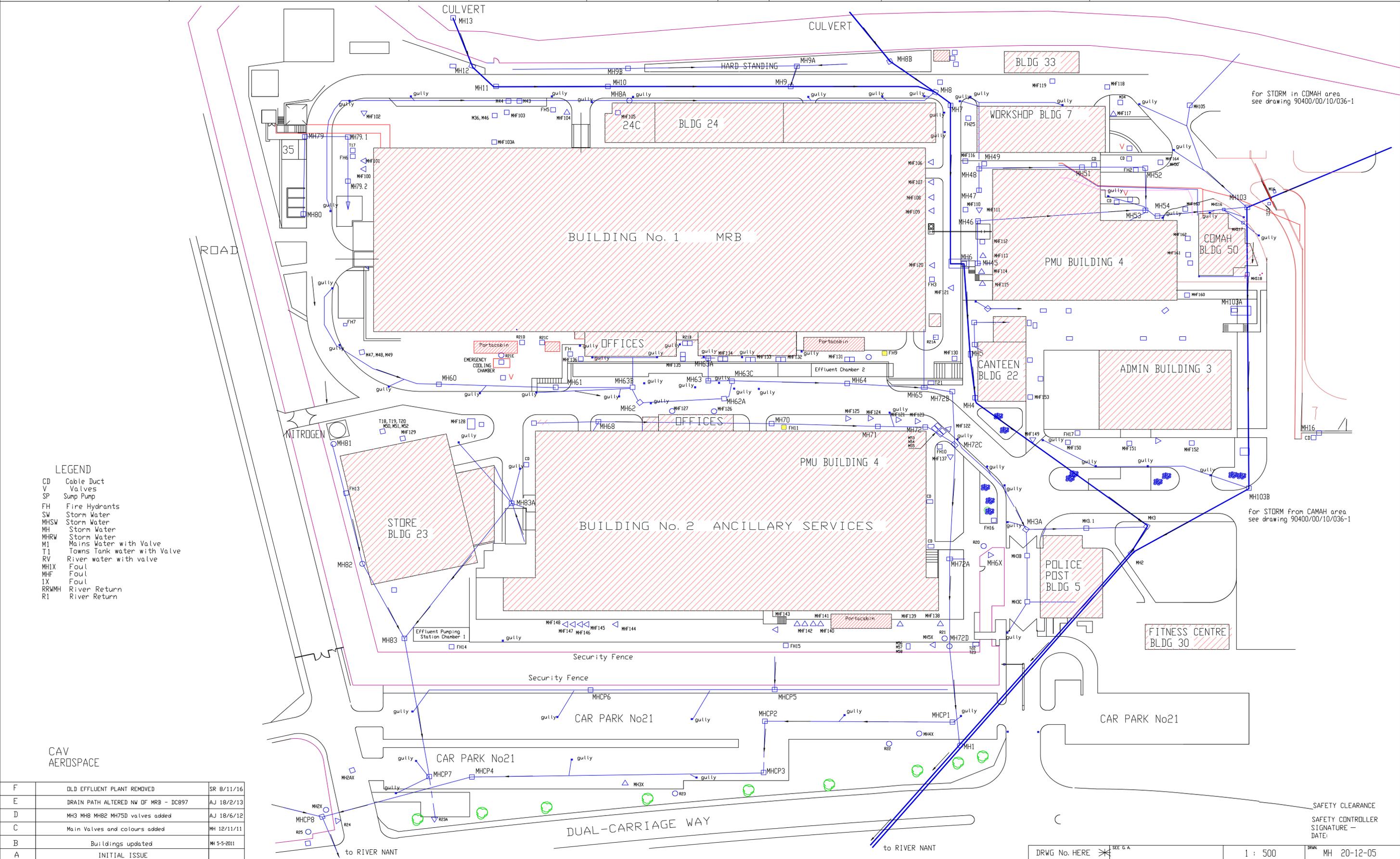


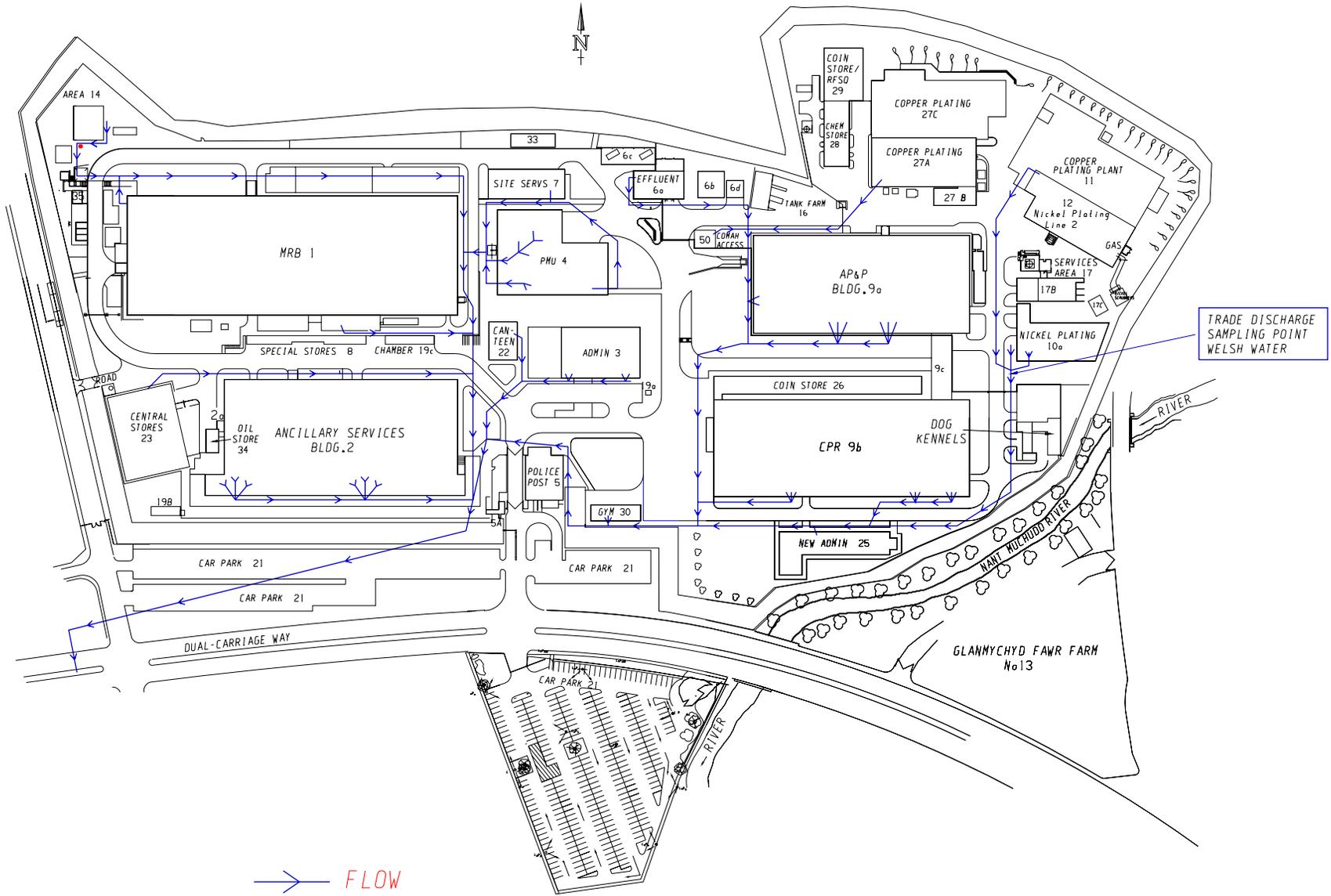
1	ATTORNEY GENERAL'S OFFICE	10/10/2010
2	PLANNING DEPARTMENT	10/10/2010
3	PLANNING DEPARTMENT	10/10/2010
4	PLANNING DEPARTMENT	10/10/2010
5	PLANNING DEPARTMENT	10/10/2010
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ROYAL MINT LLANTRISANT

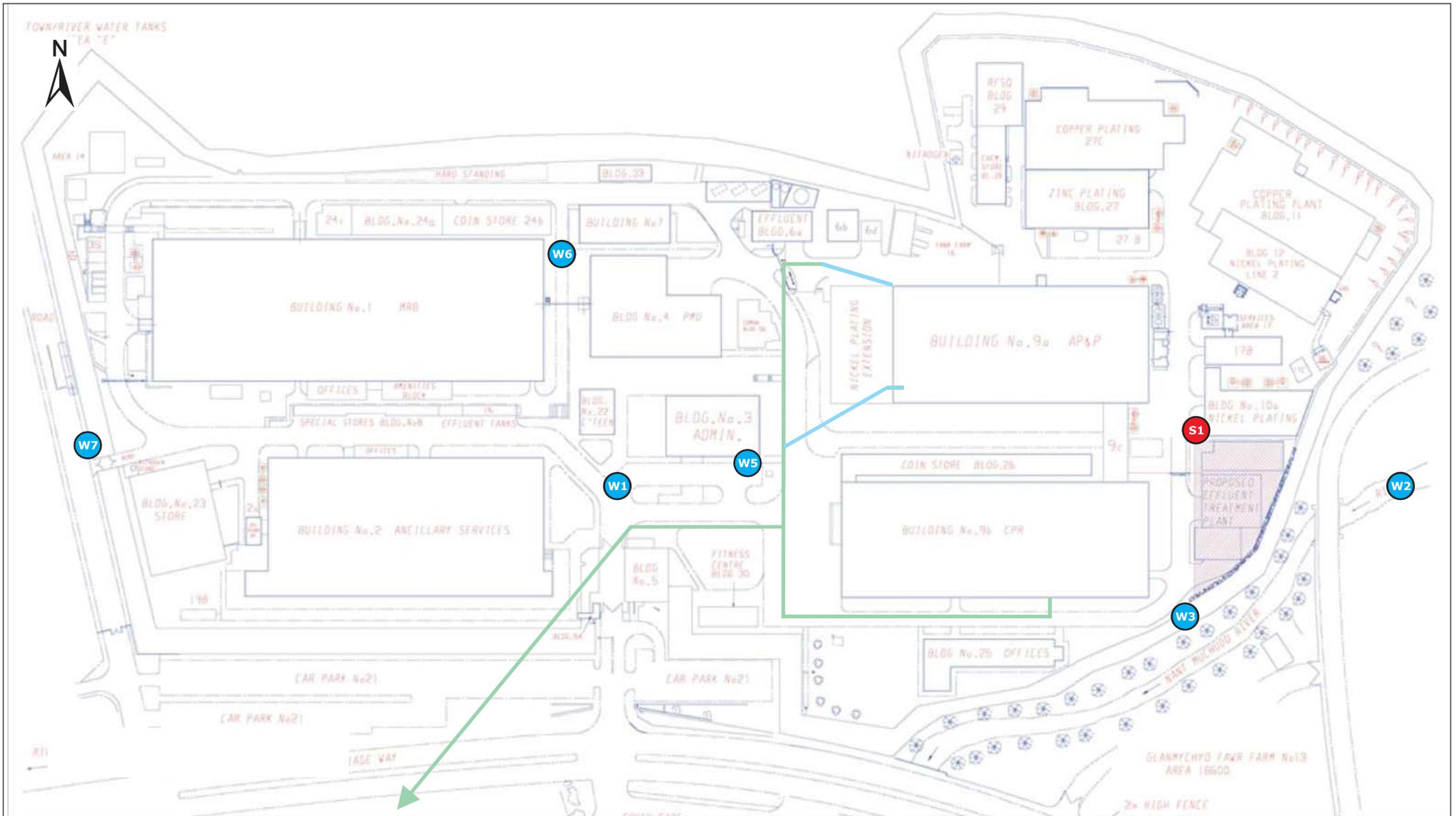
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DATE: 10/10/2010
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]





DRWG. No. HERE *		DRWN. K.D.L./RHS 24/11/03	SCALE 1:2000
TOLERANCE UNLESS OTHERWISE STATED 0 - 50 ±0.1 50 - 100 ±0.2 100 - 300 ±0.3 300 - 1000 ±0.5 CASTINGS ±2.0 ANGULAR ±0.25			
A	INITIAL ISSUE	THIS DRAWING IS THE SOLE PROPERTY OF THE ROYAL MINT AND MUST NOT BE WHOLLY OR PARTLY REPRODUCED WITHOUT PERMISSION.	SURFACE FINISH MICROMETRE SYMBOLS ARE TO BS 1134 AND R ₀ SYSTEM SURFACES MARKED THIS $\sqrt{\quad}$ TO BE MACHINED TO FINISH INDICATED.
ISSUE	REVISION	SIG & DATE	NOTE SURFACE FINISH TO BE 3.2 OR UNDER UNLESS OTHERWISE STATED.
ROYAL MINT LLANTRISANT		TITLE FOUL SEWER & TRADE DISCHARGE	ISSUE. A

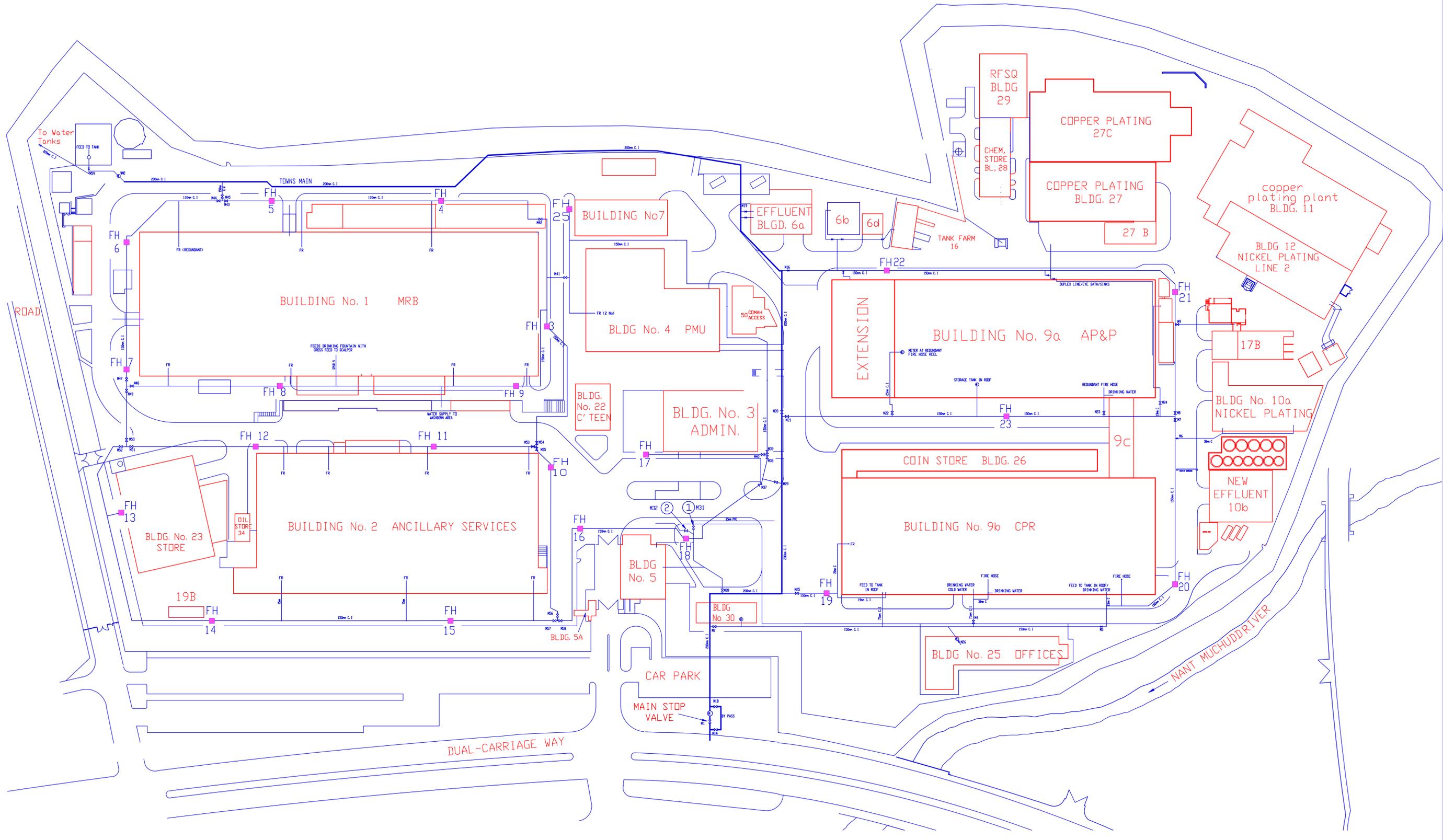


Scale Not To Scale

Legend	
	Cooling Water
	Combined Flow
	Point source emissions to surface water
	Point source emissions to sewer

Title	Figure 3: Point Source Emissions To Water
Site	The Royal Mint, Llantrisant, Pontyclun, Mid Glamorgan, CF72 8YT

Client	The Royal Mint		
Project No.	UK-14-15309	Issue	1
Date	August 2010	Drawn by	AB
			



■ FIRE HYDRANT/NUMBER



- ① REF. Stop Valve For Phase 1 Drinking Water
- ② REF. Stop Valve For Phase 2 Drinking Water

REDRAWN/UPDATED FROM E2089/9/1

SAFETY CLEARANCE
Safety Controller
Signature
Date

C	BUILDINGS UPDATED	JH 20/07/11
B	VALVES FH1 FH2 FH4 REMOVED	JH 13/05/10
A	INITIAL ISSUE	
ISSUE	REVISION	DATE

ROYAL MINT LLANTRISANT

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SURFACE FINISH
MICROMETRE SYMBOLS ARE TO BS 1134 UN 20 SYSTEM SURFACES MARKED THIS WAY TO BE MACHINED TO FINISH INDICATED

NOTE
SURFACE FINISH TO 2.0 OR UNDER UNLESS OTHERWISE STATED.

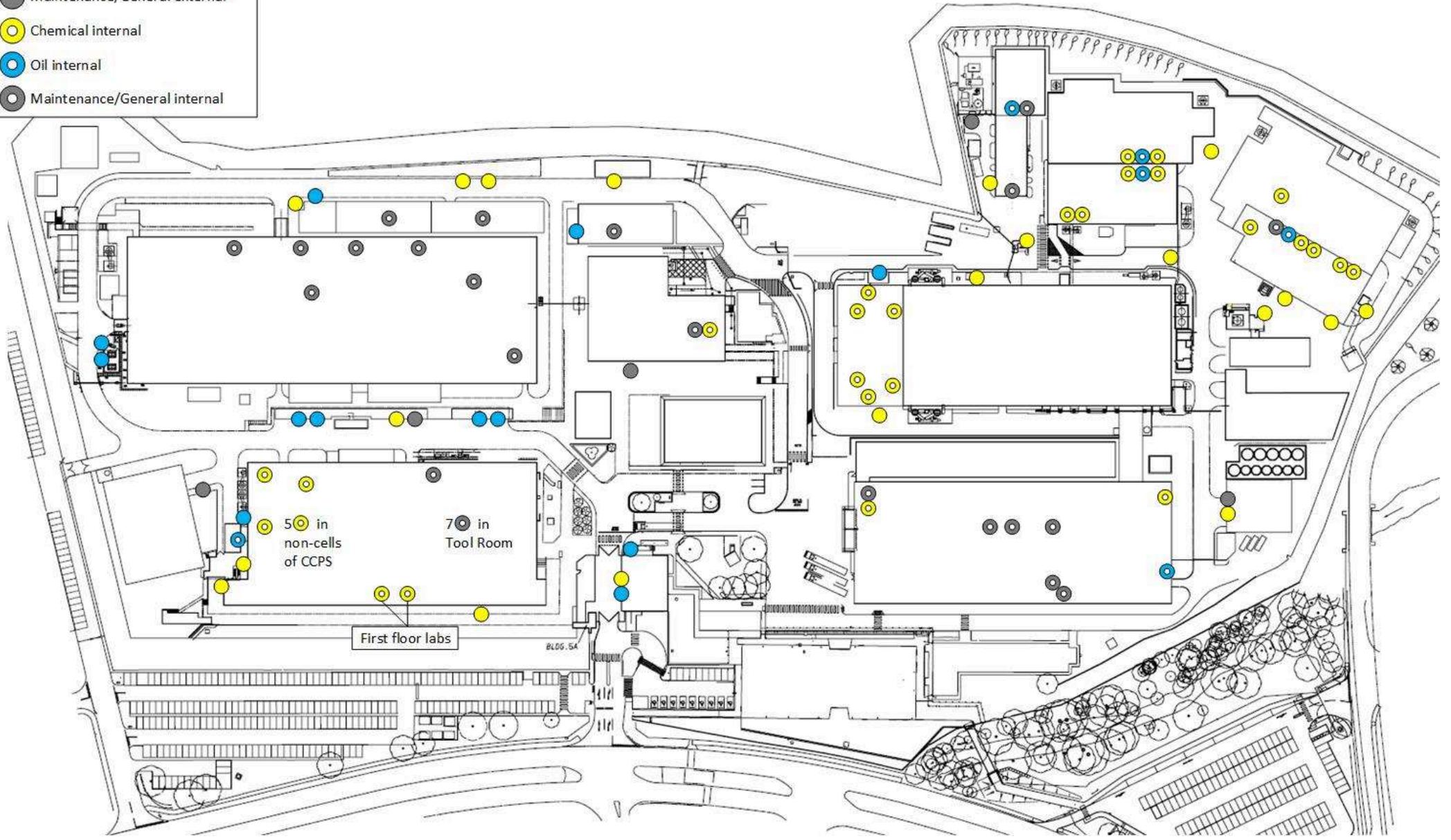
THREADS TO BS 3643 PT. 2 NUTS CLASS 6.8 BOLTS CLASS 6.8

TOLERANCES UNLESS OTHERWISE STATED 0.50 ± 0.1 50.100 ± 0.2 100.300 ± 0.3 300.1000 ± 0.5 CASTINGS ± 0.0 ANGULAR ± 0.25

DRWG No. HERE * MATERIAL TREATMENT OR FINISH TITLE
ROYAL MINT SITE FIRE HYDRANTS

DRWG No. 90400/00/10/033 -1
ISSUE A C

- Chemical external
- Oil external
- Maintenance/General external
- Chemical internal
- Oil internal
- Maintenance/General internal

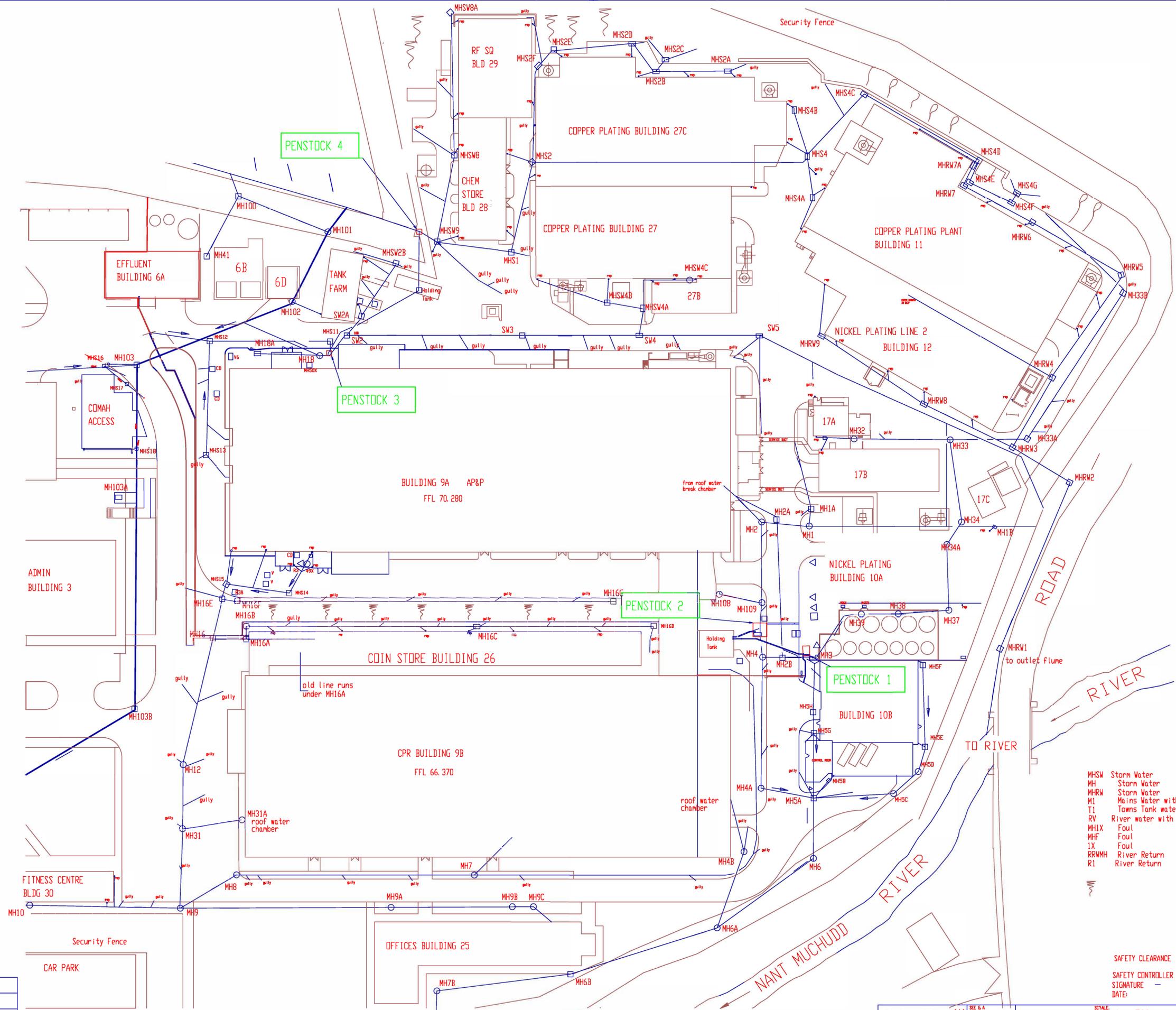


5 ● in non-cells of CCPS

7 ● in Tool Room

First floor labs

BLDG. 5A



- MHSW Storm Water
- MH Storm Water
- MHRW Storm Water
- M1 Mains Water with Valve
- T1 Towns Tank water with Valve
- RV River water with valve
- MHIX Foul
- MHF Foul
- 1X Foul
- RRWMH River Return
- R1 River Return

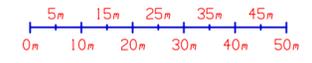
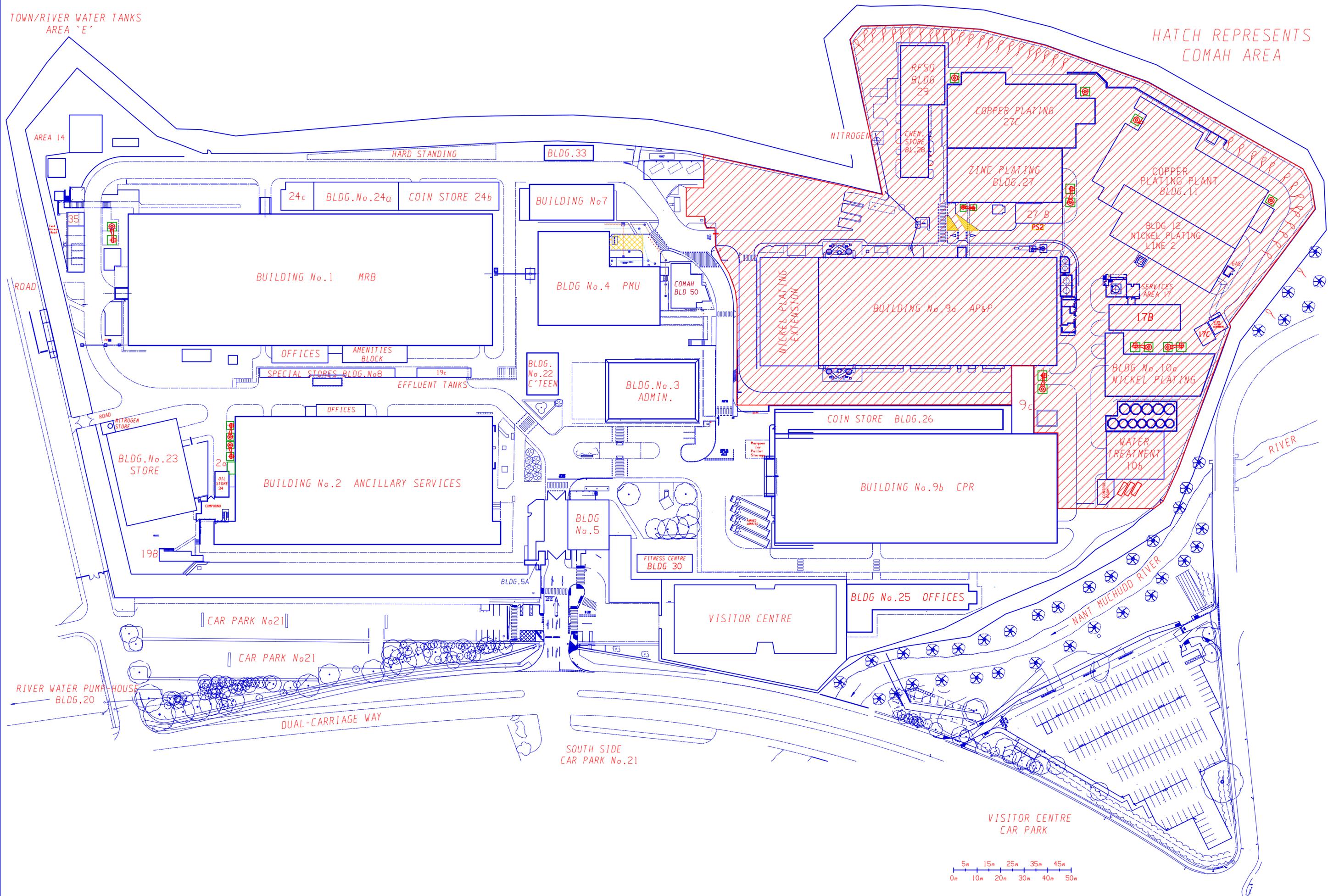
SAFETY CLEARANCE
SAFETY CONTROLLER
SIGNATURE
DATE:

A	INITIAL ISSUE	
ISSUE	REVISION	SIG.&DATE
ROYAL MINT LLANTRISANT		

7 THIS DRAWING IS THE SOLE PROPERTY OF THE ROYAL MINT AND MUST NOT BE REPRODUCED OR PARTLY REPRODUCED WITHOUT PER	SURFACE FINISH NICHOOMETRIC SYMBOLS ARE TO BS 1134 UNLESS OTHERWISE STATED TO BE FINISHED TO INDICATED	NOTE SURFACE FINISH TO BE UNDER UNLESS OTHERWISE STATED	3.2	THREADS TO BS 3643 PT. 2 NUTS CLASS 8.8 UNLESS OTHERWISE STATED	TOLERANCE UNLESS OTHERWISE STATE	0-50-+0.1 50-100+0.2 100-300+0.3 300-1000+0.5 CASTINGS ±2.0 ANGULAR ±0.25°	TREATMENT OR FINISH	TITLE PENSTOCK & STORM WATER LAYOUT	DRWG No. HERE 90400/00/10/073-1	SCALE 1 : 500	DATE MH 15-11-05
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TOWN/RIVER WATER TANKS AREA 'E'

HATCH REPRESENTS COMAH AREA



SR 12/08/15	INITIAL ISSUE
SIG.4 DATE	REVISION

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THREADS TO BS.3643 Pt.2 NUTS CLASS 6H. BOLTS CLASS 6g.

TOLERANCES UNLESS OTHERWISE STATED 0-50 ± 0.1 50-100 ± 0.2 100-300 ± 0.3 300-1000 ± 0.5 CASTINGS ± 2.0 ANGULAR ± 0.25°

DRWG No. HERE * MATERIAL TREATMENT OR FINISH

TITLE ROYAL MINT SITE PLAN WITH VISITOR CENTRE AND CAR PARK

ISSUE A 90400/00/00/126-0

15- Appendix B – Site Procedures

CELEBRATE | COLLECT | INVEST | CURRENCY | SECURE | DISCOVER

The Royal Mint, Llantrisant, Pontyclun, CF72 8YT, United Kingdom **t: +44 (0)1443 222111 w: royalmint.com / royalminbullion.com**

Subject Emergency Preparedness and Response
 (SMP 4.9)

Author / Caeli Rees
Reviewer

Date 01 November 2021

Version 6

THIS PROCEDURE IS STRICTLY A COMPANY CONFIDENTIAL DOCUMENT AND CONTAINS INFORMATION OF A COMMERCIAL NATURE, WHICH IF RELEASED EXTERNALLY WOULD BE DETRIMENTAL TO THE INTEREST OF THE MINT. IT IS NOT TO BE COPIED OR ITS CONTENTS DISCLOSED WITHOUT THE WRITTEN APPROVAL OF EITHER THE DIRECTOR OF HUMAN RESOURCES OR THE HEAD OF SHE OF THE ROYAL MINT.

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1- Amendment Record

Issue No.	Page No.	Amendment Details	Amended By	Issue Date
1	1-2	Approval and authorisation changed to 'Chief Executive'	A Davey	Nov 2004
1	6	Title of CMP 3.2 amended. (Referenced in section 3)	A Davey	Jul 2005
1	7-8 12-13	Appendix 2 – Emergency Response and Preparedness Programme added. Reference to Appendix 2 added. Appendix 2 included in Revision Status List.	A Davey	Nov 2005
1	4	Appendix 2 - Condensed the number of emergency events (from 20 to 7). Combined the emergency events 1.1, 1.2.2, 4.3, 4.5.2, 4.6 and 4.7 described in COMAH Report Chapter 3 as one Event - Event 4. Authorisation Statement amended to reflect interim Chief Executive.	A Davey	May 2006
2		Approval and authorisation changed to 'H.R. Director'. Change to new Corporate Style. Inclusion of Emergency Management Plan.	M Grant	Apr 2009
3	All	Combining of environmental and safety management procedures	M Grant	Sep 2014
4	6	Amendments to various parts of Section 8 – Procedure.	D Richards	Apr 2015
5	All	Full document review	K Jenkins	Jul 2020
6	All	Full document review & update	C Rees	Nov 2021

2- Purpose

The procedure identifies the overall management arrangements and responsibilities for the preparation, maintenance, testing and review of the Royal Mint [Emergency Management Plan \(SMP 4.9.2\)](#).

This procedure does not cover the detailed arrangements for dealing with site emergencies. These are contained within the [Emergency Management Plan](#) itself.

3- Scope

This procedure is applicable to both the COMAH and non-COMAH areas of the Royal Mint site.

4- Definitions

- 4.1 Emergency**
Any hazardous or potentially hazardous situation presenting immediate or imminent danger to personnel, the environment or property.
- 4.2 Emergency Management Plan**
A controlled document describing the responsibilities and arrangements for handling Emergency Response.

5- References

When using this procedure, reference should be made to the latest revision of the following connected procedures, systems or legislation:

- 5.1 Internal Document References**
EMP 3.2 - Legal Requirements and Evaluation of Compliance
EMP 3.1 - Environmental Aspects Register
SMP 3.2 - Incident Investigation and Reporting
- 5.2 External Document References**
Control of Major Accident Hazards Regulations [2005](#)
The Management of Health and Safety at Work Regulations [1999](#)

6- Roles and Responsibilities

- 6.1 Head of SHE.**
Is responsible for ensuring compliance with this procedure and for the compilation and review of the [Emergency Management Plan](#).
- 6.2 Process Safety Manager**
[Owns the Emergency Management Plan](#) and is responsible for providing the technical knowledge, support and training advice for the [site](#).

6.3 Security Department

Will facilitate the use of the Primary Emergency Control Centre (PECC) within Building 5 and the Secondary Emergency Control Centre (SECC) within Central Stores. They will also facilitate the first response and escalation process within the Emergency Management Plan.

6.4 Site Managers

Are responsible for ensuring personnel are available and undertake training applicable to the Emergency Plan.

7- Procedure

7.1 Requirements

- Potential incidents and emergencies that are likely to occur on site shall be identified by risk assessment and documented in [SMP 4.9.2 Emergency Management Plan](#).
- Methods to respond to, mitigate and prevent emergencies on site and for obtaining outside support services shall be established and maintained.
- Roles and responsibilities for communications on site and for obtaining outside support services shall be established and maintained primarily via [SMP 4.9.2 Emergency Management Plan](#)
- [Physical exercise](#) drills or table top [based scenario discussions](#) shall be carried out on those emergency events identified. The SHE department shall maintain records of these exercises in [Q-Pulse](#). If required methods to respond to, mitigate and prevent emergencies shall be amended based on the results of the exercises. [The control document associated with testing of Emergency Response is SMP 4.9.1.](#)
- Following an emergency [event](#), the cause of the emergency and corresponding emergency methods shall be reviewed. Corrective actions shall be identified through [Q-Pulse](#). Methods to respond to, mitigate and prevent that arise as a consequence of an emergency shall be amended as required. The Head of SHE will be notified to ensure amendments to the Emergency Management Plan are made.
- For further details of arrangements for the management of specific site emergencies, refer to [SMP 4.9.2 Emergency Management Plan](#) – either via the Emergency Procedures page on Normality or [within document control on Q-Pulse](#).

7.2 Emergency Plan Document Control

[SMP 4.9.1 – Emergency Management Plan](#) shall be a controlled document. This shall include at least the following:

- It shall be numbered (including an issue number).
- It shall be dated and authorised by the Head of SHE and the Director of HR and SHE.
- A master copy shall be kept in the [PECC](#).
- [Distribution shall be controlled via Q-Pulse.](#)
- Revisions shall be sent to all holders of controlled copies and superseded copies or pages removed from all points of issue and destroyed.

7.3 Review and Revision

The [Process Safety Manager](#) shall review and if necessary, revise and reissue the Emergency Plan at least every 3 years or following an incident or following significant plant design or organisational changes, whichever is sooner.

8- Appendices

No specific appendices required for this SMP.

Subject **Testing of Emergency Preparedness and Response
(SMP 4.9.1)**

**Author /
Reviewer** **Martyn Grant**

Date **29 September 2020**

Version **1**

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6.3	Statutory testing of emergency plans	5

1- Amendment Record

Issue No.	Page No.	Amendment Details	Amended By	Issue Date

2- Purpose

The procedure identifies the specific arrangements in place for testing Emergency Preparedness and Response.

3- Scope

The scope of this procedure covers all testing against The Royal Mint Emergency Management Plan and not plans created by any external organisation.

4- References

The Control of Major Accident Hazard Regulations 1999 (COMAH) and subsequent amending legislation places duties on upper tier COMAH operators to: prepare an adequate internal emergency plan; review and test emergency plans.

5- Roles and Responsibilities

5.1 Head of Security.

The Head of Security will be responsible for putting in place a testing regime that covers the site fire alarms (fire alarm drills).

5.2 Environmental Manager

The Environmental Manager will be responsible for putting in place a testing regime that covers internal testing of The Royal Mint's on site emergency plans.

5.3 Process Safety Manager

The Process Safety Manager will be responsible for putting in place a testing regime that covers statutory testing of The Royal Mint's emergency plans.

5.4 SHE Team

The SHE team members will act as nominated observers to assess the testing, paying attention to the appropriateness of actions, the behaviour of employees and any problems which may arise during the exercise.

6- Procedure

For the purposes of this procedure there are 3 distinctive types of testing that take place.

6.1 Fire Drills

In order to fulfil its legal obligations and in accordance with all fire safety regulations, The Royal Mint should conduct at least one fire drill per year in each area of The Royal Mint but where possible there will be two in each area each year.

Throughout the drill, nominated observers should:

- Keep an eye out for any inappropriate behaviour, such as stopping to collect coats, bags and other personal belongings.
- Closely observe any difficulties experienced by people with disabilities, such as an inability to get out of an exit or get down stairs easily.

- Make sure employees are using the nearest fire escape route, rather than just the exit they are most familiar with.
- Pay attention to any difficulties experienced as a result of the chosen escape routes, such as doors being difficult to open or exits being blocked.

Following the drill, the results of each fire drill should be recorded in Q Pulse including such points as:

- A log of all details of the fire drill, including how the evacuation procedure went and any inappropriate actions or problems which were noted as a result.
- Any significant findings of the drill should be recorded.
- If identified a review of the Fire Risk Assessment.
- Remedial action deemed necessary, such as the installation of additional fire safety signs or fire alarms.

6.2 Testing on-site emergency plans

The purpose of the emergency plan testing is to give confidence in the accuracy, completeness and practicability of the plan.

The Royal Mint will endeavour to carry out a monthly test of an element of the Emergency Plan in various areas of the site covered by the Emergency Plan.

Testing of the emergency plan may consist of a live exercise or a table-top exercise including the communication arrangements. The testing of other components should demonstrate whether the plan can be put into effect successfully.

Following each test exercise, there will be a debrief to understand any if any changes are required to the emergency plan. The results of each test should be recorded in Q Pulse including such points as:

- A brief description of the scenario used, including how the exercise went and any problems which were noted.
- Any significant findings of the test should be recorded.
- If identified a review of the Emergency Plan to be undertaken.
- Any remedial action deemed necessary.

6.3 Statutory testing of emergency plans

COMAH 1999 Regulation 11 requires that a 3-year emergency plan testing cycle is in place.

The objective of testing the emergency plan should be to give confidence in the following elements of the plan:

- The completeness, consistency and accuracy of the emergency plan and other documentation used to respond to an emergency.
- The adequacy of the equipment and facilities, and their operability, especially under emergency conditions.
- The competence of staff to carry out the duties identified for them in the plan, and their use of the equipment and facilities.

The test should be such that it shows that people following the emergency plan could cope with the range of accidents that could occur. The testing should give an indication of the conditions that may exist on and off the establishment in the event of an emergency. It should also show that the plan would work as proposed: controlling and mitigating the effects of an accident; communicating the necessary information; and initiating the measures which should lead to the necessary restoration of the environment.

Testing should be based on an accident scenario identified in the safety report as being reasonably foreseeable. Tests should address the response during the initial emergency phase, which is usually the first few hours after the accident occurs.

Statutory testing will generally be via a live exercise of one of the major accidents identified in the safety report. The exercise chosen will be prepared jointly and agreed by all the agencies expected to participate. There is also the option to test on-site and off-site plans at the same time.

The aims and objectives of test should always be made clear at the outset (both at the planning stage and on the day). The lessons learned should be passed to all the stakeholders involved.

Following any exercise there should be a period of evaluation to enable all the organisations to get the most out of their participation. The period of evaluation will generate reports that are recorded in Q Pulse and can include the following:

- Evaluation of the lessons learned.
- Determine whether modifications are required to the emergency plan.
- Modification to any onsite arrangements.
- Dissemination of information to the relevant organisations who need to be kept informed of progress on any actions.

Emergency Response Flowchart

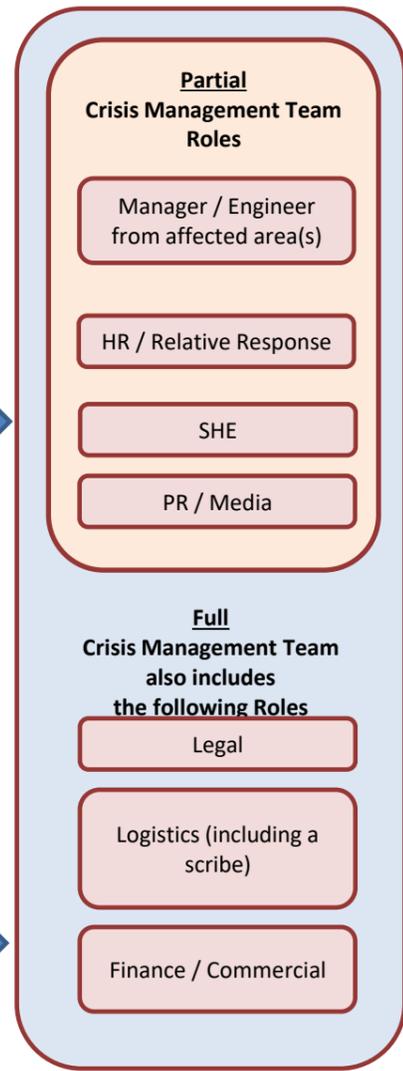
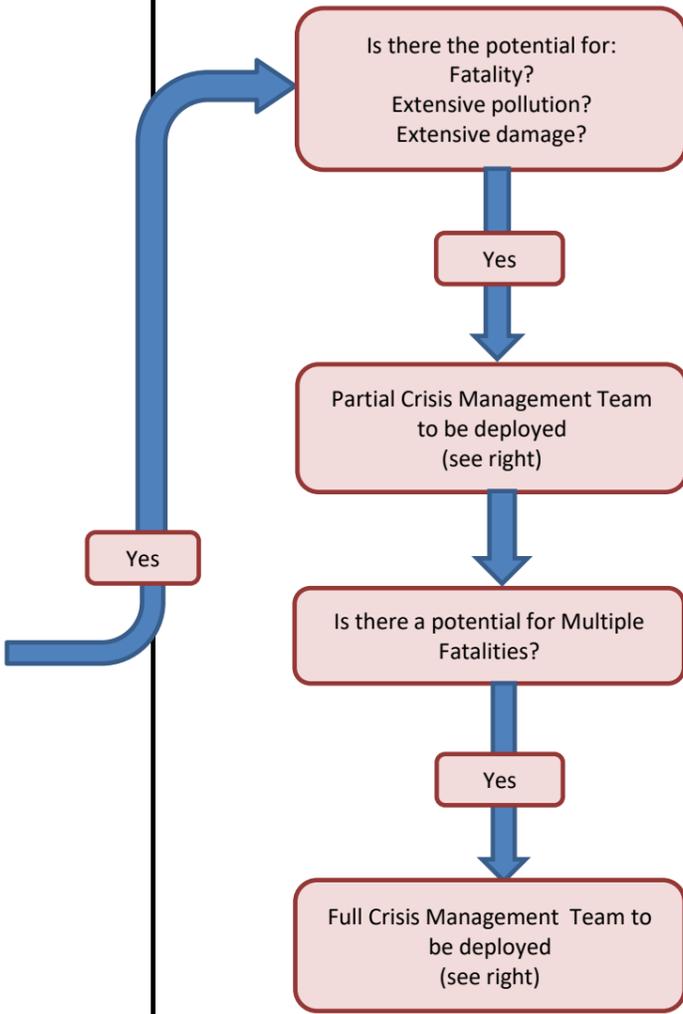
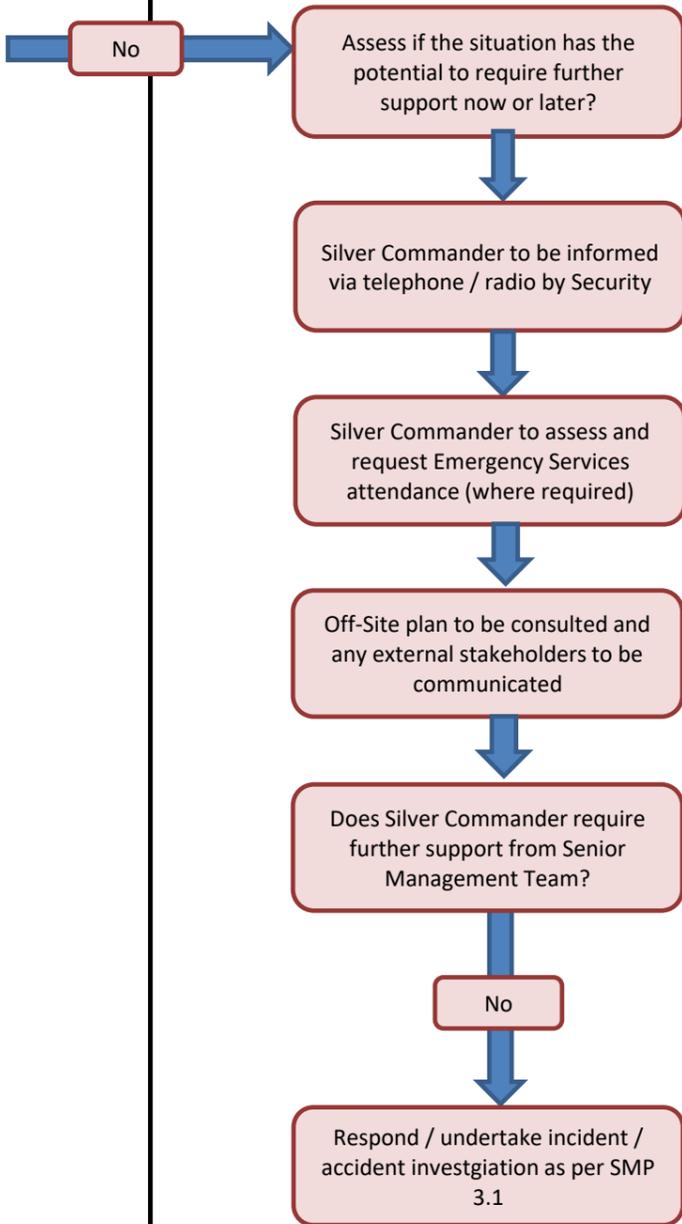
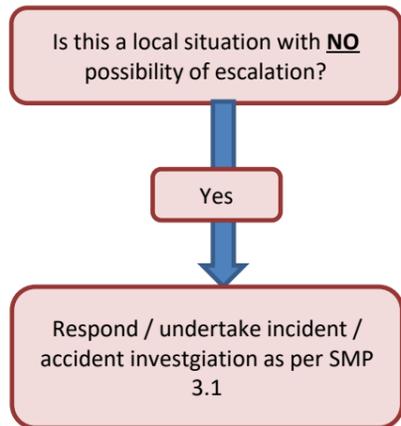
Issue Date:	09/03/2022
Emergency Procedure	EPO
Version	2
Review Date	09/03/2024

LEVEL 1
Bronze Commander Only
 First Aid treatment
 Non-Safety Critical Alarms
 Non-Safety Critical Breakdowns

LEVEL 2
Bronze & Silver Commanders Only
Serious injury as defined
Dangerous occurrence as defined
 Loss of containment: Directly to watercourse
 >25 litres oil and / or 200 litres of chemical
 Loss of production due to damage to equipment

LEVEL 3
Bronze, Silver & Gold Commanders
 Emergency Services on-site:
 Ambulance, Fire, Police
 Unscheduled regulator on-site:
 HSE, NRW

LEVEL 3
Crisis Management Team(s)





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Serious Injury is defined as:

Fractures (other than fingers, thumbs, toes)
Amputations (full or Partial)
Loss of sight
Crush injuries (head, arms, legs, torso)
Burns covering >5% of the body
Loss of consciousness caused by head injury or asphyxiation
Any injury involving Confined Space Entry

Dangerous Occurances are defined as:

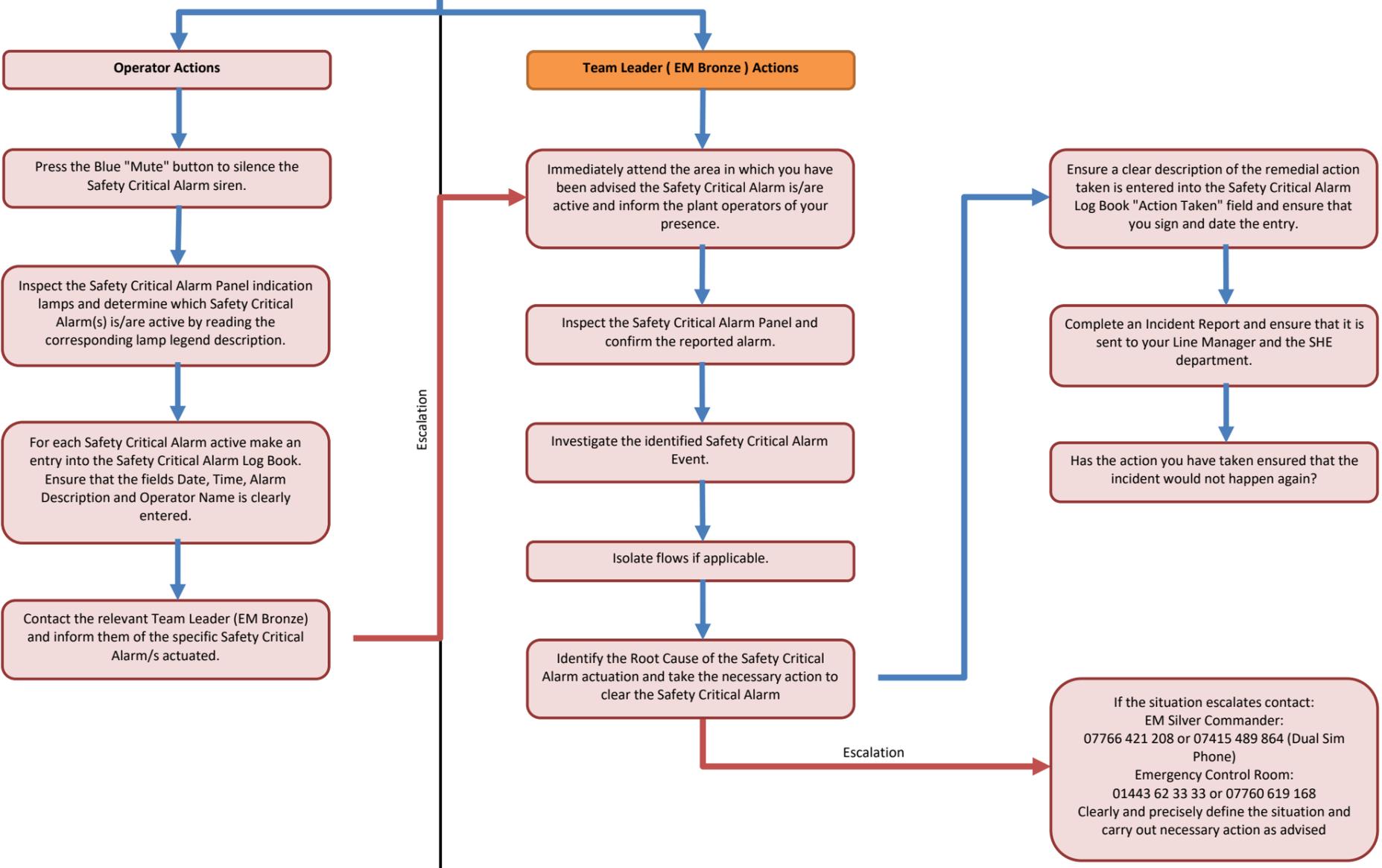
Collapse, overturning or failure of load bearing lifting equipment
Failure of closed vessels, protective devices and pipework
Contact with overhead electric lines or close contact which causes discharge
Electrical incidents causing explosion or fire
any explosion, discharge, intentional fire or ignition which causes injury requiring first aid or medical treatment

Safety Critical Alarm Activation

Issue Date:	09/03/2022
Emergency Procedure	EP1
Version	v1.0
Review Date	09/03/2024



LEVEL 1 Safety Critical Alarm Activated



Emergency Type
EP1 - Safety Critical Alarms

Causes:
1. Safety Critical Alarm for sumps, tanks, penstock system and catchment pits etc.

Anticipated Consequences

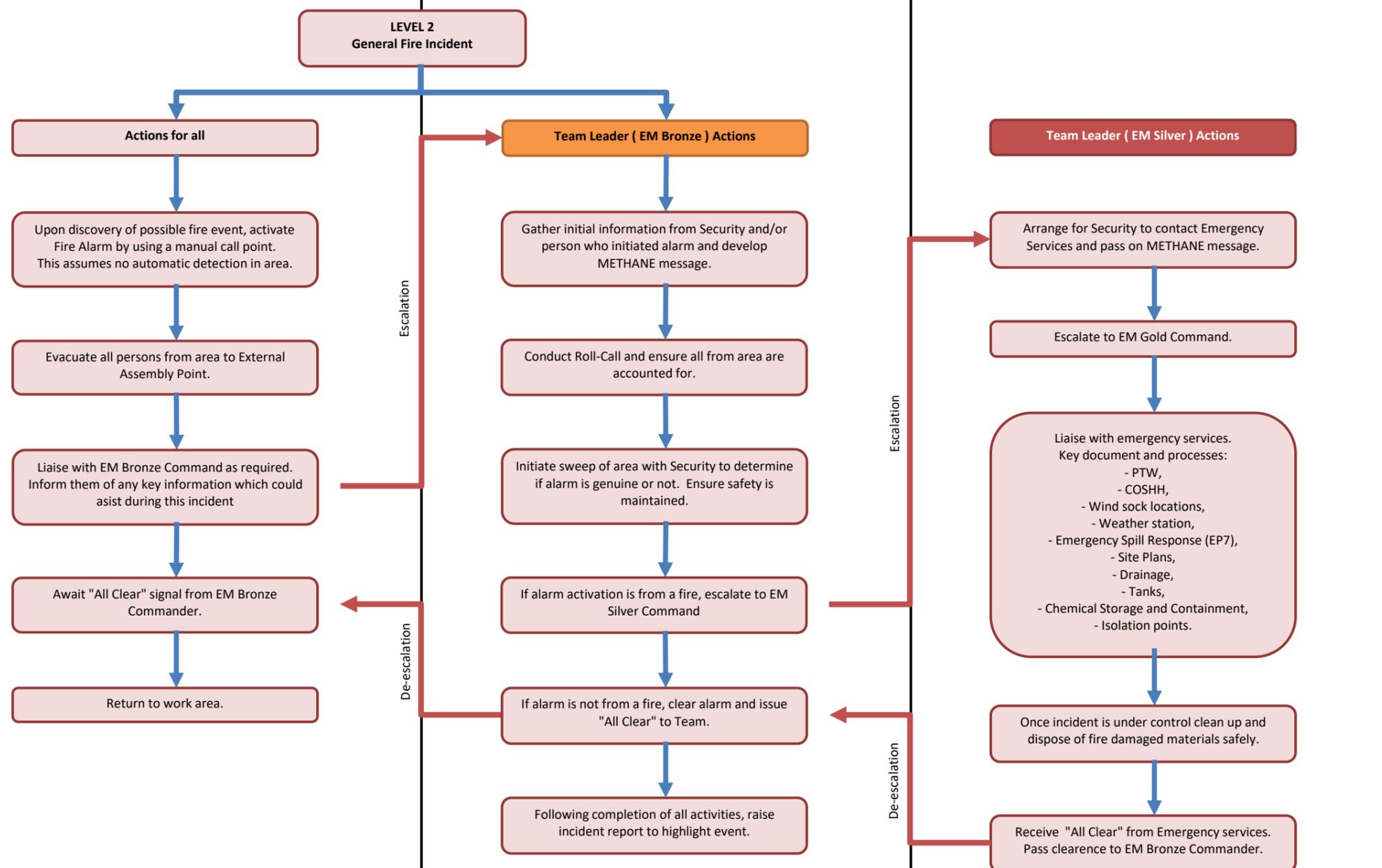
- Health and Safety
 - Toxic gas
 - High / Low pH
- Environmental
 - uncontrolled releases to air, water or land

Actions to be taken by operator / team-leader (listed in order of priority)

- Examine the control panel relating to the area alarming.
- Notify the Team Leader (EM Bronze) of the incident immediately.
- EM Bronze to investigate the alarm activation and identify the root cause of the abnormal condition.
- If the reason for the alarm activation is due to incoming flows, isolate the source where it is safe to do so.
- Take further corrective actions as required.
- Complete incident report.

Fire & Evacuation of Process Plants

Issue Date:	09/03/2022
Emergency Procedure	EP2
Version	2
Review Date	09/03/2024



Emergency Type
EP2 - Fire and Evacuation

Causes:

1. Electrical fire in chemical storage areas (covered by EP3).
2. Electrical fire in non-chemical storage areas.
3. Gas leaks followed by explosion and fire.

Anticipated Consequences

1. Fire could spread between buildings and hazardous areas and could cause a major environmental impact.
2. Toxic and polluting smoke may be generated as a result of the fire breakdown products. The smoke would be dispersed and have an environmental impact on the local community.
3. Contaminated firewater run-off to surrounding land causing groundwater pollution (covered by EP3).

Actions to be taken by operator / team-leader (listed in order of priority)

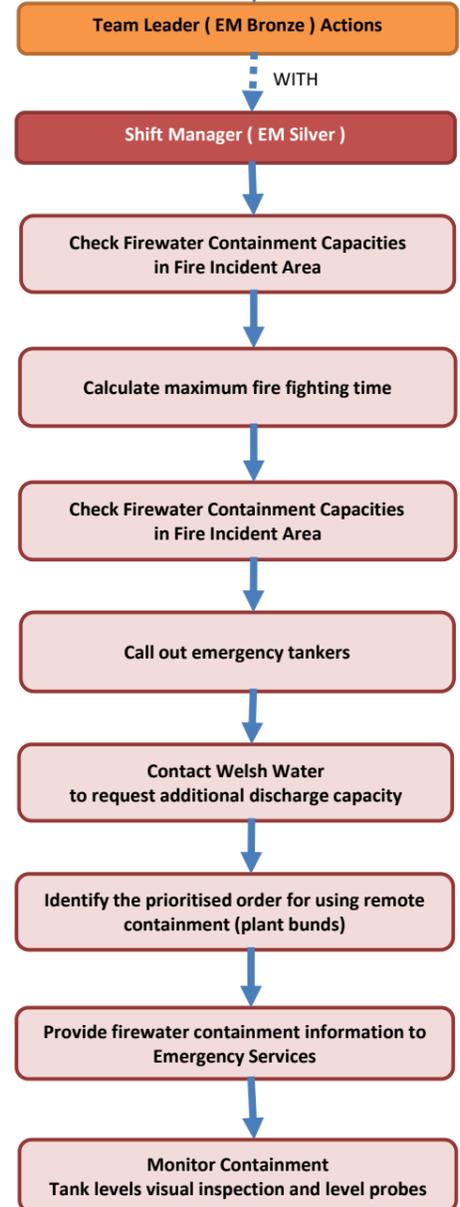
1. If a fire is detected (via the automated site fire alarm system) the fire alarm will automatically be sounded locally, which is also relayed to the Security Control Room.
2. If the automatic fire alarm system has not activated the alarm can be raised at the nearest break glass point or by ringing 3333
3. Ensure all persons are evacuated from danger area to designated external assembly point.
4. The EM Bronze or fire warden shall carry out a roll call to ensure all personnel are accounted for and have evacuated the area.
5. If it proves to be a false alarm, await 'All Clear' from the appointed responsible person.
6. If toxic smoke present sound Site Incident Alarm and move personnel into appropriate IAP's.
8. If genuine, treat as a major fire incident and follow the steps outlined below:-
 - a) Security control room to call fire and rescue service and other emergency services as necessary.
 - b) If safe to do so, turn off electricity/ gas supplies.
 - c) EM SILVER COMMANDER to liaise with Emergency Services when they arrive on site.
 - d) If the fire involves chemicals, then follow Emergency Procedure EP3.
 - e) Once under control, clean up any materials that may be a hazard to the environment.
 - f) Await 'All Clear' from the Fire and Rescue Service.
 - g) Complete "initial" incident report - Recovery Programme, debrief meeting and initiate fire incident investigation if applicable.

Firewater Management

Issue Date:	09/03/2022
Emergency Procedure	EP3
Version	2
Review Date	09/03/2024



LEVEL 2
Major Fire Incident Reported and
Emergency Services Called Out.



Maximum Firewater Containment Reached

Contact the NRW to obtain their decision whether a sacrificial area can be used for the excess firewater runoff

Area / Activity	Pollution pathway	Local containment capacity	Initial Fire fighting time using local capacity (A)	Additional remote containment if required			Maximum Fire Fighting time = a+b+c+d
				Penstock containment tanks 80 m ³ x 2 = 160 m ³ (B)	Other tanks / bunds to be used	Fire fighting time (C)	
ZP1	Storm drain	110% ~70m ³	32 min	36 min each = 72 min	CP2, CP3	32 min each = 64 min	9min each = 18min 186 min
CP2	Storm drain	110% ~70m ³	32 min	36 min each = 72 min	Zp1, CP3	32 min each = 64 min	9min each = 18min 186 min
CP3	Storm drain	110% ~70m ³	32 min	36 min each = 72 min	Zp1, CP2	32 min each = 64 min	9min each = 18min 186 min
DBP1 & CTP1	Storm drain	Total ~200m ³	91 min	36 min each = 72 min	External bund	32 min	9min each = 18min 213 min
Chemical stores	Storm drain	1.5m ³ / room Total ~10m ³	5 min	36 min each = 72 min	N/A	N/A	9min each = 18min 95 min
Bulk acid stores	Storm drain	110% ~70m ³	32 min	36 min each = 72 min	N/A	N/A	9min each = 18min 122 min
Drainage pipework	N/A	COMAH area ~25 m ³	N/A	N/A	N/A	N/A	N/A
MRB Tandem and Finishing mills	Storm drain	Tan ~60m ³	55 min	N/A	Soluble oil chamber ~ 15 m ³	7 min	9min each = 18min 80 min
		Fin ~30m ³					
		Xserv~30m ³					
		Tot ~120m ³					
Central oil store	Storm drain	~10 m ³	5 min	N/A	Tandem ~ 60 m ³	61 min	9min each = 18min 84 min
					Finishing ~ 30 m ³		
					X service ~ 30 m ³		
					Sol oil chamber ~ 15 m ³		
					Tot. ~135m ³		

Emergency Type
EP3 - Firewater Management

Causes:
The following activities pose the greatest pollution risk to the local river and groundwater caused by firewater run-off in dealing with a major fire on site:

- Zinc Plating Plant 1
- Copper Plating Plant 2
- Copper Plating Plant 3
- Nickel Plating Plant 2
- Armour Plating Plant 1
- Armour Plating plant 2
- Chemical Stores
- Bulk Sulphuric Acid Storage
- Bulk Sodium Hydroxide Storage
- Bulk Oil Store
- MRB Rolling Mills

Anticipated Consequences

In the event of a fire the firewater runoff may contain pollutants. These pollutants may escape from the site into the local watercourse or to ground by a number of pathways. These include:

- The site's surface water drainage system.
- Direct run-off into nearby watercourses or onto ground causing risk to groundwater.
- Via the foul sewer drainage system

Actions to be taken by operator / team-leader (listed in order of priority)

In the event of a major fire on site the following firewater containment measures shall be adopted:

- Check containment capacities in the two remote containment tanks (penstocks).
- Calculate maximum fire fighting time @2.2m³/min fire fighting water use. Refer to Table 1 which shows the total firewater containment (local and remote) that is available on site in the COMAH area in the event of a major fire in the area.
- In the event that the fire escalates and additional firewater is generated, the additional remote containment facilities shall be used in priority order.
- In the event that all containment is used up, the Environmental Agency shall be responsible for the decision to use a sacrificial area to deposit the fire water that minimises environmental impact.

Weather Station Management

Issue Date: 09/03/2022

Emergency Procedure: EP4

Version: 2

Review Date: 09/03/2024



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LEVEL 1
Weather Station Management

Access Met Office website

Monitor and Record:
1. Wind-Speed and Direction
2. Ambient Air Temperature

Provide Weather Station Information to the
Emergency Services and the HSE/NRW on a
regular basis

The Emergency Response Room shall visually
monitor air emissions from the fire using CCTV

Emergency Type
EP4 - Weather Station Management

Causes:

The following activities pose the greatest air pollution risk to the local environment caused by a major fire on site in the following areas:

1. Zinc Plating Plant 1
2. Copper Plating Plant 2
3. Copper Plating Plant 3
4. Nickel Plating Plant 2
5. Armour Plating Plant 1
6. Armour Plating Plant 2
7. Chemical Stores
8. Bulk Sulphuric Acid Storage
9. Bulk Sodium Hydroxide Storage
10. Bulk Oil Store
11. MRB Rolling Mills

Anticipated Consequences

In the event of a major fire in buildings containing hazardous chemicals, there is the potential to release toxic emissions to atmosphere that may impact on the local community.

Actions to be taken by operator / team-leader
(listed in order of priority)

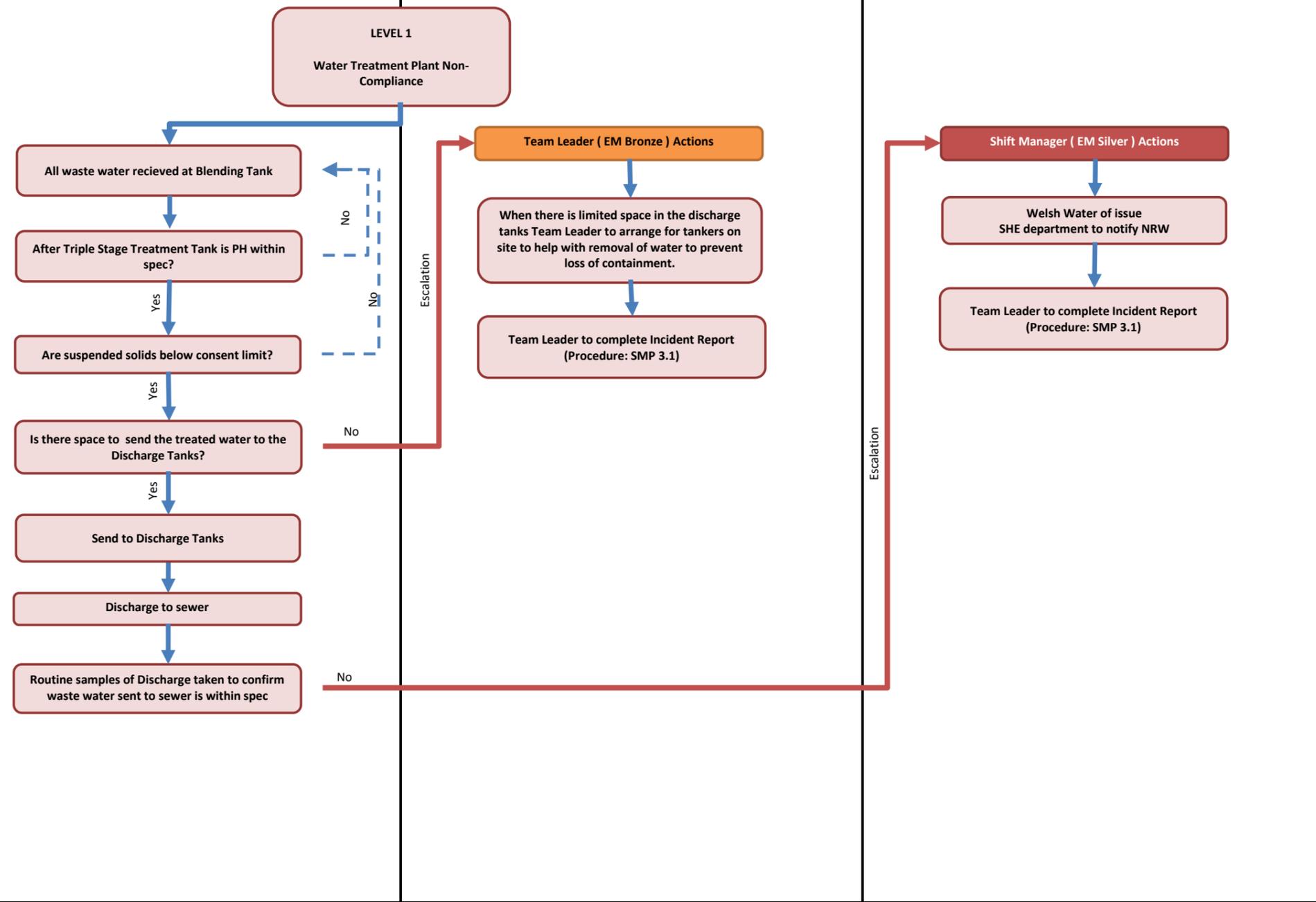
The Met Office website is an essential air monitoring system to monitor the impact of the fire smoke plume on the local community.

In the event of a major fire on site or an abnormal release to atmosphere of a hazardous substance the following air quality monitoring measures shall be followed:

1. Initiate the Met Office website.
2. Monitor and record the following information for Emergency Services, the Natural Resources Wales and Health and Safety Executive:
 - @Ambient air temperature;
 - @Wind-Speed and Direction.
3. This information shall be made readily available to the Emergency Services, Natural Resources Wales and Health and Safety Executive as required.
4. During all major incidents involving fire and abnormal emissions to atmosphere The Emergency Control Room shall be responsible for the visual monitoring of air emissions using CCTV.

Abnormal Emissions from Water Treatment

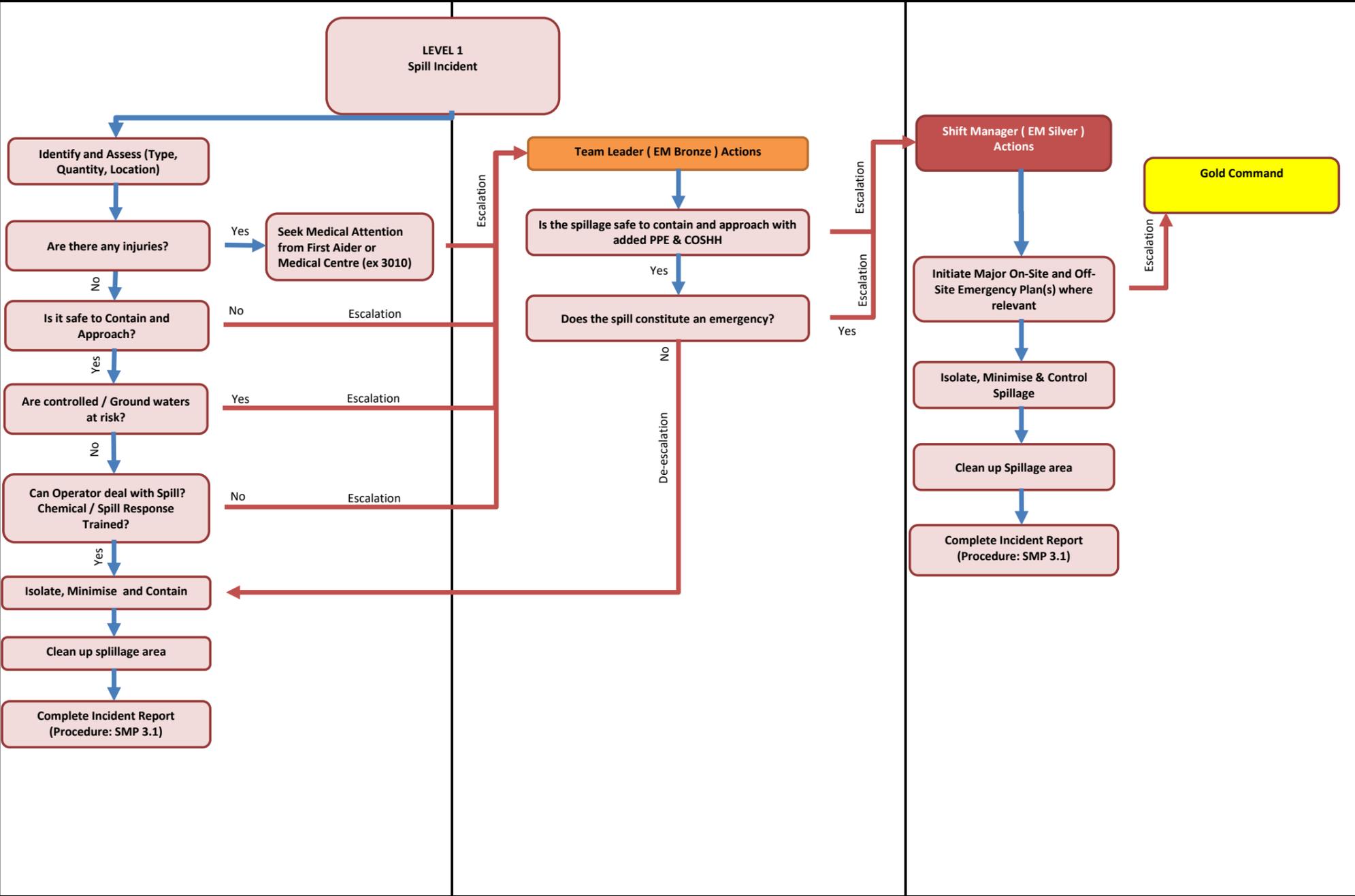
Issue Date:	09/03/2022	 THE ROYAL MINT® THE ORIGINAL MAKER
Emergency Procedure	EP5	
Version	2	
Review Date	09/03/2024	



Emergency Type EP5 - Abnormal Emissions from Water Treatment Plant
Causes: Failure of the Main Sewer Plant to treat and meet the consent conditions of the Environmental Permit. This could be as a result of pH, metals, chlorine, sulphate and cyanide discharges.
Anticipated Consequences
<ul style="list-style-type: none"> • Non-compliance with Environmental Permit. • Potential to cause pollution incident at Welsh Water's main sewer treatment plant.
Actions to be taken by operator / team-leader (listed in order of priority)
<ol style="list-style-type: none"> 1. If pH at discharge point is alarming, the plant operator will investigate and water will be rejected to out of spec line to allow retreatment. 2. If suspended solids are above consent limit, the waste water will be rejected to the out of spec line to allow retreatment. 4. If the routine sewer effluent sample does not meet the sewer consent conditions, the discharge is immediately isolated and the cause investigated and corrected. 5. The Team Leader on shift shall be responsible for completing the incident report (Procedure SMP 3.1) where any non-compliances may have occurred. 6. The SHE Department shall be responsible form notify Natural Resources Wales when applicable. 7. In the unlikely event of a serious breach in our sewer effluent discharge, the RM SILVER COMMANDER shall be immediately notified. 8. The RM SILVER COMMANDER shall be responsible for informing Welsh Water of the breach to the sewer if applicable.

Spillage Response

Issue Date:	09/03/2022	 THE ROYAL MINT® THE ORIGINAL MAKER
Emergency Procedure	EP6	
Version	2	
Review Date	09/03/2024	



Emergency Type EP6 - Spillage Response
Causes: 1. Spillages during loading and unloading of chemicals. 2. Spillage of diesel during the diesel dispensing operation. 3. Failure of automatic liquid level control sensors and devices. 4. Overfilling of tanks. 5. Rupture of pipe work carrying hazardous materials. 6. Rupture of containers holding hazardous chemicals 7. Contaminated firewater from fire fighting activities
Anticipated Consequences
Potentially polluting liquids entering storm water drainage system and polluting the local river.
1. If safe to do so seal off storm drains with drain mats from spill kits. • COMAH area activate penstock systems and nominate someone to manually check they are shut. 2. Inform Security Control Room (3333) to put them on Stand-by. 3. Contain spillage with absorbent booms/socks from spill kits 4. If safe to do so quickly stem source of liquid. 5. If spillage has already entered the drain, block off drain outlet discharge to the river. 6. Check local ductwork to ensure spillage has not entered duct. 7. Utilise spill response trailer if required. 8. Contact relevant Departmental Manager and Environmental Manager 9. Use diesel pump to empty liquid from drains / ductwork into IBC, flush drain / ductwork with clean water and transfer wash water with diesel pump to IBC. 10. If acceptable, discharge contents of IBC to main effluent treatment plant. 11. Where additional spill response support is required, call out numbers available via Water Treatment Plant 12. Clean up spillage. 13. Assess cause and take action to prevent repeat. 14. Complete incident report

Loss of Material to Ground

Issue Date: 09/03/2022

Emergency Procedure EP7

Version 2

Review Date 09/03/2024



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Emergency Type EP7 - Loss of Material to Ground

Causes:

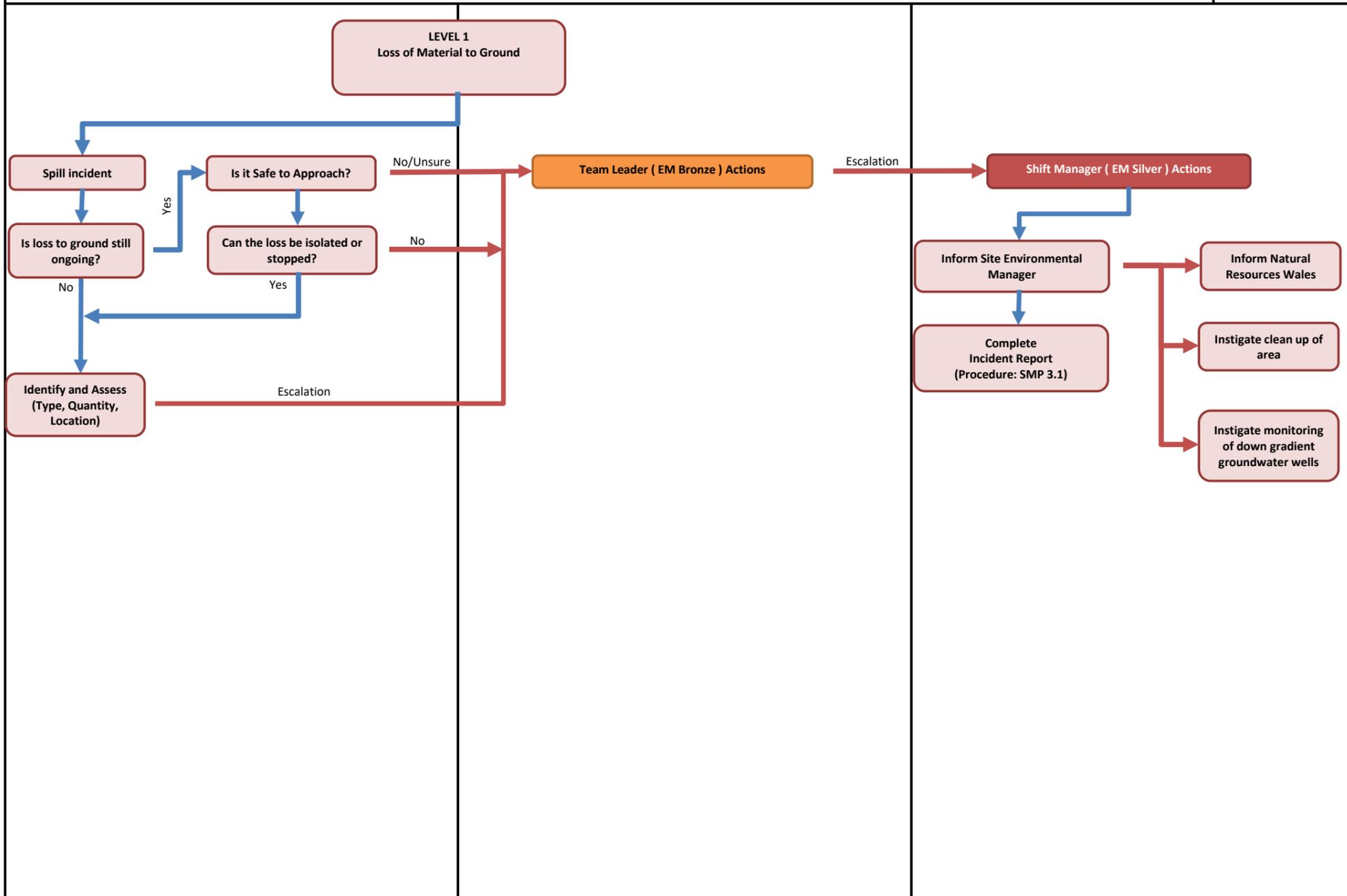
1. Spillages of chemicals to ground
2. Integrity breach of secondary containment bund
3. Integrity breach of below ground pipe work carrying hazardous chemicals

Anticipated Consequences

- Breach in Environmental Permit consent conditions.
- Contamination of ground and groundwater.
- Pollution to local river via groundwater pollution.
- Contaminated land requiring remediation.

Actions to be taken by operator / team-leader (listed in order of priority)

1. If safe do so isolate source of release.
2. Contain spillage with absorbent booms/socks from spill kits.
3. Identify & assess the type and quantity of material released to ground.
4. Report loss immediately to Team Leader on shift and inform Security Control Room to be on standby.
5. Inform Environmental Manager who shall be responsible for informing Natural Resources Wales where applicable.
6. Team Leader to instigate clean-up of ground.
7. Dispose of all waste generated from the clean-up operation in accordance with waste disposal procedures.
8. Site Environmental Manager to instigate monitoring of down gradient groundwater wells where applicable.
9. Team Leader to complete incident report, (Procedure SMP 3.1) ensuring that all known facts leading up to the incident and during the incident have been documented. Recommendation at this stage could well be that a more detailed in depth Special Investigation be instigated.



Natural Gas Leak

Issue Date: 09/03/2022

Emergency Procedure EP7

Version 2

Review Date 09/03/2024



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LEVEL 1 Natural Gas Leak

Natural gas leak reported and/or A2 gas alarm sounds in Plant Areas, Evacuation started.

Isolate likely supply (if safe using gas monitors) and identify and assess

Are there any injuries?

Yes

Seek medical Attention from First Aider or Medical Centre (3010)

No

Escalation

Team Leader (EM Bronze) Actions

Follow SR 179 :- Identification of Natural Gas Leaks

Inform Security Control Room of ongoing incident (3333)

Manage Evacuation Process and safely monitor incident locally.

Complete Incident Report (Procedure: SMP 3.1)

Escalation

Shift Manager (EM Silver) Actions

Follow SR 179 :- Identification of Natural Gas Leaks

Contact National Grid / Wales & West Utilities to explain situation and/or request assistance

Contact Fire Service if appropriate

Initiate Major on site emergency plan

National Grid to carry out isolations and repairs and give all clear

Once incident is over and area safe. Complete Incident Report (Procedure: SMP 3.1)

Gold Command

Emergency Type
EP7 - Loss of Material to Ground

Causes:

1. Pipe work leak.
2. Pipe work fracture.

Anticipated Consequences

- Potential to cause a major fire/explosion on site.
- Major fire could involve chemicals, which could lead to a major environmental impact i.e. discharges to air and water.

Actions to be taken by operator / team-leader
(listed in order of priority)

1. Release of natural gas reported or A2 alarm in AP&P/CP3.
2. Evacuate area and affected buildings safely
3. Identify and assess location.
4. If there are any injuries seek medical attention from first aider or medical centre (ex 3010).
5. Fixed gas monitors exist (BPAC/AP&P/CP3). Isolate if levels fall below A1 alarm.
6. Immediately inform Security Control Room (3333) and RM SILVER COMMANDER or equivalent.
7. RM SILVER COMMANDER to call out National Grid and liaise with them when on site.
8. RM SILVER COMMANDER to Inform Fire and Rescue Service (if appropriate) via Security Control Room.
9. National Grid to isolate and repair and give 'All Clear'.
10. Initiate major on site emergency plan if appropriate.
11. RM SILVER COMMANDER or equivalent to complete Incident Report

Storm Water Containment System

Issue Date: 09/03/2022

Emergency Procedure EP9

Version 2

Review Date 09/03/2024



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Emergency Type EP9 - Storm Water Containment System

Causes:

1. Failure of conductivity probe and pH probe to detect contaminated storm water.
2. Failure to respond to alarm conditions.
3. Failure to close outlet in the event of alarm conditions.

Anticipated Consequences

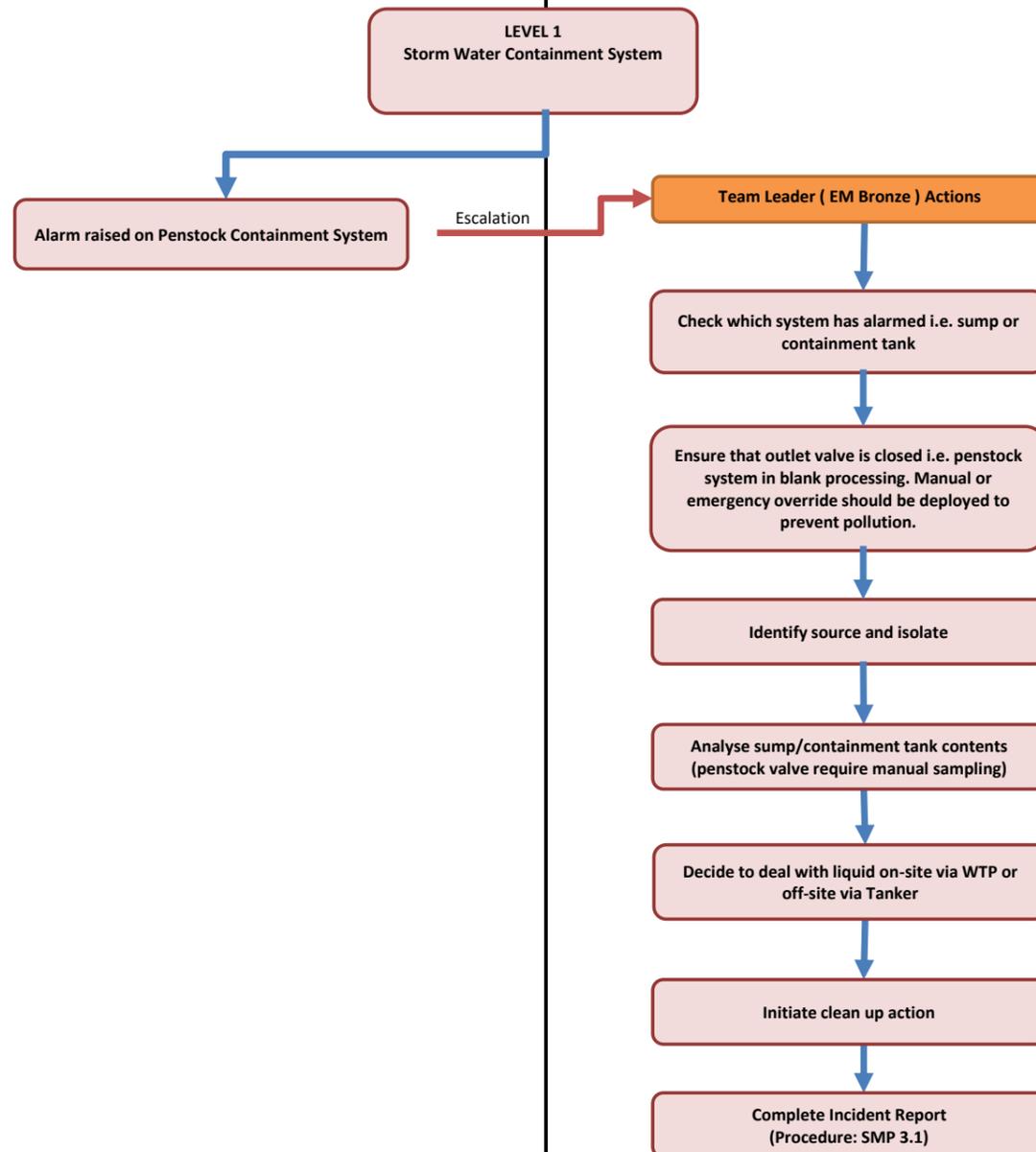
- Contaminated storm water could reach the River Ely and cause pollution.
- Breach in Environmental Permit consent conditions.
- Abnormal emissions could give rise to local ground contamination on site and immediate vicinity off-site.

Actions to be taken by operator / team-leader (listed in order of priority)

1. Alarm raised on Penstock Containment System.
2. The RM Bronze Commander shall be informed.
3. Check which system has alarmed i.e. sump or containment tank.
4. Ensure that the containment system outlet valve is closed. This is the penstock system in blank processing only. The valves of the penstock are usually closed and only release when the contents of the sump are within specification of pH and conductivity. In an incident either manual or emergency override should also be deployed to prevent pollution to the environment.
5. Identify cause of alarm (spillage) and isolate.
6. Analyse sump / containment tank contents. The sump is the chamber associated with the penstock valve and requires manual sampling.
7. Decide whether to deal with liquid on or off-site.
8. Initiate clean up action.
9. Complete Incident Report (Procedure SMP 3.1)

Other Emergency procedures to be considered / used:

- Firewater management EP4
- Spillage response EP8



Suspect Package

Issue Date: 09/03/2022

Emergency Procedure: EP10

Version: 2

Review Date: 09/03/2024



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Emergency Type EP10 - Suspect Package

Causes:

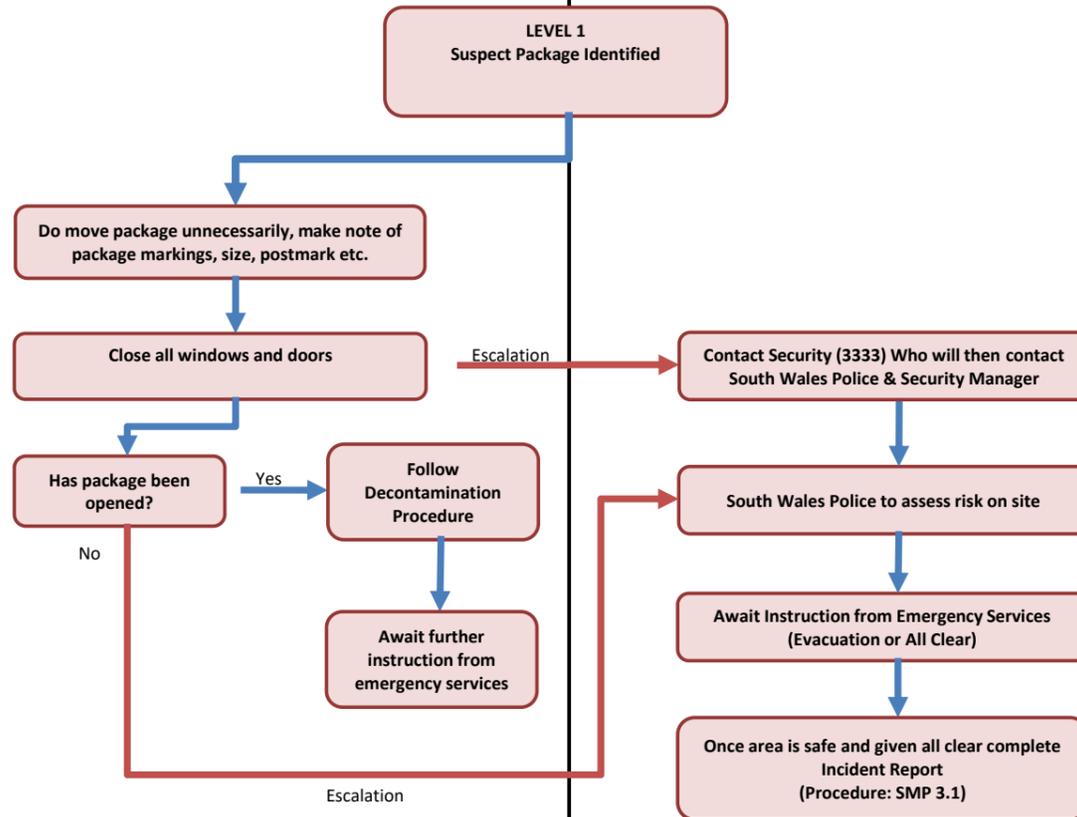
1. May contain hazardous chemicals.
2. May contain biohazard – Anthrax etc.
3. May contain electrical incendiary device.

Anticipated Consequences

- Harm to personnel.
- Harm to personnel and the local community.
- Harm to personnel and buildings.

Actions to be taken by operator / team-leader (listed in order of priority)

1. Suspicious package identified.
2. Make note of package markings, size, postmark etc.
3. Call Security Control Room on 3333.
4. Close all windows and doors.
5. If package not opened, carry out procedure as follows:
 - Await further instructions from Security.
 - Complete incident report (Procedure SMP3.1)
6. If package opened, treat as an emergency. The Security Control Room shall contact the following:
 - Emergency Services where applicable
 - South Wales Police
 - Head of Security
7. Follow Decontamination Procedure:
 - Remove contaminated items of clothing and place in sealed plastic bag.
 - Stay within room until Emergency Services arrive and await instructions.
 - Complete incident report (Procedure SMP 3.1).



Bomb Threat Warning

Issue Date: 09/03/2022

Emergency Procedure: EP11

Version: 2

Review Date: 09/03/2024



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Emergency Type
EP11 - Bomb Threat Warning

Causes:

1. Bomb threat warning via telephone/mobile phone

Anticipated Consequences

- Potential harm to personnel and the local community.
- Potential fire risk and harm to personnel and the environment.

Actions to be taken by operator / team-leader
(listed in order of priority)

1. Try to keep the caller in order to gain further information, particularly in relation to the device and the time it may be due to explode or ignite.
2. Listen for:
 - a) Pronounced accent or speech impediments in the caller's voice;
 - b) Background noise;
 - c) Any sounds which may indicate whether or not the call is being made from a private, public or establishment telephone.
3. Record all relevant information on proforma. Officers should bear in mind that all information appertaining to a bomb warning telephone call, must be carefully and accurately recorded as such information may be of vital evidential value during any follow up enquiries. It must also be borne in mind that the making of a bomb hoax call is a criminal offence.
4. Contact Security Control Room as soon as possible to report threat.
5. Security Control Room to contact South Wales Police.
6. Await further instructions from South Wales Police.
7. Await for 'All Clear' from South Wales Police.
8. Security to complete incident report.

LEVEL 1
Receipt of Bomb Warning to site

Try to keep the caller talking in order to gain further information

Listen to:
a) Pronounced accent or speech impediments in caller's voice;
b) Background noises;
c) Any sounds which may indicate whether the call is being made from a private, public or establishment telephone.

Record all relevant information

Complete bomb warning proforma

Escalation

Contact Security (3333) who will Initiate Emergency Plan

Security to contact South Wales Police

Await Instruction from Emergency Services (Evacuation or All Clear)

Once area is safe and given all clear complete Incident Report (Procedure: SMP 3.1)

Oxy- acetylene cylinder incident

Issue Date: 09/03/2022

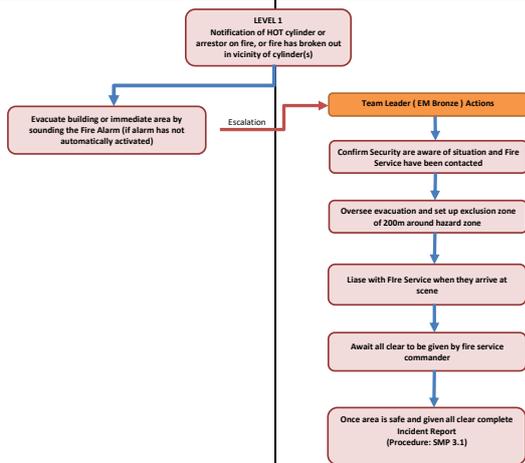
Emergency Procedure: EP12

Version: V1.0

Review Date: 09/03/2024



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Emergency Type
EP12 - Oxy- acetylene cylinder incident

Causes:

- 1. Faulty cylinder

Anticipated Consequences

- Potential harm to personnel and the local community.
- Potential fire risk and harm to personnel and the environment.

Actions to be taken by operator / team-leader
(listed in order of priority)