Tata Steel Strip Products UK

Safety, Health & Environment
Port Talbot Works

Steelworks Air Quality Management Plan

Version	Date	Comment
1	May 2010	
2	28/09/2011	Annual review
3	04/10/2012	Annual review
4	28/03/2013	Revised to include timeline for AQMP audit completion
5	10/12/2013	Annual review
6	27/01/2014	Revised to include amended timeline for the circulation of breach day investigation reports
7	27/02/2015	Revised to include updates to Section 6 – Monitoring and Responding to Dust Fallout in Port Talbot
8	22/02/2016	Annual Review
9	28/02/2017	Annual Review
10	08/04/2019	Annual Review
11	16/01/2020	Annual Review
12	27/08/2021	Annual Review, reorganisation and inclusion of new triggers for the risk of fugitive dust emissions in Port Talbot
12	27/10/2021	Resubmitted incorporating builds from NRW
13	10/03/2023	Annual Review and inclusion of other Air Quality Daily Management topics

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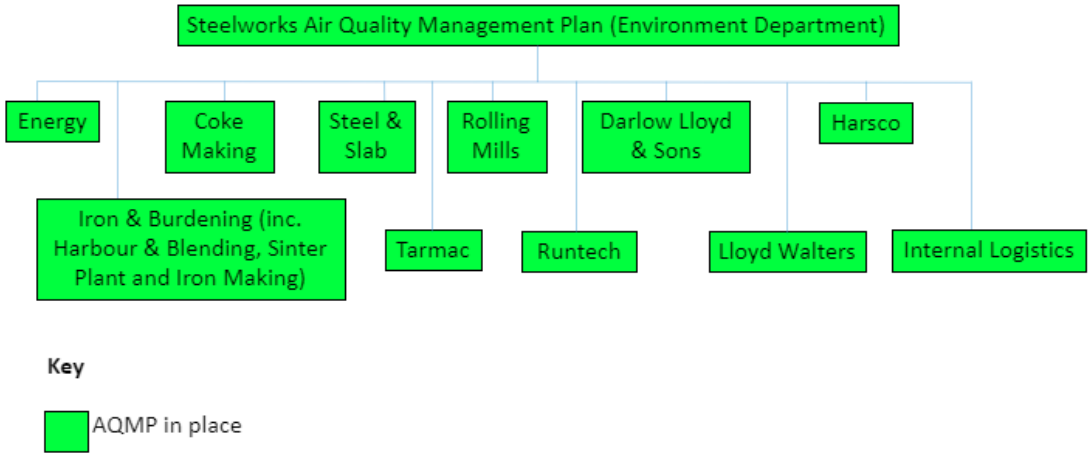
1. Introduction

Purpose

The purpose of this Air Quality Management Plan (AQMP) is to describe and facilitate the implementation of measures taken by the Steelworks to manage air quality, limit potential atmospheric emissions and respond to air quality alerts regarding PM_{10} and fugitive dust emissions. This AQMP also documents key air quality daily management processes (monitoring, communication action implementation and feedback) associated with the following; dust deposition, CCTV, permitted release points (continuous and discontinuous monitoring), environmentally critical equipment (ECE) and road, stockyard and stockpile management. This AQMP (and associated and linked documentation, such as Works Area and key contractor AQMPs and other relevant Environmental Management System procedures) is considered an Emissions Management Plan for the purposes of Section 3.7 of the Tata Steel UK Limited Permit BL7108IM. This is the overarching plan for the Steelworks. Each Works Area and key contractor are also required to have local plans, which feed into this high level plan as shown by Figure 1.

Figure 1: Air Quality Management Plan Organogram



The Tata Steel Works Area AQMPs can be found in the Document Management System (DMS) for the works area in question or by requesting from the area Fire & Environment Manager (document owner).

The Key Contractor AQMPs can be found here > Key Contractor AQMPs

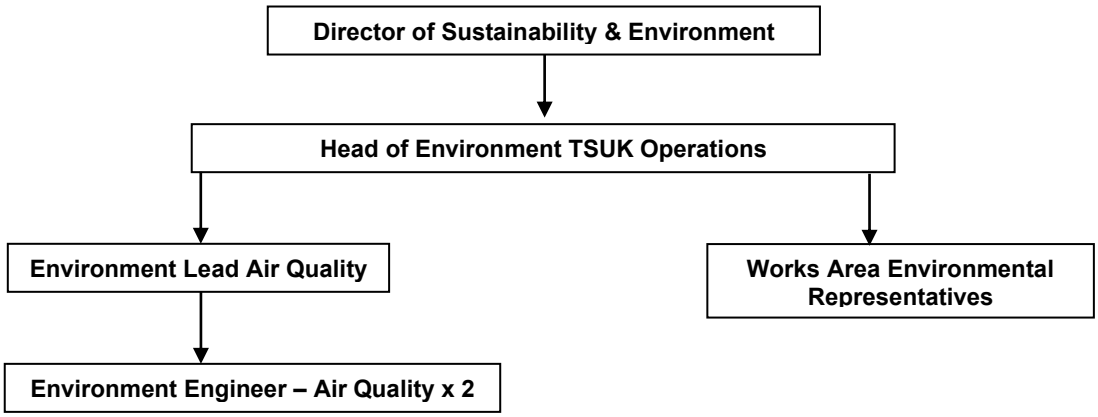
Responsibility

The Director of Sustainability & Environment is required to ensure that a suitable resource is provided to enable the effective implementation of the Steelworks Air Quality Management Plan.

The Head of Environment TSUK Operations is responsible for providing resource for the effective implementation of Works area and Key Contractor Air Quality Management Plans (in conjunction with relevant Works Manager or Contractor Manager).

The Environment Lead Air Quality is responsible for ensuring that appropriate support is provided to Works Areas and key contractors to enable the effective implementation of their Air Quality Management Plans and is also responsible for ensuring that compliance with the plans is audited as part of an agreed auditing schedule.

Figure 2: Organisational Chart



A full list of Steelworks AQMP Tasks and Responsibilities can be found in Appendix 1

External Communication

Environment Operations is the key point of contact at the Steelworks for communication with external bodies (e.g. Natural Resources Wales (NRW), Welsh Government (WG), Neath Port Talbot County Borough Council (NPTCBC)) on Air Quality. Other Departments should only communicate with external bodies on Air Quality, if Environment Operations are made aware and are involved beforehand. Documentation relating to Air Quality should only be provided to external bodies following review and agreement from Environment Operations.

Works Areas and key contractors are required to communicate any incidents that may have an impact on Air Quality (e.g. uncontrolled releases of dust, failure of abatement systems) to Environment Operations. If reportable, Environment Operations will notify such issues to NRW. The criteria for informing and notifying NRW (under EPR) are outlined in Section 4.3, 4.4 and Schedule 5 of the installation permit.

All incidents that may have an impact on air quality are to be recorded via the Salus System, investigated and closed out as per the LFE (Learning From Events) Standard.

2. Monitoring

There is a requirement to monitor and respond to elevated PM_{10} concentrations and the risk of fugitive dust emissions in Port Talbot. Monitoring and response requirements are outlined below.

PM_{10} Concentrations

The PM_{10} & Fugitive Dust Communication Guidance Procedure outlines the process to be followed to monitor PM_{10} concentrations at the AURN (Automatic Urban Rural Network) and other offsite monitors throughout the day and determine the risk of a localised PM_{10} Breach at the AURN.

In the event that data is unavailable for the AURN monitor, Environment Operations with determine the risk of a localised breach using data from the Prince Street monitor (NPTCBC monitor network) and contact NPTCBC to understand the cause and likely duration of the issue with the AURN monitor. If data is unavailable for the Prince Street monitor, data from the Penrhyn monitor (Tata Steel on-site monitor network) will be used. The location of the Penrhyn monitor can be found in Appendix 9. Environment Operations will monitor the level of risk throughout the day and will issue an update should the level of risk change.

NB: A breach of the day mean PM_{10} objective is only recorded if the daily mean is in excess of 50µg/m^3. This can be determined by downloading the daily mean value for the day in question from Airquality.gov.wales - Data Selector which is rounded to the nearest whole number. A daily mean of 50µg/m^3 or less will not be recorded as a breach, whereas a daily mean of 51µg/m^3 or more will be recorded as a breach.

NB: With regards to the percentage data capture required for a day to be determined as a breach day, if when downloading the daily mean value as described above there is no value provided (i.e. a reading of 'nodata' for the day in question), it can be concluded that there is insufficient data capture to determine a breach.

NB: In many instances, data has been uploaded to airquality.gov.wales retrospectively. In order to avoid a situation where backfilled data has unknowingly caused a previously 'non breach day' to become a breach day, a regular check should be carried out by Environment Operations (by downloading the daily mean data) of the number of breach days recorded calendar year to date to monitor for discrepancies (especially when there are known data gaps). The Tata Steel UK Limited Permit BL7108IM requires all breaches at the AURN monitor (whether they be attributed to localised or trans-boundary sources) to be investigated. Refer to 5. Reporting for the investigation process to be followed in the event of a breach at the AURN and in the event of a 'retrospective breach' where data is made available after the event).

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Risk of Fugitive Dust Emissions

Tata Steel have an network of site boundary monitors, measuring Total Suspended Particulate (TSP) and PM_{100} concentrations, which are used as an indication for the potential of fugitive dust in Port Talbot as of Q1 FY22 as described in the PM_{10} & Fugitive Dust Communication Guidance Procedure (also outlined briefly below as it is a relatively new process). The locations of the site boundary monitors can be found in Appendix 10.

Fugitive Dust Medium Risk Alerts

Following two to four consecutive elevated hourly concentrations being recorded at one or multiple boundary monitors within usual office hours, an investigation will commence as soon as possible, potentially resulting in the issuing of a 'Fugitive Dust Medium Risk Alert'.

A Medium Alert will be issued when the following weather conditions are forecast for the remainder of the day the alert was triggered on and until at least 8:30am the following day:

- Dry conditions
- Temperature in excess of 15ºC
- The prevailing wind direction is forecast to be towards town (Margam and/or Taibach and/or Aberavon)

A Medium Alert will not be issued in the following circumstances

- The boundary monitor(s) in question is impacted from off-site sources (NB: Medium and High PM_{10} Alerts will be issued regardless of wind direction
- A Medium or High PM_{10} Alert has already been issued

Fugitive Dust High Risk Alerts

Following five consecutive elevated hourly concentrations being recorded at one or multiple boundary monitors within usual office hours, an investigation will commence as soon as possible, potentially resulting in the issuing of a 'Fugitive Dust High Risk Alert'.

A High Alert will be issued when the following weather conditions are forecast for the remainder of the day the alert was triggered on and until at least 8:30am the following day:

- Dry conditions
- Temperature in excess of 15ºC
- The prevailing wind direction is forecast to be towards town (Margam and/or Taibach and/or Aberavon)

A High Alert will not be issued in the following circumstances

- The boundary monitor(s) in question is impacted from off-site sources (NB: Medium and High PM_{10} Alerts will be issued regardless of wind direction
- A High PM_{10} Alert has already been issued

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Aloa_ADA Deposition

Daily rate of deposition data (mg/m^2/day) is reviewed by Environment Operations prior to the Environment DSUM for the previous 24 hours (or over the weekend period when reviewing on a Monday morning). The data is validated by Aloatec each week day morning by 09:15 as per the SLA agreement. The daily rate of deposition data is reviewed against targets (set as an average of all available data from date of installation, updated at the end of each financial year) and assigned a RAG status in the DSUM document – green if under target and red if over target. A view of potential sources (via windrose analysis) is also provided in the Environment DSUM.

Data from the Aloa_ADA Deposition sensors is accessible via the following link: Aloatec Aloa_ADA Deposition Sensor Data

The locations of the three Aloa_ADA Deposition Sensors can be seen in Appendix 9.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

CCTV Monitoring (Aloa_Detect)

Validation of the Aloa_Detect CCTV cameras takes place before the Compliance DSUM to confirm the number of Level 2 & Level 3 graded emissions detected in the previous day as per the AloaDetect Navigation Training.pptx pack. NB: works areas also have responsibility for reviewing and validating emissions detected by the Aloa_Detect system as per the Aloa_Detect Navigation Training pack.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Continuous Emission Monitoring CEMs (Point Sources)

CEMs data considering monitoring uncertainty (Uncertainty in assessing compliance with emission limits.docx) is reviewed before the daily Compliance DSUM to determine if there have been any breaches of ELVs (Emission Limit Values) at the permitted release points or data losses in the past 24 hours and if any of the permitted release points are currently recording elevated running means or data losses on the day in question.

NB: A minimum of 6 hours data capture is required per day (00:00 – 23:59) for a valid daily average as agreed with NRW. In the event that 6 hours data capture is not obtained, a Schedule 5 notification to NRW will be required as per the Regulatory Obligation Training.pptx Standard.

The locations of Port Talbot CEM devices are identified on the following schematic: 20211102 G002 Monitor Layout A3.pdf

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Discontinuous Emission (Spot) Monitoring (Point Sources)

Tata Steel UK operates an in-house stack emissions sampling team based at Sheffield and Port Talbot. The team currently consists of the Environment Lead Monitoring, two Environmental Monitoring Specialists, an Environmental Monitoring Technician and an Environmental Monitoring Apprentice (currently in the process of recruiting a further Technician)

The Environment Lead Monitoring and Monitoring Specialist are qualified to MCERTS Level 2 with the relevant technical endorsements for the different pollutants to be measured. The Monitoring Technician is qualified to MCERTS Level 1 and the apprentice registered as an MCERTS Trainee, working towards Level 1 (Environment Agency Guidance - MCERTS: performance standard for manual stack emission monitoring organisations).

The team based in Sheffield is accredited by the United Kingdom Accreditation Service (UKAS) to ISO 17025 for all pollutants to be measured, including the calibration of CEMs following standard BS EN 14181, with the accreditation planned to be extended to the Port Talbot based team. The monitoring methods used are listed in Environment Agency Guidance - Monitoring stack emissions: techniques and standards for periodic monitoring and meet the requirements of the MCERTS performance standard.

A schedule for sampling is produced at the start of the financial year, including spot sampling as required by the Tata Steel UK Limited Permit BL7108IM and calibration of CEMs. This plan also includes service visits and functional tests by the CEM OEMs aligned to the planned calibrations. The schedule is accessible to all stakeholders and accessible via the following link: Sampling Schedule.

The locations of the Port Talbot permitted release points are identified on the following schematic: Site Plan of Environmental Release Points.pdf.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Air Quality Environmentally Critical Equipment (ECE)

The process of monitoring the status of Air Quality ECE (weekly point in time review of operational status) is described in the Identification and Management of Environmentally Critical Equipment.docx Procedure. Examples of Air Quality ECE items include monitoring devices (CEMs and ambient), dust extraction systems and dust suppression systems.

The locations of key Air Quality ECE are identified on the following schematic: G020 Priority 1 Air Quality ECE.pdf

Emerging ECE issues are discussed and actioned in the Environment DSUM and ECE Register review status is reviewed and actioned in the Environment WSUM.

Wheel Washers

The operational and sensor communication (which identifies usage) status of site wheel washers are reviewed and issues actioned in the Environment DSUM. The locations and operational status of the wheel washers are available via the following link: Wheel Washers Operational Status Pi Web.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Road Management

The requirement for site water bowser deployment is monitored during office hours and the following are conditions which will be considered:

- Dry conditions
- Temperature in excess of 15ºC
- The prevailing wind direction is forecast to be towards town (Margam and/or Taibach and/or Aberavon)
- Observations made or Salus Form raised related to dry road conditions

However, it should be noted that production services suppliers are empowered to deploy site water bowsers as required. The requirement for the deployment of site water bowsers during the weekend period will be monitored each Friday.

The Water Bowser Routes and Fill Point Map can be found in Appendix 8.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Plant-i GPS for Bowsers and Sweepers

The process for monitoring water bowser and road sweeper deployment in the previous 24 hours (or over the weekend period when reviewing on a Monday morning) is described in the PM_{10} & Fugitive Dust Communication Guidance Procedure.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

On-Vehicle Measurement

An ambient particulate monitor (Air Quality Monitoring Station Met One ES-642) along with vehicle telematics/GPS data uplink has recently been installed on Environment Operations 4x4 vehicle with the aim of monitoring and measuring site road condition and pin-pointing problem areas for road dust. In the event of a High Alert Site Drive being triggered on the previous day, prior to the Environment DSUM, Environment Operations will review the On-Vehicle Measurement Web Interface and review the daily automatically generated report (see 3. Communication). The On-Vehicle Measurement Web Interface offers the following functionality:

- Date/time data selector.
- Data visualisation – Heat-map style.
- Data access and download

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

Stock Yard and Stockpile Management

Burdening Stockyard and stockpile condition is monitored via a daily inspection by Production Services Supplier Lloyd Walters Industrial Services (LWIS) prior to the Harbour & Blending

DSUM Meeting. In addition, monitoring of stockpile condition in the Coal Stockyards now takes place by Morfa Coke Ovens personnel.

Refer to 3. Communication and 4. Action Implementation and Feedback for continuation of process.

3. Communication

PM_{10} Automated Alerts

To facilitate compliance with the daily mean PM_{10} objective, Works Areas and key contractors shall refer to and act upon automated alerts (in the form of emails from 'Envirosuite – Alerts' alerts-no-reply@envirosuite.com). Following the cease of automatically generated alerts from NPTCBC to key personnel, Tata Steel has developed a system of automated alerts with a third party (Envirosuite). These automated alerts should be used to support an appropriate response to elevated PM_{10} concentrations at the AURN monitor in Port Talbot.

Personnel should contact Environment Operations, to be added or removed from the automated alert circulation list.

Key personnel will receive an automated alert in the event of the following trigger being met:

- **Medium Risk:** The running mean PM_{10} concentration (minus the transboundary influence) at the AURN monitor has reached 35µg/m^3

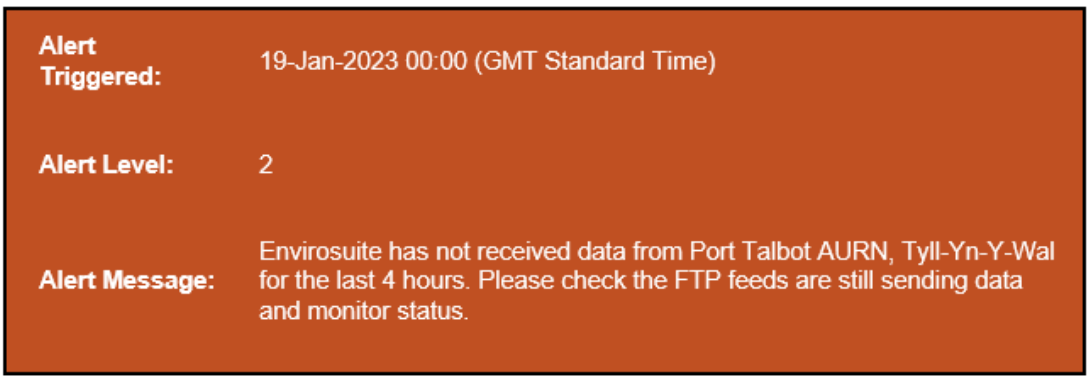
Alert Triggered:	28-Sep-2021 04:00 (GMT Standard Time)
Alert Level:	2
Alert Message:	The current risk of a localised breach at the AURN monitor is MEDIUM (running mean minus transboundary influence >35ug/m3). Please ensure any emissions observed or Environmentally Critical Equipment (ECE) issues are reported via the Environmental Incident Form (EIF) system.

- **High Risk:** The running mean PM_{10} concentration (minus the transboundary influence) at the AURN monitor has reached 45µg/m^3

Alert Triggered:	01-Oct-2021 01:00 (GMT Standard Time)
Alert Level:	3
Alert Message:	The current risk of a localised breach at the AURN monitor is HIGH (running mean minus transboundary influence >45ug/m3). Please ensure agreed High Alert Actions are in place and those responsible provide feedback to the Environment Department via the standard feedback form cascaded.

Stakeholders was also receive an automated alert in the event that data is no longer being received from the AURN Monitor.

Example below:



The above Medium and High risk automated alerts (previously covering evenings and weekends) have been extended to cover office hours also.

However, manual communications will resume were the situation to arise that the AURN monitor is at risk of exceeding the annual PM_{10} objective of 35 breach days recorded in a calendar year i.e. the AURN monitor has entered the Short Term Action Plan (STAP) 'red' zone for pro-rata breaches. The process of completing Medium and High risk manual PM_{10} communications is described in the PM_{10} & Fugitive Dust Communication Guidance Procedure and examples of Medium and High risk manual PM_{10} communications can be found in Appendix 2.

NB: Regardless of the pro-rata breach position at the AURN monitor, Environment Operations will forward on automated alerts to follow up with stakeholders to emphasise key messages as appropriate and the actions to be taken as described in Section 4. Environment Operations will also provide appropriate updates e.g. if the running mean PM_{10} concentration is still at a high alert level at the end of the working day, once again emphasising key messages as appropriate and the actions to be taken as described in Section 4.

Weekly performance data is reviewed in the Environment WSUM and communicated to a wider stakeholder group via the Environment Operations Weekly Report.

Refer to 4. Action Implementation and Feedback for continuation of process.

Fugitive Dust Medium and High Risk Alert Communications

The communication will state the risk of fugitive dust emissions in the local community and the response that should be made by key stakeholders. Environment Operations will monitor the level of risk throughout the day and will issue an update should the level of risk increase.

The Fugitive Dust Medium and High Risk Alerts will take the form of a one page email communication which will outline the potential sources within the Steelworks boundary (e.g. Works Areas or Contractor designated areas). The process of communicating the increased risk of fugitive dust emissions is outlined in the PM_{10} & Fugitive Dust Communication Guidance Procedure.

The decision whether to issue communications on the weekend and Bank Holidays will be reviewed by Environment Operations periodically.

Examples of the Fugitive Dust Medium and High Risk Alert templates can be found in Appendix 3 and Appendix 4 respectively.

Refer to 4. Action Implementation and Feedback for continuation of process.

Aloa_ADA Deposition

Daily rate of deposition data (mg/m^2/day), a view of potential sources (via windrose analysis) and the assigned RAG status (green if under target and red if over target) is communicated to the rest of Environment Operations by the Environment Operations Air Quality Team in the Environment DSUM. Weekly performance data is reviewed in the Environment WSUM and communicated to a wider stakeholder group via the Environment Operations Weekly Report.

CCTV Monitoring (Aloa_Detect)

The number of Level 2 & Level 3 graded emissions detected in the previous day are reported in the Compliance DSUM and the relevant Works Area point of contact raises in the area DSUMs. In addition, automated alerts have been developed to notify key stakeholders of Level 2 & Level 3 emissions as they occur.

Examples are included below:

Alert Triggered:	17-Jan-2023 14:55 (GMT Standard Time)
Alert Level:	2
Alert Message:	A potential Level 2 emission has been detected by the Blast Furnace 5 Aloa_Detect camera. Can those responsible please review the Aloa_Detect System (http://ptbees01.syseng.internal/detect/lancement.php?quadra=true) and raise a Salus Form (https://uk.sheassure.net/salus/Incident/IncidentEvent/Page/1) to investigate

Alert Triggered:	17-Jan-2023 10:00 (GMT Standard Time)
Alert Level:	3
Alert Message:	A potential Level 3 emission has been detected by the Morfa Coke Ovens Aloa_Detect camera. Can those responsible please review the Aloa_Detect System (http://ptbees01.syseng.internal/detect/lancement.php?quadra=true) and raise a Salus Form (https://uk.sheassure.net/salus/Incident/IncidentEvent/Page/1) to investigate

Weekly performance data is reviewed in the Environment WSUM and communicated to a wider stakeholder group via the Environment Operations Weekly Report.

Refer to 4. Action Implementation and Feedback for continuation of process.

Continuous Emission Monitoring CEMs (Point Sources)

Breaches, data losses and elevated running means are reported in the Compliance DSUM and the relevant Works Area point of contact raises in the area DSUMs. In addition, automated alerts have been developed to notify key stakeholders of elevated, running means, potential breaches of ELVs and data losses.

Examples are included below:

Elevated Running Means:

Alert Level 1 – Approach to Limit

Alert Triggered:	10-Jan-2023 11:00 (GMT Standard Time)
Alert Level:	1
Alert Message:	Approach to Limit - The daily average particulate reading for the Sinter Plant Waste Gas Stack is within 30% of the permitted limit concentration (daily average limit of 40mg/m3) - please investigate

Alert Level 2 – Exceeding Limit

Alert Triggered:	10-Jan-2023 10:00 (GMT Standard Time)
Alert Level:	2
Alert Message:	Exceeding Limit - The daily average particulate reading for the Sinter Plant Waste Gas Stack is currently exceeding the permitted concentration (daily average limit of 40 mg/m3) - please investigate

Potential Breaches of ELV:

Alert Level 3 – Potential Breach Recorded

Alert Triggered:	09-Jan-2023 00:00 (GMT Standard Time)
Alert Level:	3
Alert Message:	Potential Breach Recorded - The Sinter Plant Waste Gas Stack potentially exceeded the permitted daily average particulate concentration yesterday (daily average limit of 40 mg/m3) - please complete investigation via Salus System: https://uk.sheassure.net/salus/Incident/IncidentEvent/Page/1

Data Losses:

Alert Level 3 – Stale Data

Alert Triggered:	12-Nov-2022 00:00 (GMT Standard Time)
Alert Level:	3
Alert Message:	Envirosuite has not received data from CEMS - Secondary Fume Extraction - Centre, CEMS - Secondary Fume Extraction - North, CEMS - Secondary Fume Extraction - South for the last 2 hours. Please check monitor status.

Weekly performance data is reviewed in the Environment WSUM and communicated to a wider stakeholder group via the Environment Operations Weekly Report.

Refer to 4. Action Implementation and Feedback for continuation of process.

Discontinuous Emission (Spot) Monitoring (Point Sources)

Spot monitoring results are communicated to all stakeholders by Environment Operations Stack Monitoring Team (including Environment Operations and relevant works area) via email with compliance status explicitly stated in the body of the email (example below).

Subject: FBD 1 & 2 Particulate Results Summary [Sample Dates: No.1: 03.11.2022, No.2: 04.11.2022]

Good Afternoon All,

Please find attached a summary of results from the recent particulate sampling on the FBD 1 & 2 [Full reports are available on request].

Note: The average results are NOT within the permitted limits. Can those responsible please raise a Salus form for this non-compliance (Salus Link) and commence a Level 2 investigation.

Weekly performance data is reviewed in the Environment WSUM and communicated to a wider stakeholder group via the Environment Operations Weekly Report.

Refer to 4. Action Implementation and Feedback for continuation of process.

Air Quality Environmentally Critical Equipment (ECE)

In the event that the required weekly review of area ECE registers has not been completed, Environment Operations will escalate to relevant stakeholders as set out in the Identification and Management of Environmentally Critical Equipment.docx Procedure.

Weekly performance data is reviewed in the Environment WSUM and communicated to a wider stakeholder group via the Environment Operations Weekly Report.

Wheel Washers

The Production Services Supplier Lloyd Walters Industrial Services (LWIS) are responsible for communicating the operational and communication sensor (which indicates usage) status of each of the site wheel washers each weekday by email following a daily inspection to all relevant stakeholders. The daily report will indicate if a wheel washer is operational, out of service for cleaning or maintenance or has experienced an issue resulting in it being out of service.

Personnel should contact LWIS to be added to the daily report.

Refer to 4. Action Implementation and Feedback for continuation of process.

Road Management

When the conditions described in Section 2 are met, a Road Management Communication will be issued to all relevant stakeholders within office hours, stating the requirement to deploy site water bowsers.

The requirement for the deployment of site water bowsers during the weekend period will be communicated by exception each Friday.

An example of the communication can be found in Appendix 7.

Refer to 4. Action Implementation and Feedback for continuation of process.

Plant-I GPS for Bowsers and Sweepers

Following monitoring of water bowser and road sweeper deployment in the previous 24 hours or over the weekend period, a review will be undertaken as to whether deployment was instructed in line with the 'Road Management' section above. If deployment has not taken place as instructed, Environment Operations will contact the Production Services Supplier in question to understand the reasons why and action as appropriate.

Refer to 4. Action Implementation and Feedback for continuation of process.

On-Vehicle Measurement

A daily automated report is generated from the On-Vehicle Measurement Web Interface which illustrates the route of travel of the 4x4 vehicle in the previous 24 hours, the risk of dust lift off and the particulate concentrations (TSP) recorded along the route in a heat map style.

Personnel should contact Environment Operations to be added to the circulation list of the On-Vehicle Measurement daily automated report. An example of the automated report can be seen in Appendix 11.

Refer to 4. Action Implementation and Feedback for continuation of process.

Stock Yard and Stockpile Management

The outcome of the Burdening Stockyard and stockpile condition monitoring via daily inspection by Production Services Supplier Lloyd Walters Industrial Services (LWIS) is communicated in the Harbour & Blending DSUM Meeting (attended by an Environment Operations representative) and is also circulated by email to all relevant stakeholders. The outcome of the Coal Stockyard stockpile condition monitoring is circulated by email daily to all relevant stakeholders.

The content of the above monitoring reports is reviewed in the Environment DSUM.

Personnel should contact LWIS and Morfa Coke Ovens personnel to be added to the daily reports.

Refer to 4. Action Implementation and Feedback for continuation of process.

4. Action Implementation and Feedback

PM_{10} & Fugitive Dust Emissions

In order to limit potential atmospheric emissions of PM_{10} and fugitive dust, Works Areas and key contractors are required to employ abatement methods for these emissions. Potential sources of PM_{10} and fugitive dust emissions at each Works Area and key contractor site(s), the abatement methods employed and the frequency of abatement are to be summarised in the Works Areas or key contractors local Air Quality Management Plans, in addition to further actions which are to be taken in response to a high alert – 'High Alert Actions'.

Actions that will be implemented by Works Areas and key contractors under each risk scenario for the risk of a localised PM_{10} Breach and risk of fugitive dust are outlined below.

Medium Risk:

On medium risk days, Works Areas and key contractors will undertake the usual day to day checks on visual emissions and emissions of particulates as well as usual checks to ensure that abatement systems are operating as designed. Works Areas and key contractors will take appropriate action to mitigate abnormal emissions or abatement failure should such issues be identified.

Environment Operations will complete site inspections via site monitoring systems prior to Environment Operations DSUM. Any issues will be actioned in the meeting and reported to the works area or contractor in question for a Salus Form(s) to be raised and the emission to be mitigated.

In addition, the communication template will inform recipients of the requirement to report any emissions observed or issues related to abatement systems (ECE) via the Salus System. This feedback (via the Salus system) will be used to inform further action if needed.

High Risk:

On high risk days, Works Areas and key contractors will continue to undertake the actions taken on medium risk days. In addition, an independent check on Environmentally Critical Equipment (ECE) Priority 1 items will be carried out to ensure effective operation and ensure appropriate action is taken to mitigate abnormal emissions or abatement failure should such issues be identified. Further, Works Areas and key contractors will provide feedback to Environment Operations via the standard feedback template (Appendix 5).

NB: If a PM_{10} High Alert is triggered outside of office hours and a breach is avoided, (i.e. daily mean concentration at the end of the day is less than 50µg/m^3) standard feedback will not be required.

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Following a High PM_{10} Alert or High Fugitive Dust Risk Alert, Works Areas and key contractors will put in place the agreed High Alert Actions for the remainder of the day the alert was triggered on and until at least 8.30am the following day, allowing sufficient time for Environment Operations to carry out a review as the continued need for the enactment of High Alert Actions and communicate to the Works Areas and key contractors in question.

In the event that the High Fugitive Dust Risk Alert occurs on a Friday, a review will take place as to whether High Alert Actions will remain in place throughout the weekend period based on forecasted weather conditions.

Confirmation of the enacting of High Alert Actions is required feedback and included on the standard feedback template.

In addition, Environment Operations will complete a site drive during office hours in the event that a High Alert is issued or as soon as possible following the risk level increasing to high from low or medium, aligned to the Site Drive Standard (Appendix 6) and review the On-Vehicle Measurement daily automated report the next morning for the day of the Site Drive. The intention of the site drive to look for evidence of High Alert Actions not being enacted rather than to positively confirm that all High Alert Actions are in place. This is because it is

not possible to verify the enaction of all High Alert Actions from the site drive route due to restricted access.

Environment Operations will also provide appropriate updates, in line with the communication procedures outlined in Section 3 – Communication.

Aloa_ADA Deposition

Samples are collected from the Aloa_ADA Deposition sensors on a regular basis (and sample disks cleaned and replaced), analysed at Harbourside Labs and a comparison is made against a library of samples. In the event that daily targets (described in 2. Monitoring) are doubled, this will be actioned in the Environment DSUM and an individual daily sample collected for analysis.

Data collected by the sensors and analysis results are considered in the fallout complaint investigation process.

Required maintenance carried out on the Aloa_ADA Deposition sensors is recorded in the following log: Aloa_ADA Deposition Sensor Maintenance Log.

CCTV Monitoring (Aloa_Detect and Conventional CCTV)

Works areas are responsible for reviewing and validating emissions detected by the Aloa_Detect system as per the AloaDetect Navigation Training.pptx pack. Level 2 & Level 3 graded emissions are also reported by relevant Works Area point of contact in the area DSUMs for mitigating action to be taken and a Salus form to be raised (if not already) to commence an appropriate investigation (Salus Level 1 Investigation) as per the LFE (Learning From Events) Standard and works area specific instructions in the Aloa_Detect Navigation Training pack. Key stakeholders are also notified via automated alert (see Section 3 – Communication). Feedback received will be discussed and actioned as appropriate in Environment Operations DSUM.

Level 2 and Level 3 graded emissions are to be included in Works Area PM_{10} and Fugitive Dust high alert standard feedback if they coincide with a high alert.

Level 2 and Level 3 graded emissions are considered in the visual emission and fallout complaint investigation processes.

Continuous Emission Monitoring CEMs (Point Sources)

Breaches, data losses and elevated running means are reported by relevant Works Area point of contact in the area DSUMs for mitigating action to be taken and a Salus form to be raised (if not already) to commence an appropriate investigation (Salus Level 2 Investigation) as per the LFE (Learning From Events) Standard. Key stakeholders are also notified via automated alert (see Section 3 – Communication). Feedback received will be discussed and actioned as appropriate in Environment Operations DSUM and breaches of ELVs at the permitted release points will be notified via Schedule 5 to NRW as per the Regulatory Obligation Training.pptx Standard.

NB: A minimum of 6 hours data capture is required per day (00:00 – 23:59) for a valid daily average as agreed with NRW. In the event that 6 hours data capture is not obtained, a Schedule 5 notification to NRW will be required as per the Regulatory Obligation Training.pptx Standard.

Breaches of ELVs are to be included in Works Area PM_{10} and Fugitive Dust high alert standard feedback if they coincide with a high alert and considered in the complaints investigation process.

Discontinuous Emission (Spot) Monitoring (Point Sources)

Breaches of the ELV (communicated via email – example below) require a Salus form to be raised by the works area in question to commence an appropriate investigation (Salus Level 2 Investigation) as per the LFE (Learning From Events) Standard and ensure mitigating actions

are initiated. Options for resampling will be discussed amongst all stakeholders where appropriate. Breaches of ELVs at the permitted release points will be notified via Schedule 5 to NRW as per the Regulatory Obligation Training.pptx Standard.

Breaches of ELVs are to be included in Works Area PM_{10} and Fugitive Dust high alert standard feedback if they coincide with a high alert and considered in the complaints investigation process.

Subject: FBD 1 & 2 Particulate Results Summary [Sample Dates: No.1: 03.11.2022, No.2: 04.11.2022]

Good Afternoon All,

Please find attached a summary of results from the recent particulate sampling on the FBD 1 & 2 [Full reports are available on request].

Note: The average results are NOT within the permitted limits. Can those responsible please raise a Salus form for this non-compliance (Salus Link) and commence a Level 2 investigation.

Air Quality Environmentally Critical Equipment (ECE)

ECE Register asset owners are responsible for carrying out a weekly review of ECE availability, reporting unavailability via the Salus System and making Environment Operations aware of potential permit compliance issues as described in the Identification and Management of Environmentally Critical Equipment.docx Procedure. Unavailability of Priority 1 Air Quality ECE is to be included in Works Area PM_{10} and Fugitive Dust high alert standard feedback if they coincide with a high alert

Wheel Washers

Wheel washer communication sensor and operational issues are discussed and actioned in the Environment DSUM and the relevant works area DSUM meeting.

Road Management and Plant-i GPS for Bowsers and Sweepers

Production services suppliers named on the Road Management Communication are responsible for deploying site water bowsers as instructed by Environment Operations. However, it should be noted that production services suppliers are empowered to deploy site water bowsers as required in the event that local conditions require deployment in the absence of a communication from Environment Operations. The decision of ceasing bowser deployment (for example, in the event of rainfall) is the responsibility of the Area Contract Representatives named on the communication template.

If following a review of the Plant-i system, it is found that deployment has not taken place as instructed, Environment Operations will contact the Production Services Supplier in question to understand the reasons why and action as appropriate.

On- Vehicle Measurement

Although specific actions are being developed following review of data on the On-Vehicle Measurement Web Interface and daily automated report, it is the intention that the information provided will be used in the following ways by Environment Operations:

- To review the existing water bowser and road sweeper route map (Appendix 8) and placement of Wheel Washers
- To use the daily data provided to inform which areas water bowsers and road sweepers are deployed to target high priority areas
- Compare data to the findings from High Alert Site Drives and inform PM_{10} Breach Investigations
- Compare to known movements of bowsers/sweepers (from Plant-I GPS monitoring system)
- Use the data provided as baseline data for future environmental improvement projects.

Stock Yard and Stockpile Management

As LWIS hold the Burdening Environmental Contract, they are responsible for reporting any emissions observed during the Burdening Stockyard and stockpile condition monitoring via daily inspections in the Salus system and putting in place mitigating actions, such as deploying extra water bowser support and reapplication of latex binding surfactant to stockpile surfaces as required. For the Coal Stockyards, Morfa Coke Ovens personnel are responsible for reporting any emissions observed via the Salus system and putting in place mitigating actions, such as instructing Darlow Lloyd & Sons to apply latex binding surfactant to stockpile surfaces as required. The content of the above monitoring reports is reviewed in the Environment DSUM and actioned if required.

Concerns raised via LWIS and Morfa Coke Ovens daily reports are to be included in Works Area PM_{10} and Fugitive Dust high alert standard feedback if they coincide with a high alert and considered in the complaints investigation process.

5. Reporting

Response to a Breach of the Daily Mean PM_{10} Objective

Environment Operations will carry out an investigation in the instance that the daily mean PM_{10} concentration objective is breached (in line with the PM10 Breach Investigation Standard Operating Procedure.docx) at the AURN monitor. The Tata Steel UK Limited Permit BL7108IM requires all breaches at the AURN monitor (whether they be attributed to localised or trans-boundary sources) to be investigated via methodology agreed with NRW outlined below. The investigation will comprise of 4 phases:

Phase 1: Establish if the breach is attributable to a localised or regional event
Phase 2: Identify if the breach can be attributed to on-site sources
Phase 3: Evaluation of site PM_{10} data
Phase 4: By exception, evaluation of site process data based on findings from Phase 3 and Standard Feedback (Appendix 5) received from works areas and key contractors

NB: Circumstances may arise where data has been uploaded to airquality.gov.wales retrospectively and backfilled data has caused a previously 'non breach day' to become a breach day. In this event, a request for Standard Feedback (Appendix 5) and implementation of High Alert Actions would not have been made at the time of the elevated PM_{10} concentrations at the AURN monitor. When undertaking a breach investigation as described above, a retrospective request for Standard Feedback will not be made and Phase 4 will rely on a review of incidents having a potential impact on air quality recorded on the Salus system.

Depending on the findings at each phase, the investigation may stop and make conclusions, or progress to the next stage. For example, if it is identified in Phase 1 that the breach is attributable to a localised event and there is potential to attribute the breach to operations at the Steelworks, the investigation process continues to Phase 2. However, if the breach is attributable to a regional event, the investigation will not continue, and conclusions will be made.

NB: In the event that wind speed and direction data is not available publicly for the AURN monitor (via Airquality.gov.wales - Data Selector), contact should be made with NPTCBC. If no wind data is available, wind data should be taken from the Tata Steel on-site monitor network (CES Roof Weather Station).

If it is identified in Phase 2 that the breach can be attributed to off-site sources, the Tata Steel investigation will stop at this stage and it will be left to NPTCBC to carry out an investigation to determine whether any other significant events have occurred in the Port Talbot Air Quality Management Area that may have caused the breach (e.g. localised fires). However, if Phase 2 identifies that the Steelworks cannot be discounted as a potential source, the investigation will continue to Phase 3. In Phase 3, PM_{10} data from on-site monitors will be used to determine which sources at the Steelworks may have contributed to the breach.

The investigation will progress to Phase 4 if the analysis of the off and on-site data suggests that specific sources at the Steelworks cannot be discounted as potentially contributing to the breach. Process data and feedback of plant conditions and mitigating actions taken supplied by Works Areas and key contractors not discounted as potential contributors will feed into Phase 4 of the investigation. Works Areas and key contractors will ensure that suitable resource is provided to respond to requests for process data and feedback following the issue of medium and high PM_{10} alerts.

Reporting the Outcome of Breach Investigations to Natural Resources Wales (NRW)

In the event that the AURN monitor has exceeded the pro-rata allowance for breach days and the Short Term Action Plan (STAP) has been enacted, an initial investigation outlining the outcome of breach investigations will be submitted to NRW within two working days of a breach. This initial investigation will be used to determine if any immediate actions need to be undertaken to prevent the re-occurrence of a breach.

A finalised breach investigation report will be submitted to NRW via email (industryregulation.swwales@cyfoethnaturiolcymru.gov.uk) within 10 working days of the breach. Where appropriate, this report will include any lessons learnt and actions that need to be taken to reduce the risk of making a significant contribution to any daily average concentration of PM_{10} that exceeds 50µg/m^3 recorded at the AURN in the Port Talbot AQMA. Works Areas and key contractors are to provide feedback of plant conditions and mitigating actions taken within 5 working days of a breach.

In the event that wind speed and wind direction data is not available for the AURN monitor and it is known that that data will not be reinstated by the time the report is due for submission (within 10 working days of a breach), AURN wind data will be substituted with data from the Tata Steel on-site monitor network as agreed with NRW.

Annual and Quarterly Data Assessment and Report

Environment Operations shall assess and report annually and quarterly the data produced from the on-site ambient air quality monitoring network. Quarterly and annual assessment reports shall be submitted to NRW at the following reporting email address.

industryregulation.swwales@cyfoethnaturiolcymru.gov.uk

Quarterly reports shall be produced for the quarters January to March, April to June and July to September. The quarterly reports should be submitted to NRW by the last day of the month following the end of each calendar quarter e.g. January to March's report should be submitted by the end of April. An annual report should be produced at the end of each calendar year and will be submitted to NRW by the last working day of January the following calendar year. A quarterly report for the period October to December will not be submitted as the information contained therein would be duplicated in the Annual Report which is to be submitted by the same date.

Each report shall describe which monitors have been deployed over the course of the monitoring period and provide details of any monitors that have been taken out of commission for calibration and maintenance or for repair as a result of failure. The reports will present analysed Air Quality data from each monitor deployed during that monitoring period. NB: With regards to the small network of Topas monitors which remain in the network, only data from units within their annual calibration period will be included in the quarterly and annual reports produced.

The annual report will also include a summary of breach investigations undertaken throughout the year. Where appropriate, this will include any lessons learnt and actions that need to be taken to reduce the risk of making a significant contribution to any daily average concentration of PM_{10} that exceeds 50µg/m^3 recorded at the AURN in the Port Talbot AQMA.

6. Audit and Annual Review

Audit

Environment Operations will manage and undertake an annual schedule of Works Areas and key contractor Air Quality Management Plan (AQMP) audits as per the AQMP Audit SOE Standard. Works Areas and key contractors will ensure that a suitable resource is provided for the undertaking of an AQMP audit. AQMP audits with be led by either the Environment Lead Air Quality or an Environment Engineer Air Quality as identified in the schedule. For audits of Works Areas, the area Environmental Representatives will actively participate in the auditing of the AQMP with the Environment Operations representative assigned to the audit.

Table 1 below shows a timeline for the issuing of audit reports. Any actions (e.g. observations, non-conformances) from the Works Area audits will be issued via Salus and tracked in an appropriate forum (see below) to enable monitoring of progress towards completion. Actions from audits of key contractors will be issued by email along with an agreed timeline for completion.

Table 1: Timeline for issue of audit report and actions

Activity	Timescale
Complete audit at works area / contractor	in month scheduled
Submit draft audit report to approver	within 10 working days of audit
Approve audit report	within 15 working days of audit
Make required changes and submit to works area / contractor	within 20 working days of audit
Issue actions via Salus (Works Area) or email (key contractor) (following confirmation of agreed due dates with AQMP owner). Examples of appropriate forums include: Works Areas – Environmental PDCA/WSUM Key contractors – Production Services Meeting (facilitated by Environment Operations) Environment Operations – Audit MSUM	within 30 working days of audit

Annual Review

The Steelworks, Works Areas and key contractor's AQMPs will be reviewed annually. The review will be used to ensure the continuing suitability and effectiveness of the plan. The plan will be considered effective if compliance with the Air Quality Standards (Wales) Regulations 2010 is achieved by the Port Talbot Air Quality Management Area and if the number of air quality related complaints received is below the set limit as prescribed in Annual Plan.

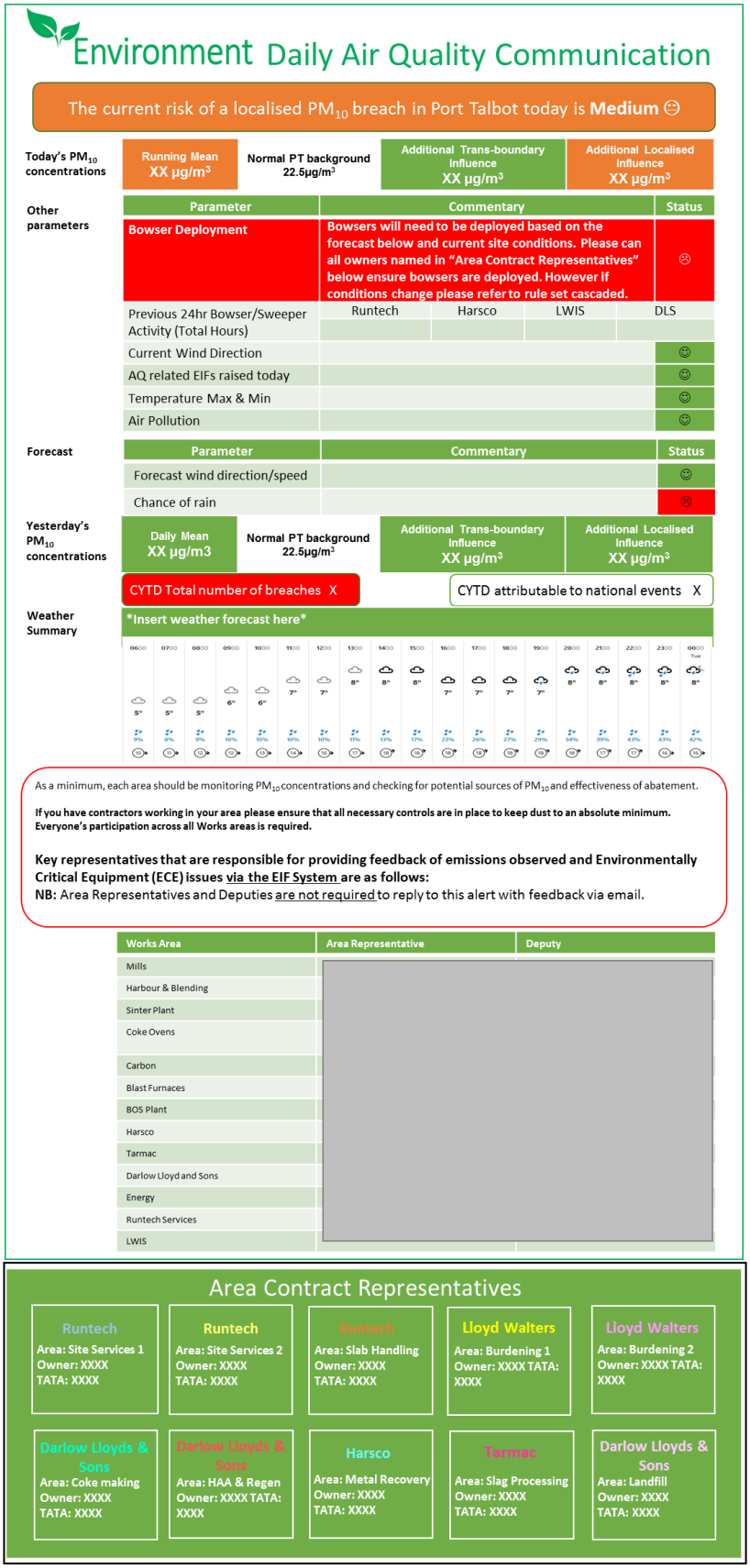
A more frequent review will be undertaken if changes occur that may affect the suitability and / or effectiveness of the plan.

Appendix 1: Steelworks AQMP Tasks and Responsibilities

Those responsible for undertaking the Steelworks AQMP are outlined in the table below

Task	Responsible
Ensuring that a suitable resource is provided to enable the effective implementation of the Steelworks Air Quality Management Plan.	Director Sustainability & Environment
Providing resource for the effective implementation of Works area and Key Contractor Air Quality Management Plans.	Works Manager / Contractor Manager / Head of Environment TSUK Operations
Providing appropriate support to Works Areas and Key Contractors to enable the effective implementation of their Air Quality Management Plans and ensuring that compliance with the plans is audited as part of an agreed auditing schedule.	Environment Lead Air Quality
Key points of contact at the Steelworks for communication with external bodies (e.g. NRW, Welsh Government, NPTCBC) on Air Quality.	Head of Environment TSUK Operations, Environment Lead Air Quality
Communication of any incidents that may have an impact on Air Quality (e.g. uncontrolled releases of dust, failure of abatement systems) to Environment Operations.	Works Area/Contractor representative
Ensuring effective abatement of atmospheric emissions of PM_{10} and fugitive dust	Works Areas, Key Contractors
Monitoring particulate concentrations, dust deposition and complaints figures	Environment Operations, Works Areas, Key Contractors
Responding to elevated particulate concentrations and increasing dust deposition and complaints numbers	Environment Operations, Works Areas, Key Contractors
Medium and High PM_{10} and Fugitive Dust communications	Environment Engineer Air Quality
Upkeep of the Steelworks Air Quality Management Plan	Environment Lead Air Quality, Environment Engineers Air Quality
Upkeep of the Works Area and key contractor Air Quality Management Plan	Works Area/ Contractor representative
Review and interpretation of PM_{10} data, risk of fugitive dust and weather conditions in Morning Meetings.	Environment Engineers Air Quality/Works Area/Contractor representative(s)
Implementation of response actions to reduce potential emissions of PM_{10} and fugitive dust	Environment Operations, Works Area/ Contractor representative(s)
Provision of a suitable resource to undertake a breach investigation.	Head of Environment TSUK Operations /Works Manager/Manufacturing Manager/ Contractor Manager.
Undertaking breach Investigations	Environment Engineer Air Quality
Providing process data to feed into PM_{10} breach investigations and investigation of dust fallout events.	Works Area/Contractor representative(s)
Air Quality Governance	Environment Lead Air Quality
Undertaking quarterly and annual site data analysis and reporting the findings to NRW	Environment Engineer Air Quality

Appendix 2: Manual PM_{10} Medium and High Risk Alert Examples



Environment Daily Air Quality Communication

The current risk of a localised PM_{10} breach in Port Talbot today is **Medium**

Today's PM_{10} concentrations

Running Mean	Normal PT background	Additional Trans-boundary Influence	Additional Localised Influence
XX µg/m³	22.5µg/m³	XX µg/m³	XX µg/m³

Other parameters

Parameter	Commentary				Status
Bowser Deployment	Bowsers will need to be deployed based on the forecast below and current site conditions. Please can all owners named in "Area Contract Representatives" below ensure bowsers are deployed. However if conditions change please refer to rule set cascaded.				☹
Previous 24hr Bowser/Sweeper Activity (Total Hours)	Runtech	Harsco	LWIS	DLS	
Current Wind Direction					☺
AQ related EIFs raised today					☺
Temperature Max & Min					☺
Air Pollution					☺

Forecast

Parameter	Commentary	Status
Forecast wind direction/speed		☺
Chance of rain		☹

Yesterday's PM_{10} concentrations

Daily Mean	Normal PT background	Additional Trans-boundary Influence	Additional Localised Influence
XX µg/m3	22.5µg/m³	XX µg/m³	XX µg/m³

CYTD Total number of breaches X

CYTD attributable to national events X

Weather Summary

Insert weather forecast here

As a minimum, each area should be monitoring PM_{10} concentrations and checking for potential sources of PM_{10} and effectiveness of abatement.

If you have contractors working in your area please ensure that all necessary controls are in place to keep dust to an absolute minimum. Everyone's participation across all Works areas is required.

Key representatives that are responsible for providing feedback of emissions observed and Environmentally Critical Equipment (ECE) issues via the EIF System are as follows:
NB: Area Representatives and Deputies are not required to reply to this alert with feedback via email.

Works Area	Area Representative	Deputy
Mills		
Harbour & Blending		
Sinter Plant		
Coke Ovens		
Carbon		
Blast Furnaces		
BOS Plant		
Harsco		
Tarmac		
Darlow Lloyd and Sons		
Energy		
Runtech Services		
LWIS		

Area Contract Representatives

Runtech Area: Site Services 1 Owner: XXXX TATA: XXXX	**Runtech** Area: Site Services 2 Owner: XXXX TATA: XXXX	**Runtech** Area: Slab Handling Owner: XXXX TATA: XXXX	**Lloyd Walters** Area: Burdening 1 Owner: XXXX TATA: XXXX	**Lloyd Walters** Area: Burdening 2 Owner: XXXX TATA: XXXX
Darlow Lloyds & Sons Area: Coke making Owner: XXXX TATA: XXXX	**Darlow Lloyds & Sons** Area: HAA & Regen Owner: XXXX TATA: XXXX	**Harsco** Area: Metal Recovery Owner: XXXX TATA: XXXX	**Tarmac** Area: Slag Processing Owner: XXXX TATA: XXXX	**Darlow Lloyds & Sons** Area: Landfill Owner: XXXX TATA: XXXX

Environment Daily Air Quality Communication

The current risk of a localised PM_{10} breach in Port Talbot today is High 😐

Today's PM_{10} concentrations

Running Mean	Normal PT background	Additional Trans-boundary Influence	Additional Localised Influence
XX µg/m³	22.5µg/m³	XX µg/m³	XX µg/m³

Other parameters

Parameter	Commentary	Status
Bowser Deployment	Bowsers will need to be deployed based on the forecast below and current site conditions. Please can all owners named in "Area Contract Representatives" below ensure bowsers are deployed. However if conditions change please refer to rule set cascaded.	☹
Previous 24hr Bowser/Sweeper Activity (Total Hours)	Runtech / Harsco / LWIS / DLS	
Current Wind Direction		☺
AQ related EIFs raised today		☺
Temperature Max & Min		☺
Air Pollution		☺

Forecast

Parameter	Commentary	Status
Forecast wind direction/speed		☺
Chance of rain		☹

Yesterday's PM_{10} concentrations

Daily Mean	Normal PT background	Additional Trans-boundary Influence	Additional Localised Influence
XX µg/m3	22.5µg/m³	XX µg/m³	XX µg/m³

CYTD Total number of breaches X

CYTD attributable to national events X

Weather Summary

Insert weather forecast here

As a minimum, each area should be monitoring PM_{10} concentrations and checking for potential sources of PM_{10} and effectiveness of abatement.

If you have contractors working in your area please ensure that all necessary controls are in place to keep dust to an absolute minimum. Everyone's participation across all Works areas is required.

Key representatives that are responsible for providing feedback (via standard feedback template following roll out) are as follows:

Works Area	Area Representative	Deputy
Mills		
Harbour & Blending		
Sinter Plant		
Coke Ovens		
Carbon		
Blast Furnaces		
BOS Plant		
Harsco		
Tarmac		
Darlow Lloyd and Sons		
Energy		
Runtech Services		
LWIS		

Area Contract Representatives

Runtech
Area: Site Services 1
Owner: XXXX
TATA: XXXX

Runtech
Area: Site Services 2
Owner: XXXX
TATA: XXXX

Runtech
Area: Slab Handling
Owner: XXXX
TATA: XXXX

Lloyd Walters
Area: Burdening 1
Owner: XXXX TATA: XXXX

Lloyd Walters
Area: Burdening 2
Owner: XXXX TATA: XXXX

Darlow Lloyds & Sons
Area: Coke making
Owner: XXXX
TATA: XXXX

Darlow Lloyds & Sons
Area: HAA & Regen
Owner: XXXX TATA: XXXX

Harsco
Area: Metal Recovery
Owner: XXXX
TATA: XXXX

Tarmac
Area: Slag Processing
Owner: XXXX
TATA: XXXX

Darlow Lloyds & Sons
Area: Landfill
Owner: XXXX
TATA: XXXX

Appendix 3: Fugitive Dust Medium Risk Alert Example

Environment

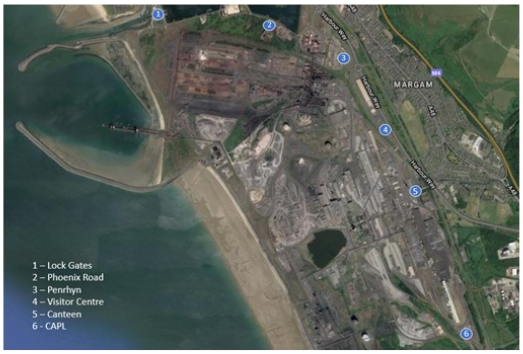
Fugitive Dust Risk Alert

Medium Alert

***Two/Three/Four* consecutive hours of elevated TSP / PM_{100} concentrations have been recorded at the *insert monitor name here* boundary monitor**

Elevated Concentrations Recorded	Date/Times	Wind Direction
XX µg/m^3	dd/mm/yy hh:mm	xxx^o

Boundary Monitor Locations



Trajectory Model Output

Potential Contributing Sources

Works Area	Area Representative	Deputy

Please review plant conditions and environmentally critical equipment (ECE) status during the hours identified above and raise an Environmental Incident Form(s) (EIF) if required.

Area Representatives and Deputies <u>are not required</u> to reply to this alert with feedback via email.

Appendix 4: Fugitive Dust High Risk Alert Example

Environment

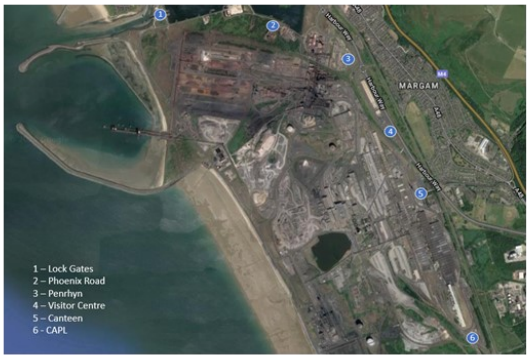
Fugitive Dust Risk Alert

High Alert – Requirement for Action

***Five or more* consecutive hours of elevated TSP / PM_{100} concentrations have been recorded at the *insert monitor name here* boundary monitor**

Elevated Concentrations Recorded	Date/Times	Wind Direction
XX µg/m^3	dd/mm/yy hh:mm	xxx^o

Boundary Monitor Locations



Trajectory Model Output

Potential Contributing Sources

Works Area	Area Representative	Deputy

Identified Works Areas and Contractors above are required to enact the High Alert Actions detailed in their Air Quality Management Plans (AQMPs) until 8:30am tomorrow, before which time a review will take place.

In addition, identified Works Areas and Contractors above are required to provide feedback via the Standard Feedback Template communicated.

* Feedback to be provided as soon as possible upon receipt of a PM10** or Dust Fallout High Alert			
**In the event that a PM10 High Alert is a precursor to a PM10 Breach, the below template is to be updated so that the information provided covers the whole 24hr breach period			
High Alert* Standard Feedback		Prompt(s)	Feedback/Comments
Date of High Alert		N/A	
Plant Status		Any plant down for maintenance?	
Status of Priority 1 Air Quality related Environmentally Critical Kit items		Provide confirmation that the area ECE Register has been reviewed and is up to date	
Permitted Release Points	1	Elevated concentrations or breach recorded?	
	2		
	3		
	4		
	5		
Shift Reports		Any AQ related issues raised?	
Aloa_DETECT [if applicable]		Any Level 3 or 2 emissions detected by Aloa_Detect camera(s)?	
Environmental Incident Forms (EIFs)		Any AQ Related EIFs raised (inc. reference number and details)	
Water Bowser Deployment		Have water bowsers been deployed as instructed (via Daily AQ Communication)? [if relevant]	
High Alert Actions		Provide confirmation that High Alert Actions have been put in place	

Appendix 6: Site Drive Standard

Environmental Site Drive

STANDARD - 007

- Rota for the site drive is stored in the Environment DSUM. Named Engineer to be in Port Talbot for their rota day and arrange for a 'buddy' to join site drive to take any required photographs. It is the responsibility of the named Engineer to arrange cover if unavailable (cut off for site drive is 15:00 Monday to Thursday and 14:00 Friday to account for working hours).
- A site drive is triggered by a High Alert for PM10 or Fugitive Dust (PM100). PM10 and PM100 concentrations are discussed in both the Compliance and Environment DSUM meetings each morning.
- If the alert level increases from low or medium to high later in the day, a site drive will be triggered.
- Van pre-flight check list to be completed prior to site drive around inclusive of Covid guidelines.
- Route to be followed is below.
- 20 MPH speed limit is to be adhered to.
- Van is to be wiped down with disinfectant wipes on site drive completion.
- Pre and post flight check to be completed and placed in folder
- Key to be returned to designated location.
- It is the responsibility of the Engineer carrying out the Site Drive to raise Salus Forms for any emissions / issues noted (unless the Works Area/Contractor question has already done so) and fill out the High Alert Site Drive Log, raising any immediate concerns with the Environment Team (AQ) and relevant area personnel ASAP following completion of the site drive.
- The intention of the site drive to look for evidence of High Alert Actions not being enacted rather than to positively confirm that all High Alert Actions are in place. This is because it is not possible to verify the enaction of all High Alert Actions from the site drive route. Any evidence of non-enaction (including photographic evidence taken by the site drive 'buddy') should be shared with the Environment Team (AQ) for follow up with relevant persons.

Responsible Persons	**Environment Team**

Environmental Site Drive Route

STANDARD - 007

Site Drive Route

Appendix 7: Road Management Communication

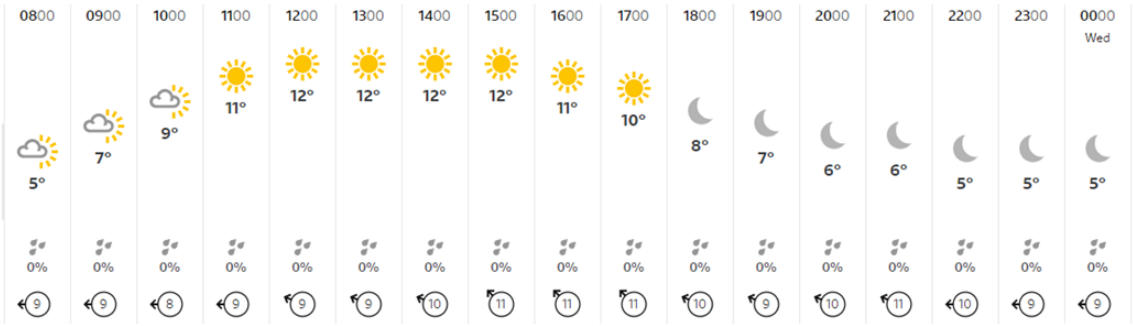
Environment **Road Management**

Please be aware, one or more of the following triggers for water bowser deployment has been met:

- **Dry conditions**
- **Temperature in excess of 15ºC**
- **The prevailing wind direction is forecast to be towards town (Margam and/or Taibach and/or Aberavon)**
- **Observations made or Salus Form raised related to dry road conditions**

Therefore, site water bowsers are to be deployed.

Weather forecast:



Area Contract Representatives

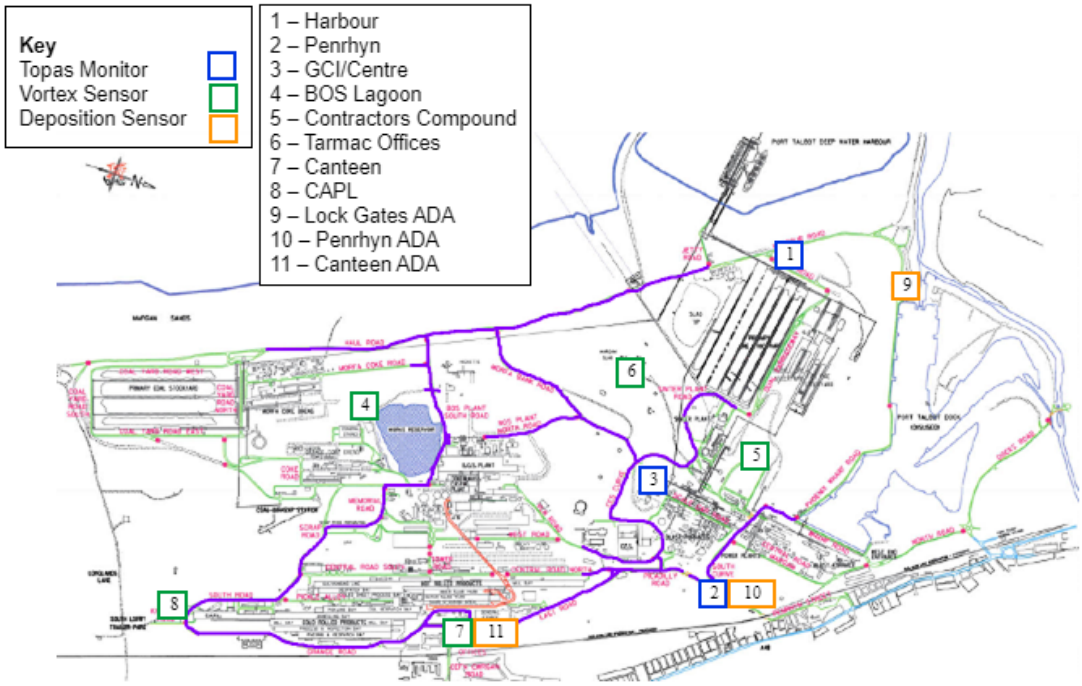
Runtech Area: Site Services 1 Owner: TATA:	Runtech Area: Site Services 2 Owner: TATA:	Runtech Area: Slab Handling Owner: TATA:	Lloyd Walters Area: Burdening 1 Owner: TATA:	Lloyd Walters Area: Burdening 2 Owner: TATA:
Darlow Lloyds & Sons Area: Coke making Owner TATA:	Darlow Lloyds & Sons Area: HAA & Regen Owner: TATA:	Harsco Area: Metal Recovery Owner: TATA:	Tarmac Area: Slag Processing Owner: TATA:	Darlow Lloyds & Sons Area: Landfill Owner: TATA:

Please be advised that a change in the weather conditions (e.g heavy rainfall) will supersede this communication.

Appendix 8: Water Bowser Routes and Fill Point Map

Sl. No	Fill Points	Feed Type, Flow (Availability)
1	HAA	Bottom Suction Feed, 48 m^3/hr (100%)
2	Morfa Coke Ovens	Top Feed, 186 m^3/hr (100%)
3	Coke Ovens Gas Holder	Bottom Feed, 48 m^3/hr (100%)
4	Service Boiler House	Top and Bottom Feed, 150 m^3/hr (100%)
5	Brick Stores Road	Top and Bottom Feed, 150 m^3/hr (100%)
6	BOS Lagoon	Top and Bottom Feed, 74 m^3/hr (100%)
7	Main Slab Yard	Top and Bottom Feed, 118 m^3/hr (94%)
8	Million Gallon Tanks	Bottom Feed, Not Available (Not preferred)
9	BOS Gas Holder	Bottom Feed, Not Available (Not preferred)
10	Harbour and Blending	Top Feed, 36 m^3/hr (100%)
11	Burdening	Top Feed, 200m^3/hr (100%)

Appendix 9: Tata Steel PM_{10} Onsite Monitor Network as planned from Q1 2023 (as agreed with NRW)



Appendix 10: Tata Steel Site Boundary Monitor Locations

Appendix 11: On-Vehicle Measurement Daily Automated Report

NB: In example below, route of travel indicated by green circles

TATA

environmental SENSORS

Environmental Road Dust Report	27/01/2023

This automated report contains recent road dust lift-off conditions and is intended to advise all drivers and those involved in road dust mitigation activities around Port Talbot Steelworks. The findings are based on data from the on-vehicle air quality monitoring station which carries out continuous total suspended particulate (TSP) measurements while the vehicle traverses all site roads.

Live and historic data from the on-vehicle air quality monitoring system can be viewed and downloaded from: https://tata.envirosensors.co.uk/login

Site Road Overview

Green (low risk)

- There is a low risk of dust lift-off from site roads today.
- All normal speed limits and procedures must still be followed.

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