AN APPLICATION TO VARY ENVIRONMENTAL PERMIT NUMBER EPR/ZP3831DX IN RESPECT OF THE ASH PROCESSING PLANT AT FIDDLERS FERRY, WARRINGTON, CHESHIRE

DUST AND EMISSIONS MANAGEMENT PLAN (DEMP)

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1. Introduction

1.1 This document comprises the Dust and Particulate Matter Emissions Management Plan (DEMP) for Fiddlers Ferry Ash Processing Plant (the APP) which is operated pursuant to Environmental Permit number EPR/ZP3831DX (the permit). The permit authorises an activity for the receipt and processing of Coal Derived Fly Ash (CDFA) consisting of drying and physical separation with a maximum annual throughput of 500,000 tonnes when in full production. The APP is located on the eastern outskirts of Widnes within the footprint of the former Fiddlers Ferry Power Station (FFPS). FFPS was closed in March 2020. The APP site covers an area of approximately 2 hectares (ha) and is centred approximately at National Grid Reference (NGR) SJ 54716 86035. The approximate boundary of the permit is shown on Figure DEMP 1, Figure DEMP 2 and Figure DEMP 3.

1.2 The permit for the APP was first issued to RockTron (Widnes) Ltd in January 2009 and was varied and transferred on a number of occasions between 2009 and 2023. The permit was transferred to Peel NRE Developments Acquisitions No.1 Limited (Peel) in August 2023. An application to transfer the permit from Peel to Titan was submitted to the Environment Agency (EA) on 21 July 2025 and was duly made on 22 October 2025. It is assumed that the transfer notice will be issued prior to the determination of this application to vary the permit.

1.3 The APP has been mothballed and non-operational for a number of years. Peel submitted an email to the local area EA officer on 18 July 2025 to confirm the reactivation of the APP permit from its mothballed status. This DEMP relates to the future operation of the APP by Titan following installation of new plant and equipment at the site to facilitate the storage and processing of CDFA at the site consistent generally with the activity which is already permitted to be undertaken at the site. Full details of the APP process are described in the Technical Description Document (TDD) presented at Appendix B to the application to vary the permit and are discussed in section 2 of this DEMP.

1.4 The purpose of this DEMP is to identify the operations at the site which may have the potential to have an impact on air quality as a result of emissions of particulate matter, to present the details of the operational controls which are implemented to minimise particulate emissions and to describe the monitoring which is carried out to confirm the effectiveness of the management controls.

1.5 The DEMP forms part of the environmental management system (EMS) under which the site is operated.

1.6 The DEMP has been prepared based on the guidance presented in the relevant sections of the following documents and guidance:

- Environment Agency – Control and monitor emissions for your environmental permit[1] (the emissions guidance).
- Environment Agency internal guidance template entitled "Dust and emission management plan" (Version 10 dated October 2018) (the EA DEMP template)
- Environment Agency guidance 'Non-hazardous and inert waste: appropriate measures for permitted facilities[2]' (the Appropriate Measures guidance).

1.7 The activities with the potential to generate and/or release dust and particulate matter are identified in Section 2 of this document. The locations of potential receptors are identified in Table DEMP 1, are shown on Figure DEMP 1 and are discussed in Section 2 together with the potential pathways for linkage of the sources and receptors.

1.8 In Sections 3 and 4 of this document the management techniques that are used at the site to minimise the potential for dust and particulate matter emissions from the site are set out and the monitoring undertaken to confirm the effectiveness of the management techniques is specified. In Section 5 details are presented of how Titan will engage with the local community together with details of the procedure for reporting and responding to complaints. An action plan which will be implemented in the unlikely event that there is the potential for a significant emission of dust or particulate matter from the site or if a complaint regarding dust or particulate matter is received is presented in Section 6.

1.9 The DEMP comprises a living document and will be reviewed on an annual basis as part of the environmental performance audit or as required by the action plan. The review will include consideration of the results of dust and particulate matter

[1] Available at Control and monitor emissions for your environmental permit - GOV.UK. Published 1 February 2016. Last updated 11 June 2025.

[2] Available at: https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities. Published 12 July 2021. Last updated 1 August 2023.

monitoring and progress with any improvements that may be identified. A review of the effectiveness of dust and particulate matter monitoring techniques will be undertaken and changes made to monitoring techniques if the review identifies any improvements that can be made.

2. Operations at Fiddlers Ferry (sources, pathways and receptors)

Sources

2.1 An overview of the APP process is presented in the flow diagram shown on Figure DEMP 4 and is discussed below. This section should be read with reference to Figure DEMP 2 which shows the layout of the site including emission points and storage silos.

2.2 A single waste type comprising CDFA will be accepted at the site. Table S2.2 of the permit, which specifies the waste types and quantities accepted at the site, has been reproduced as Table DEMP 2.

2.3 The maximum annual throughput of the plant when fully operational is 500,000 tonnes per year.

2.4 CDFA is currently permitted to be extracted from Fiddlers Ferry Ash Lagoons pursuant to Environmental Permit number EPR/BR6791IJ (the Lagoon permit) operated currently by Peel (location 14 on Figure DEMP 1). Environmental Permit number EP25/7 was issued to Titan on 9 September 2025 by Warrington Borough Council for the grading and screening of designated mineral comprising CDFA stockpiled in Fiddlers Ferry Area E (location 10 on Figure DEMP 1).

2.5 CDFA, which will naturally be damp prior to processing in the APP, will be transferred from the ash lagoons and from Area E to the APP using open topped trucks travelling on existing FFPS site roadways. The vehicle access route to the APP, which comprises a paved surface is shown on Figure DEMP 1 and Figure DEMP 2.

2.6 CFDA will be stored inside a building at the APP prior to treatment in the processing building at the APP. Storage inside a building will provide a barrier to emissions of particulate matter, albeit that the CDFA will naturally be damp prior to processing hence is unlikely to comprise a significant source of emissions of particulate matter.

2.7 The first stage of the process is drying using Atritor Dryer Pulverisers, which deagglomerate the material and dry it in one process using streams of warm air. It is planned that up to six drying units will be installed. The dryers will be installed in stages to eventually achieve the maximum throughput of 500,000tpa. Air emissions from the heater and exhausts from the dryers will be fed into six new stacks protruding

from the roof of the processing building with 1 stack serving each individual dryer. The point source emissions from the stacks will be subject to monitoring for dust pursuant to the requirements of the permit and fabric filters will be installed to abate the emissions of particulate matter (dust) from the vent stacks associated with the Atritor Dryer Pulverisers. A quantitative dispersion modelling Air Quality Assessment (AQA) has been undertaken by a specialist air quality consultant (Isopleth Limited) to assess the potential impacts of the point source emissions including dust.

2.8 The second stage of the process is to separate the mineral and carbon materials in the dried, deagglomerated CDFA using electrostatic separators located in the processing building.

2.9 Following separation, the mineral and carbon outputs are pneumatically blown through enclosed pipework into storage silos located outside of the building prior to removal from the site by road in tankers. The external silos are fitted with high level alarms and bag filters on the pressure relief vents. The bag filters are subject to a routine inspection and maintenance programme.

2.10 In summary, CDFA imported to the site will be subjected to a series of treatment activities with associated storage, all of which are undertaken within an enclosed building. With reference to the activities described in the paragraphs above, the activities with the potential to generate and/or release dust and particulate matter are presented (consistent with the approach set out in the EA DEMP template) in Table DEMP 3 together with details of how the source-pathway-receptor linkage is interrupted by the plant design and the dust mitigation measures at the site.

Pathways

2.11 Dust and particulate matter have the potential to be dispersed from the source to potential receptors by the wind. A 5-year wind rose for Liverpool Airport for the years 2020 to 2024 is presented at Appendix DEMP A and is reproduced on Figure DEMP 1. Liverpool Airport is located approximately 11.5km west south west of FFPS and is considered representative of meteorological conditions at the APP. Based on the wind rose the prevailing wind direction is from the west-northwest with a component of wind from the south-southeast and therefore areas to the east-southeast and north-northwest of the site are generally down prevailing wind direction of the site.

2.12 Based on the guidance presented in the EA DEMP template an initial search radius of 1km has been used when identifying potential receptors in the vicinity of the site.

Receptors

2.13 The potential receptors in the vicinity of the site are shown on Figure DEMP 1. The receptor type, distance and direction of the receptors closest to the site are listed in Table DEMP 1.

2.14 As shown on Figure DEMP 1, the site is located in an industrial setting within the footprint of the former FFPS. The site is bordered to the south by St Helens Canal and by a railway line. The activities in the vicinity of the site which have the potential to contribute particulate matter emissions to local air quality are identified shaded in grey in Table DEMP 1. The closest residential properties are located approximately 750m north of the site (Rose Tree Farm – Receptor 1 on Figure DEMP 1) and northeast of the site (Marsh End Farm – Receptor 2 on Figure DEMP 1). There is a proposed future housing development within 250m of the site boundary to the east of the site[3] from the Warrington Local Plan Policy MD3 at the former FFPS (Receptor 13b on Figure DEMP 1). Although the proposed future housing development is not currently present, the location has been considered in the AQA prepared by Isopleth Limited. There are currently no residential receptors within 500m of the site.

2.15 Based on information on the DEFRA MAGIC website there are no SSSIs, SPAs, Ramsar sites, SACs or National Nature Reserves (NNRs) located within 2km of the site. One Local Nature Reserve (LNR) is identified within 2km of the site. Oxmoor Wood LNR is located approximately 1.8km south-southeast of the site. Based on the information available on MAGIC, there are areas of deciduous woodland located to the south of the St Helens Canal and there are no areas of ancient woodland within

[3] Fiddlers Ferry Power Station (FFPS) was closed in March 2020 and the site was identified in the Warrington Local Plan 2021/22-2038/39 adopted in December 2023 as a key area for mixed use redevelopment comprising industrial and residential use. A Development Framework for the regeneration of the former FFPS (DF) has been developed by the landowners, Peel and was approved by Warrington Borough Council (WBC) in September 2024. The DF sets out the aims and objectives for the overall redevelopment of the former FFPS site including maintaining the existing APP as existing infrastructure to be retained in order to process the CDFA located in the former settling lagoons and stockpiled in Area E. The APP is located to the west of the proposed later phases of residential development within the wider Fiddlers Ferry site. Whilst it is considered that the earlier stages of residential development will be completed by 2030/31 it is anticipated that construction of the later phases will commence in the early 2030s and be completed by approximately 2038/39.

1km of the site. Based on the information available on MAGIC there are no Scheduled Monuments, World Heritage Sites or Listed Buildings within 500m of the site.

2.16 A specialist air quality consultant (Isopleth Limited) has undertaken quantitative dispersion modelling to assess the potential impacts of the emissions from the site including dust emissions. In the AQA, it is concluded that:

> *"Detailed air quality modelling using the AERMOD 13 dispersion model has been undertaken to predict the impacts associated with the operation of the ash dryers, natural gas fuelled engines and diesel generators.*
>
> *All impacts, human and ecological, are predicted to be below limit values at locations where the Air Quality Directive and Regulations, policies and guidance in England states that they must be applied. When applying the assumptions above it can be seen that there is no realistic potential for a breach of the air quality objectives at residences (or ecological sites)."*

2.17 According to the DEFRA UK Air Information Resource website[4] the site is not located in an Air Quality Management Area (AQMA) or within 2km of an AQMA declared for PM_{10}.

[4] https://uk-air.defra.gov.uk/

3. Dust and particulate management

3.1 Particulate matter at the site is controlled by a combination of measures relating to waste delivery and receipt at the site, site infrastructure and operational techniques employed at the site. Reference has been made where relevant to the Environment Agency Technical Guidance Document (Monitoring) M17[5] entitled 'Monitoring of particulate matter in ambient air around waste facilities' (M17), Environment Agency Technical Guidance Monitoring ambient air: particulate matter[6] and appropriate measures for control of dust and mud presented in Environment Agency guidance "Control and monitor emissions for your environmental permit". A variety of techniques are used at the site based on site specific circumstances.

Responsibility for implementation of this plan

3.2 The Technically Competent Site Manager (TCM) shall be responsible for the management of particulate matter and site staff will be trained appropriately. The TCM will appoint a suitably trained deputy to oversee the management of particulate matter at the site during operational periods when the TCM is not present at the site. The TCM will provide the training for the deputy. The training will include refresher training where appropriate however during the course of routine operation of the site the experience of the site staff, including the deputy, will comprise on the job training which will complement the refresher training.

Operational controls

3.3 Waste acceptance at the site is controlled by the waste acceptance and rejection procedures which are implemented at the site. Waste acceptance checks shall be carried out for all waste loads delivered to the APP to confirm that the load is consistent with the pre-acceptance information. The acceptance checks undertaken by suitably trained site personnel shall include inspection of the Duty of Care documentation and a visual inspection of the load to confirm that the load is consistent with the Duty of Care documentation. In the event that unsuitable materials are delivered to the site, the load is rejected. Following completion of the visual waste

[5] https://www.gov.uk/government/publications/m17-monitoring-of-particulate-matter-in-ambient-air-around-waste-facilities Published 7 April 2014. This guidance was withdrawn on 28 October 2024.

[6] Environment Agency Guidance: Monitoring ambient air: particulate matter. Published 10 September 2024. https://www.gov.uk/guidance/monitoring-ambient-air-particulate-matter

acceptance checks, drivers delivering waste to the site are instructed to place waste in the appropriate area of the site. Drop heights are minimised during the unloading and transferring of waste.

3.4 All CDFA accepted at the APP is delivered from the adjacent ash lagoons or Area E. The delivery route does not require vehicles to travel on the public highway. Vehicles delivering CDFA to the APP will return to the ash lagoon site or Area E and will not travel on the public highway. Following processing at the APP, the outputs from the process will be transported off the site and onto the public highway in road tankers. Internal site roads are subject to water bowsing and sweeping to prevent dust build up to minimise the potential for any dust or particulate matter to accumulate on the road surface and to minimise the potential for particulate matter to accumulate on the wheels of vehicles which may enter the public highway.

3.5 The site access road leading to the highway is maintained and swept with a road sweeper and the areas of hardstanding at the site will be maintained in a condition consistent with minimising the generation of dust and particulate matter.

3.6 The movement of site traffic is restricted to defined traffic routes which are maintained. A vehicle speed limit of 10mph is imposed on the site and on the adjacent access route for safety reasons and to reduce the potential for significant particulate matter to be resuspended. Insofar as it is practicable all site vehicle exhausts are upward pointing to prevent the disturbance of particulate matter from the road and site surfaces. The processing equipment used at the site is maintained in accordance with the manufacturer's recommendations to optimise performance and minimise emissions. A no idling policy is implemented at the site for vehicles and plant.

3.7 All relevant site personnel are trained in working practices and mitigation measures to minimise the generation and release of particulate matter.

3.8 Where specific activities have the potential to generate or release particulate matter, the control measures are described and are summarised in Table DEMP 3 - Source - Pathway - Receptor linkages.

3.9 Visual monitoring for emissions of particulate matter is undertaken by site personnel and periodic quantitative monitoring for dust is undertaken for the emissions from the stacks at the site. Further details are provided in Section 4 of this DEMP.

Action plan

3.10 It is considered that the operational controls which will be implemented to minimise the release of particulate matter and the generation of dust at the site will provide effective control of dust emissions at the site.

3.11 A Particulate Matter Management and Monitoring Action Plan is presented in Section 6 of this document. The Particulate Matter Management and Monitoring Action Plan will be implemented in the event that:

i. there is an unacceptable visual emission of particulate matter from the site, or

ii. a complaint is received.

4. Particulate matter monitoring

4.1 In Environment Agency Technical Guidance[7] it is stated that despite the subjective nature of the visual assessment of dust emissions:

> *'this simple, cheap and easy to implement assessment approach has the significant advantage of providing instantaneous information on problems. For example it may be possible to directly observe the source of the dust emission, such as a particular stockpile of material. This allows the taking of rapid actions to deal with the problem.'*

4.2 During all site operations continuous visual monitoring for emissions of particulate matter shall be undertaken by suitably trained site personnel. The monitoring will include visual checks for emissions from the storage silos. In addition to the continuous visual monitoring a specific routine monitoring schedule will be undertaken comprising visual monitoring at 4 specific on-site locations at least once per day while the site is operational. The on-site monitoring locations are shown on Figure DEMP 3. The results of the on-site monitoring of visible dust will be recorded on the visual monitoring checklist presented at Appendix B of this DEMP.

4.3 Visual monitoring by suitably trained site personnel is the most effective method of detecting as quickly as possible emissions of particulate matter throughout the working day thereby facilitating promptly the assessment of such emissions allowing the selection and implementation as quickly as practicable of control measures as necessary. The effectiveness of the measures taken in controlling emissions are assessed during inspections undertaken at the site following implementation of the control measures. Any problem that is observed is reported to the site manager who is responsible for investigating the cause and implementing any necessary remedial action. The results of inspections and remedial measures taken are recorded in the site diary.

4.4 Publicly available weather forecasts will be consulted by site staff to identify forecasts of extreme weather events or storms which may have the potential to increase the risk of the release of particulate matter from the site and additional control measures

[7] Environment Agency Guidance: Monitoring ambient air: particulate matter. Published 10 September 2024. https://www.gov.uk/guidance/monitoring-ambient-air-particulate-matter

such as dampening of site surfacing is implemented as necessary. The findings of the visual assessments are recorded in the Site Inspection Checklist presented at Appendix C. Any problem that is observed is reported to the site manager who is responsible for investigating the cause and implementing any remedial action as necessary. Incidents and remedial measures taken are recorded in the site diary.

4.5 Consistent with the requirements of the permit, quantitative monitoring of dust emissions from the stacks associated with the Atritor Dryer Pulverisers will be undertaken on a six-monthly basis to confirm that the emissions are within the specification of the fabric filters installed to abate the emissions of dust. The fabric filters will be inspected and maintained consistent with the requirements specified by the manufacturer. In the event that the emissions of dust are greater than the specification of the of fabric filters, action will be taken to repair or replace the fabric filters.

4.6 The records of the visual particulate matter monitoring and stack emissions monitoring are reviewed periodically to facilitate the review and assessment of operational activities as necessary. The review is carried out in conjunction with a review of meteorological data that are available and the site operations that took place during the monitoring period together with any complaints regarding particulate matter emissions that have been received.

4.7 In the event that based on the visual site observations there is an unacceptable particulate matter emission from the site the Particulate Matter Management and Monitoring Action Plan is implemented. The Particulate Matter Management and Monitoring Action Plan is presented in Section 6.

5. Engagement with the Community

5.1 Titan is conscious of the potential impact on the environment of its activities and strives to manage and minimise those impacts. Titan recognises the importance of community engagement and strives to build a positive working relationship with local residents and businesses. Contact details for the site are displayed on the signage at the site entrance.

Reporting of complaints and management responsibilities

5.2 Any complaints about the site operations and/or their impact on the environment made by third parties (including any complaints identified by the Environment Agency, Health and Safety Executive or Local Authority) should be brought to the attention of the TCM in the first instance who will identify and implement the measures needed to resolve the matter as set out in Section 6 of this DEMP. They shall then make a note of the complaint and the actions taken to resolve it. A register of complaints will be maintained onsite in the site diary. Complaints will be escalated to senior management at the discretion of the TCM, based on the number and nature of the complaints. Should complaints be escalated the details will be recorded in the site diary.

5.3 The particulate matter management and monitoring action plan which is implemented in the event that a complaint is received is presented in Section 6 of this DEMP.

6. Particulate matter and dust management and monitoring action plan

Context

6.1 The overriding management principle of the site with respect to dust control is to operate the site in a manner which prevents or minimises the release of dust as set out in the DEMP. If it is considered that the waste stored on the site, the waste being loaded or unloaded at the site or the site surfacing itself is in a condition that has the potential to release a significant quantity of dust such that there is a potential for off-site dust emissions, additional dust control measures will be employed in a manner proportionate to the risk. These actions will be undertaken as part of the routine operation of the site. The action plan in this section of the report sets out the additional actions that will be taken in the event that conditions are identified whereby the routine measures need to be supplemented or improved.

Introduction

6.2 The action plan will be implemented in the event that:

i) there is an unacceptable visual emission of dust from the site, or
ii) a complaint is received.

An unacceptable visual emission of dust from the site comprises a visual observation of dust or particulate matter crossing the site boundary from Titan's operations. The initial visual observation will be made by the site operative who has identified the emission and will be verified by the TCM. At the first instance of an unacceptable emission of dust or particulate matter from the site, verified by the TCM, the action plan provided below will be implemented.

6.3 The timescale for implementation of the action plan will vary depending on the circumstances under which it is implemented. If an unacceptable visual emission is observed by site operative there will be no delay in implementing the action plan, whereas a complaint may be received by the operator a number of hours or even days after the activity that may have contributed to the complaint has ceased. In the latter case investigation of the complaint will be based on a review of the data and observations recorded at the site corresponding to the time at which the complainant observed the event.

Action plan

6.4 In the event that an unacceptable visual emission of particulate matter from the site is observed by site personnel the event will be investigated immediately by the TCM to determine the source as follows:

If it is established that the emissions are attributable to activities being undertaken at the APP site action will be taken to control the emissions including where relevant:

- If emissions are attributable to delivery of waste to the site, the temporary cessation of the delivery of waste until control measures are sufficient to ensure that particulate matter emissions are effectively controlled and emissions do not cross the site boundary.

- Organisation of additional mechanical or manual sweeping or cleaning of the site surfaces to ensure surface debris does not give rise to unacceptable emissions of dust or particulate matter.

- Carrying out checks to confirm that vehicles are obeying the site speed limits.

- Identifying whether there are any other activities being undertaken at locations other than the APP site including the locations with the potential to release particulate matter identified in Table DEMP 1 and estimating the extent to which other activities may contribute to the visual emissions observed on the site including circumstances where windblown dust may be transported across and/or over the site from the external sources.

- In the unlikely event that the routine control measures employed at the site are not sufficient to control particulate matter emissions then consideration will be given to further measures to minimise and control emissions such as implementation of additional dust suppression and procurement of additional dust control equipment.

6.5 In the event of a complaint associated with particulate matter emitted from the site an investigation will be undertaken immediately to determine the source as follows:

- Identify from the site diary what activities were being undertaken at the time at which the complaint event occurred and in which location at the site and review the records of wastes that were accepted and handled at the site on that day.

- Identify from meteorological data available whether the emissions are potentially a result of the operations at the site.

- Identify from the site diary whether there were any unusual regional weather events occurring during the day on which the complaint was made.

- Giving consideration to the wind direction on the day of the complaint, identify from the site diary whether there were any other activities being undertaken at locations other than the APP site for example the neighbouring sites with the potential to release particulate matter identified in Table DEMP 1.

- If it is established that the emissions were attributable to activities being undertaken at the site, review the relevant operational procedures and implement improvements and provide additional training to site personnel to improve the controls and minimise future emissions. Consideration will be given to further measures to minimise and control emissions such as implementation of additional dust suppression or the procurement of additional dust suppression equipment.

6.6 In the case of a complaint, the action taken will be communicated to the complainant and the Environment Agency. Feedback will be provided to the complainant in the within 28 working days of acknowledging receipt of the complaint. As necessary the relevant operational procedures will be reviewed and improvements implemented.

TABLES

Table DEMP 1

Summary of the receptors in the vicinity of the site (including other potential sources of dust emissions)

Ref	Name or description	Type of receptor	Approximate distance from site (m)	Direction from site
1	Rose Tree Farm	Commercial/Residential	500 - 1000	N
2	Marsh End Farm	Commercial/Residential	500 - 1000	NE
3	Cross Lane Farm Cottages	Commercial/Residential	>1000	NNE
4	Fiddlers Ferry power station	Industrial	Adjacent	W
5	River Mersey	Watercourse	500 - 1000	SE
6	True Fit Golf Centre	Commercial	500 - 1000	NE
7	Penketh Fire Station	Commercial	500 - 1000	NE
8	Pit Stop	Commercial	500 - 1000	N
9	Deciduous Woodland	Woodland	<250	S
10	Area E	Commercial	500 - 1000	N
11	Residential properties on Brick Lane	Residential	500 - 1000	NW
12	Spice of India Cuerdley	Commercial	500 - 1000	NW
13a	Current - Agricultural fields	Agricultural	>250	E
13b	Future - Proposed future residential development	Residential	<250	E
14	CDFA Lagoon	Industrial	>250	S
15	A562	Road	500 - 1000	N
16	St Helens Canal	Waterbody	<250	S
17	Railway Line	Railway Line	<250	S

Note: The shaded boxes comprise activities such as roads and commercial operations in the vicinity of the site which have the potential to contribute particulate matter emissions to local air quality. Receptors within 1km of the site are displayed in Table 1 above. The receptors are measured from their closest point to the site and their locations are shown on Figure DEMP 1.

Table DEMP 2

Waste types authorised to be accepted at the site

Max Quantity	**Annual throughput shall not exceed 500,000 tonnes**
Waste Code	**Description**
10	**Waste from Thermal Processes**
10 01	**Waste from power stations and other combustion plants (except 19)**
10 01 02	Coal fly ash

Table DEMP 3

Source - pathway - receptor linkages

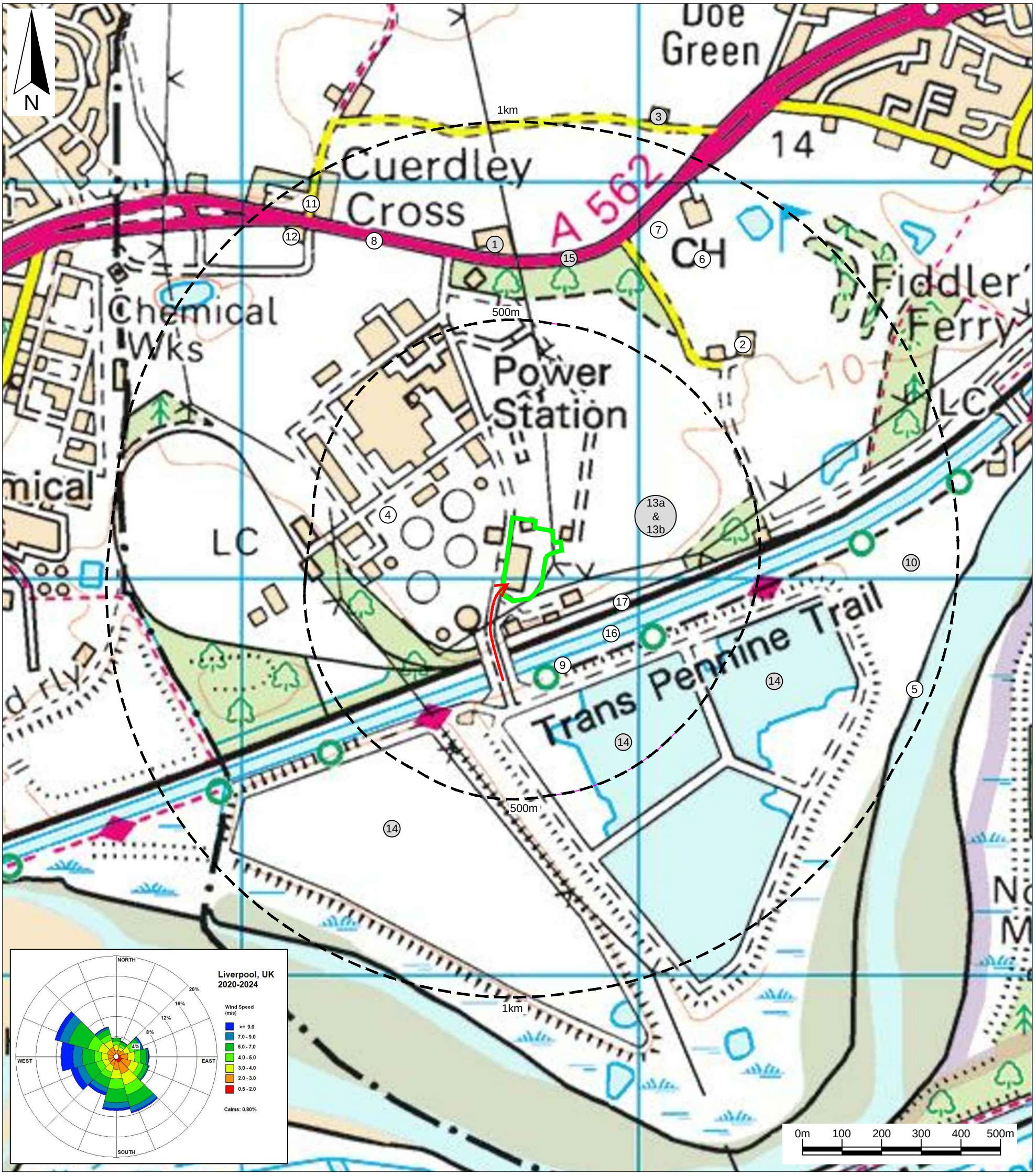
For each of the sources and pathways included in the table the receptor is considered to be the receptors identified in Table DEMP 1, particularly those located down prevailing wind of the site. The sources in the table comprise those identified based on the activities described in Section 2 of the DEMP. Further details of the techniques employed are presented in Section 3 of the DEMP.

Source	Pathway	Techniques employed to minimise the emissions of dust
Vehicles entering, travelling within, and/or leaving the site with mud or debris on their wheels.	Tracking out of the site of particulate matter and mud on vehicle wheels which may drop off and deposit on the public highway which may subsequently dry and generate particulate matter if disturbed such as when tracked over by vehicles.	All CDFA accepted at the APP is delivered from the adjacent ash lagoons or Area E. The delivery route does not require vehicles to travel on the public highway. Vehicles delivering CDFA to the APP will return to the ash lagoon site or Area E and will not travel on the public highway. Following processing at the APP, the outputs from the process will be transported off the site and onto the public highway in road tankers. Internal site roads are subject to daily inspections and water bowsing and sweeping to prevent dust build up to minimise the potential for any dust or particulate matter to accumulate on the road surface and to minimise the potential for particulate matter to accumulate on the wheels of vehicles which may enter the public highway.
The resuspension of dust and particulate matter on roads and site surfacing by vehicles	Atmospheric dispersion	The site access road is maintained and swept with a road sweeper and the areas of hardstanding at the site will be maintained in a condition consistent with minimising the generation of dust and particulate matter. During dry windy conditions, site roads will be dampened if necessary to minimise the potential of emissions from the surface.
The release of particulate matter and debris from CDFA loads as they are delivered to the site	Falling off delivery or collection vehicles.	The CFDA received at the site is naturally damp hence prior to treatment does not comprise a significant source of dust emissions.

Source	Pathway	Techniques employed to minimise the emissions of dust
The release of particulate matter when CDFA loads are deposited or set down at the APP site.	Atmospheric dispersion	CDFA will be deposited and stockpiled in the existing shed to the south of the processing building and in the proposed extensions to the storage building located to the north and northeast of the existing building prior to treatment in the processing building. Storage inside a building will provide a barrier to emissions of particulate matter, albeit that the CDFA will naturally be damp prior to processing hence is unlikely to comprise a significant source of emissions of particulate matter. Vehicle drivers are instructed to minimise drop heights when unloading CDFA.
The release of particulate matter when an excavator and/or loading shovel digs into the CDFA prior to feeding materials into the Atritor Dryer Pulverisers.	Atmospheric dispersion	Prior to the extension of the storage buildings, CDFA will be transferred to the processing building either via an enclosed conveyor or will be transported by loading shovel into the processing building. As explained above, the CDFA will naturally be damp prior to feeding into the drying process hence prior to treatment does not comprise a significant source of dust emissions. Vehicle operators are trained to operate plant in a manner that minimises the potential for dust emissions.
The release of particulate matter when CDFA is loaded into the hopper for the Atritor Dryer Pulverisers.	Atmospheric dispersion	CFDA is conveyed via an open conveyor inside the processing building to a hopper which feeds the Atritor Dryer Pulverisers. The CDFA is damp at this stage of the process. The processing building provides a barrier to emissions of dust.
The release of particulate matter from the dryer stacks.	Atmospheric dispersion	Fabric filters will be installed to abate the emissions of dust from the vent stacks associated with the Atritor Dryer Pulverisers. The fabric filter will comprise a porous woven fabric through which the hot air will pass, and the dust particles will be collected by the filter. The fabric filter will be selected based on the characteristics (including temperature) of the waste gas and will be specified to achieve a maximum emission rate of 10mg/m^3. The vent stacks are subject to periodic monitoring for dust to confirm that the fabric filter abatement is performing to the manufacturer's specification.

Source	Pathway	Techniques employed to minimise the emissions of dust
The release of particulate matter when dried CFDA is transferred from the dryer into the intermediate storage silo.	Atmospheric dispersion	Once dried, the CDFA is removed from the dryer(s) via an enclosed screw conveyor and pneumatically blown through enclosed pipework into an intermediate feed storage silo located internal to the processing building. The enclosed system is designed to prevent emissions of dust. Pipework at the APP is the subject of an inspection and maintenance programme.
The release of particulate matter when CDFA is transferred from the intermediate storage silo into the electrostatic separator.	Atmospheric dispersion	The CDFA is pneumatically blown through enclosed pipework from the intermediate feed storage silo into the electrostatic separators. The enclosed system is designed to prevent emissions of dust. Pipework at the APP is the subject of an inspection and maintenance programme.
The release of particulate matter when CDFA is treated in the electrostatic separator.	Atmospheric dispersion	The dry CDFA material is fed to the electrostatic separator where it is separated into mineral and carbon. A plastic belt cleans the electrodes used for the separation and transports the two different products to the separator outlets. The system is under vacuum with exhausts passed through a dust collector located inside the building which minimises the potential for dust emissions.
The release of particulate matter when separated mineral and carbon is transferred from the electrostatic separator into storage silos.	Atmospheric dispersion	Following separation, the mineral and carbon outputs are pneumatically blown through enclosed pipework into the storage silos located outside of the building. The external silos are fitted with high level alarms and bag filters on the pressure relief vents.
The release of particulate matter when separated mineral and carbon is transferred from storage silos into tankers for export from the site.	Atmospheric dispersion	The mineral will be stored dry and discharged through connecting pipework directly into dry bulk tankers. The carbon will be offloaded through connecting pipework directly into bulk tankers either dry or wet (20% moisture). The enclosed system is designed to prevent emissions of dust. Pipework at the APP is the subject of an inspection and maintenance programme.
Particulate emissions from the exhaust of vehicles and plant on site.	Atmospheric dispersion	Vehicles and plant on site will be maintained to optimise performance and minimise vehicle emissions. A no idling policy will be implemented at the site for vehicles and plant.

FIGURES



Key / Notes

Approximate boundary of Environmental Permit EPR/ZP3831/DX Fiddlers Ferry Ash Processing Plant

(12) Potential receptor generally within a 1km radius of the site

(15) Receptors with the potential to contribute particulate matter emissions

Offset from Environmental Permit boundary

Vehicle access route to APP

Note:
Permit boundary taken from RockTron drawing number FF-PL-11 included in variation V002 the Environmental Permit.

Rev	Status	Drn	App	Chk	Date
	Final	KR	LRM	AW	11/11/25

Site: FIDDLERS FERRY

Client: Titan Cement UK Limited

Title: Site and surrounding area

Figure DEMP 1 — 1:10,000@A3

Drawing Ref: TIC/FF/02-25/24822

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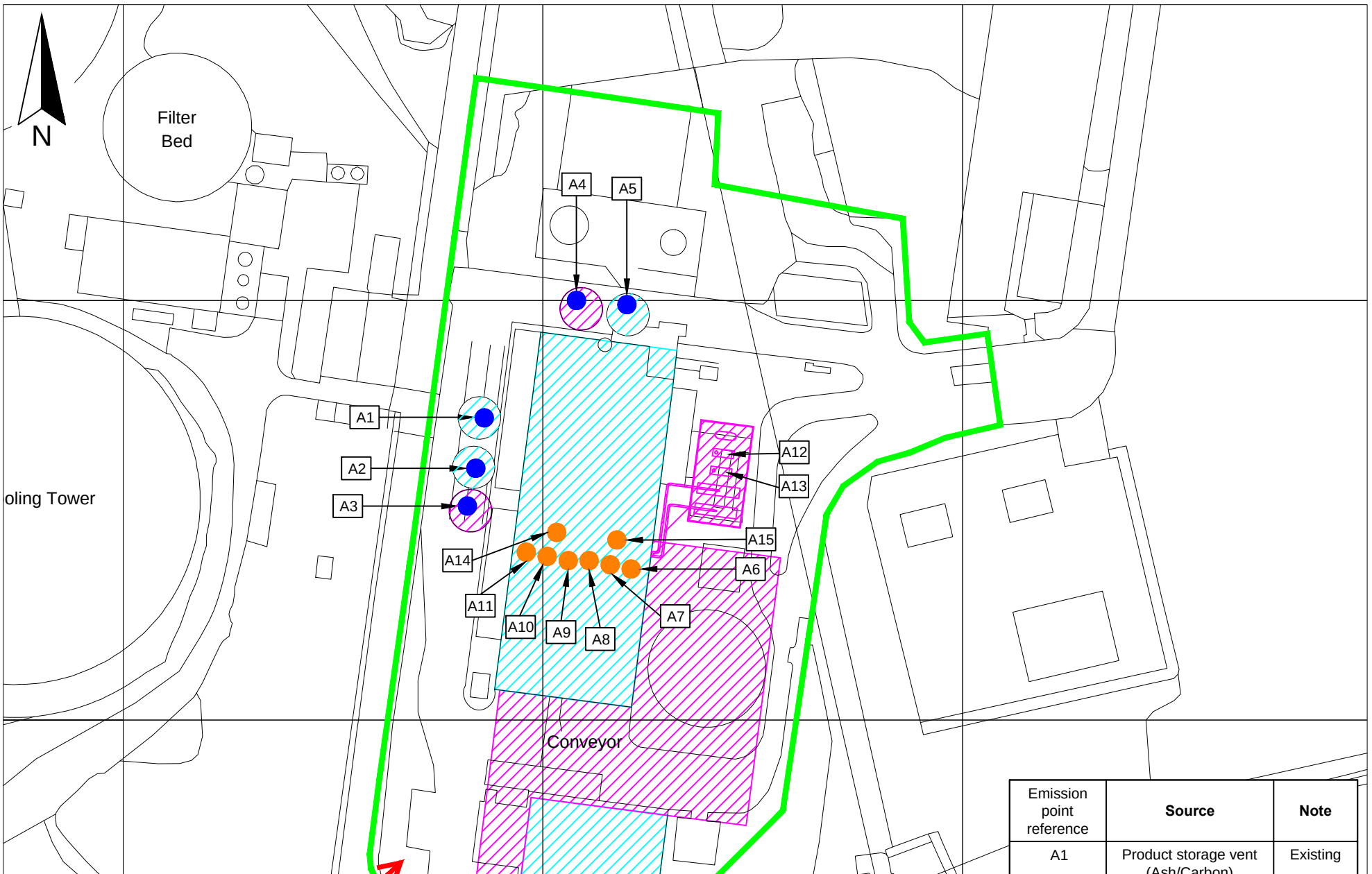

Emission point reference	Source	Note
A1	Product storage vent (Ash/Carbon)	Existing
A2	Product storage vent (Ash/Carbon)	Existing
A3	Product storage vent (Ash/Carbon)	Future
A4	Product storage vent (Ash/Carbon)	Future
A5	Product storage vent (Ash/Carbon)	Existing
A6	Dryer/Atritor stack	Future
A7	Dryer/Atritor stack	Future
A8	Dryer/Atritor stack	Future
A9	Dryer/Atritor stack	Future
A10	Dryer/Atritor stack	Future
A11	Dryer/Atritor stack	Future
A12	Diesel generator stack	Future
A13	Diesel generator stack	Future
A14	Gas generator stack	Future
A15	Gas generator stack	Future

Key / Notes

Approximate boundary of Environmental Permit EPR/ZP3831/DX Fiddlers Ferry Ash Processing Plant

Approximate location of a silo or storage tank

Approximate location of stack emission points

A1 Emission points to air

Approximate location of existing building and infrastructure

Approximate location of proposed building and infrastructure

Note:
Permit boundary taken from RockTron drawing number FF-PL-11 included in variation V002 the Environmental Permit.

Rev	Status	Drn	App	Chk	Date
	Final	KR	LRM	AW	11/11/25

Site: FIDDLERS FERRY

Client: Titan Cement

Title: The site layout and emission points - Scenario 2

Figure DEMP 2

Scale: 1:1,250@A3

Drawing Ref: TIC/FF/03-25/24854

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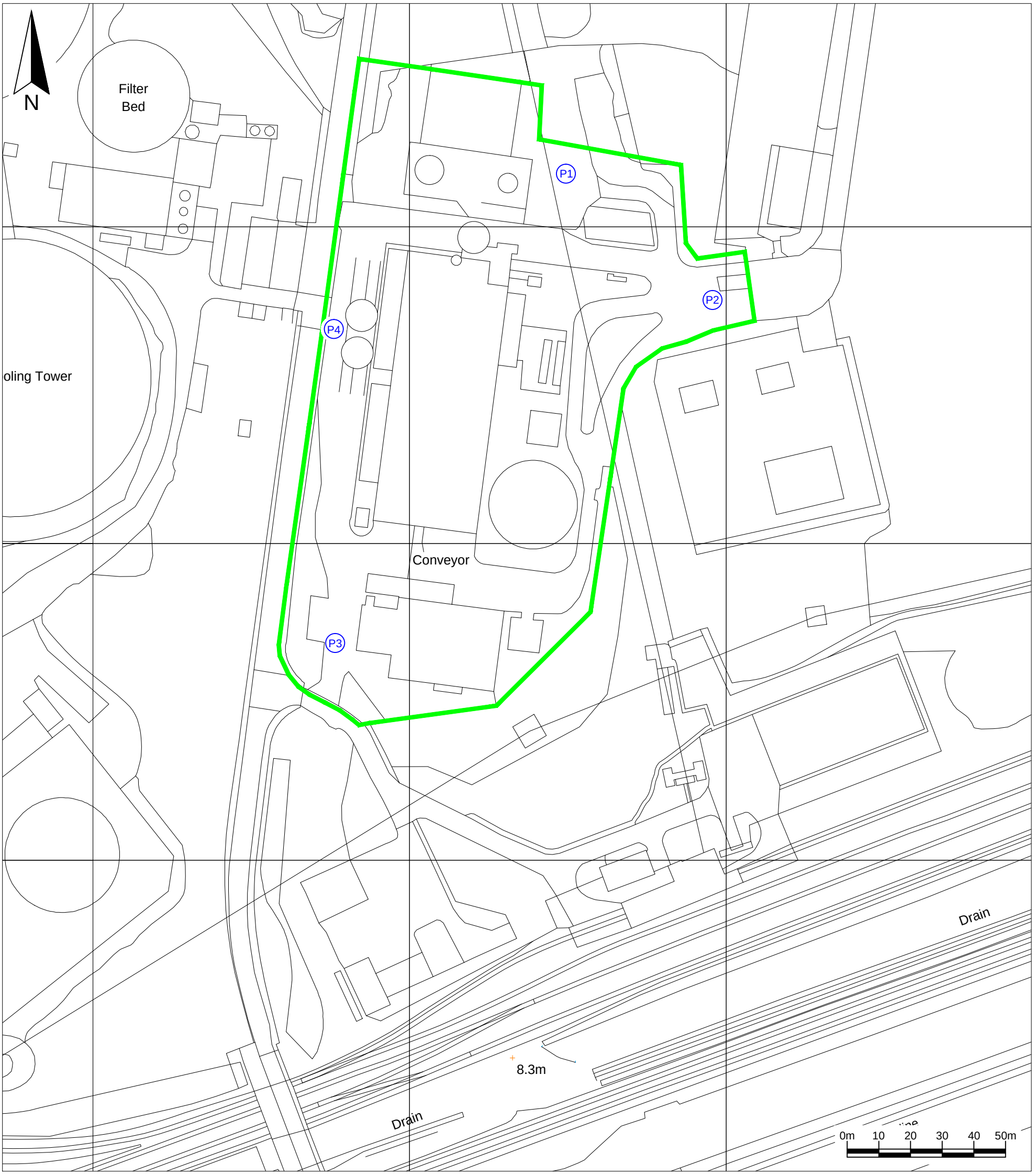

Key / Notes

Approximate boundary of Environmental Permit EPR/ZP3831/DX Fiddlers Ferry Ash Processing Plant

P1 Approximate visual dust monitoring location

Note:
Permit boundary taken from RockTron drawing number FF-PL-11 included in variation V002 the Environmental Permit.

Rev	Status	Drn	App	Chk	Date
	Final	KR	LRM	AW	11/11/25

Site: FIDDLERS FERRY

Client: Titan Cement

Title: Visual dust monitoring locations

Figure DEMP 3

Scale: 1:1,250@A3

Drawing Ref: TIC/FF/03-25/24836

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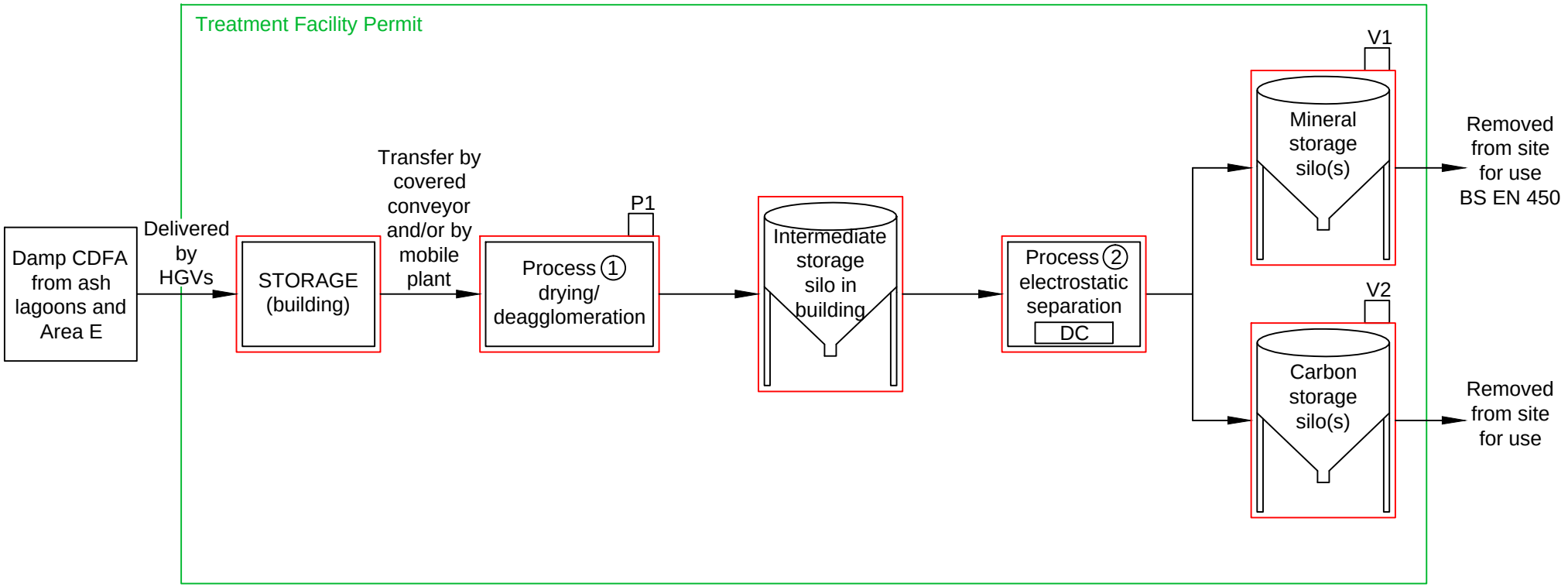

The diagram shows a single process line, which at the final phase of project development will consist of up to 6 drying/deagglomeration units [Process 1] and 2 electrostatic separation units [Process 2] to achieve a throughput of 500,000 tpa.

Key / Notes

CDFA - Coal Derived Fly Ash

P - Emission point

P1 - Heater/dryer exhaust

DC - Dust collector

V1 - Silo vent

V2 - Silo vent

Containment silo or buildiing

Rev	Status	Drn	App	Chk	Date
	Final	KR	LRM	AW	11/11/25

Site: FIDDLERS FERRY

Client: Titan Cement

Title: Process flow diagram for the ash processing

Figure DEMP 4

Scale: NTS

Drawing Ref: TIC/FF/09-25/25188

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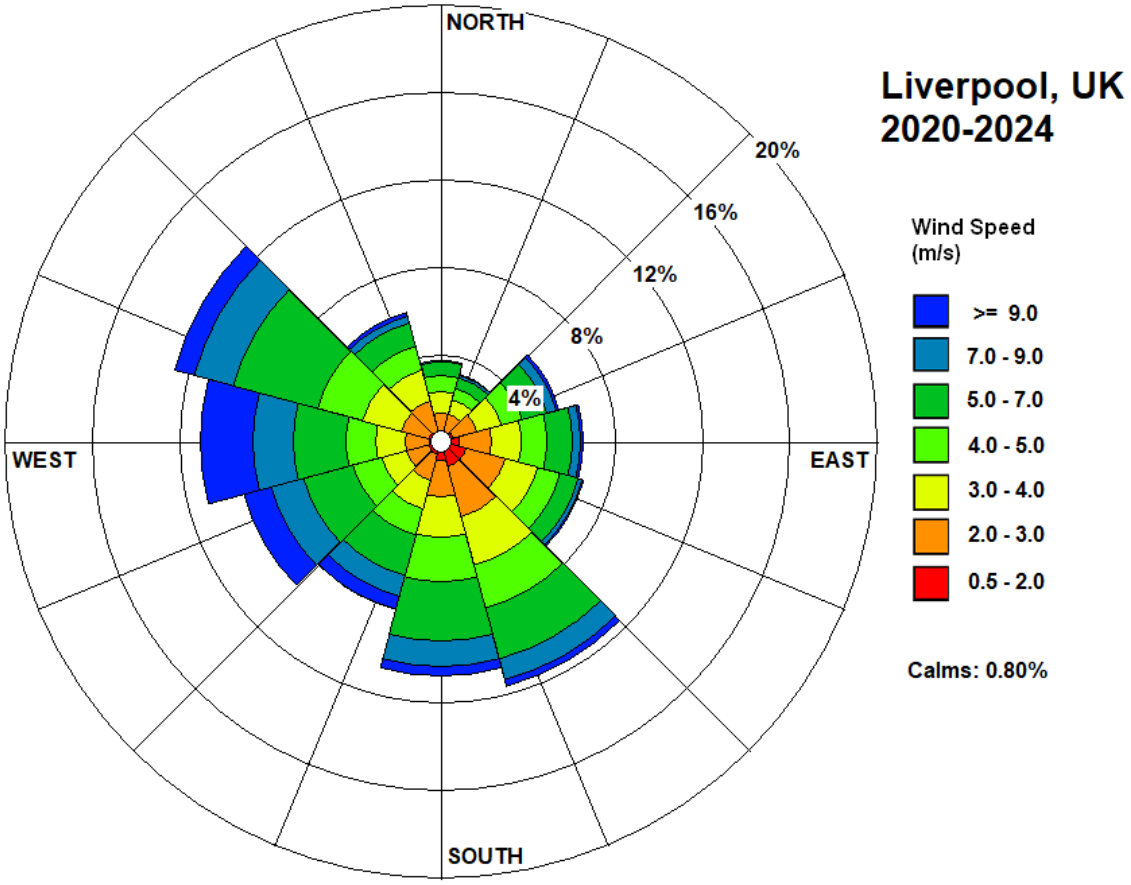
APPENDICES

APPENDIX A

WIND ROSE FOR LIVERPOOL 2020 – 2024


NORTH
EAST
SOUTH
WEST
4%
8%
12%
16%
20%
Liverpool, UK
2020-2024
Wind Speed
(m/s)
>= 9.0
7.0 - 9.0
5.0 - 7.0
4.0 - 5.0
3.0 - 4.0
2.0 - 3.0
0.5 - 2.0
Calms: 0.80%

APPENDIX B

VISUAL MONITORING CHECKLIST

Dust Monitoring Form

Week commencing: ……

Day	Name of assessor	Time	Location	Wind direction	Visual observations including the storage silos / Comments	Action taken
Monday			P1			
			P2			
			P3			
			P4			
			A1			
			A2			
			A3			
			A4			
			A5			
Tuesday			P1			
			P2			
			P3			
			P4			
			A1			
			A2			
			A3			
			A4			
			A5			
Wednesday			P1			
			P2			
			P3			
			P4			
			A1			
			A2			
			A3			
			A4			
			A5			
Thursday			P1			
			P2			
			P3			
			P4			
			A1			
			A2			
			A3			
			A4			
			A5			
Friday			P1			
			P2			
			P3			
			P4			
			A1			
			A2			
			A3			
			A4			
			A5			
Additional comments						

Signed off by TCM: ……

This form should be read and used in conjunction with Figure DEMP 3 which shows the visual monitoring locations P1, P2, P3 and P4 and Figure DEMP 2 which shows the Silo locations A1 to A5

Use as many of these forms as necessary

APPENDIX C

SITE INSPECTION CHECK SHEET

Site Inspection Check Sheet

Week Commencing: _____

Daily Check	Mon	Tue	Wed	Thu	Fri	Sat	Sun
TCM signed in?							
Waste/materials stored in correct area?							
Outputs – stored in silos							
Condition of ground – surface integrity, spillages, debris							
Silos – visual check of integrity							
Dust – visual assessment							
Dust – bowser available/operational							
Mud on road – site entrance checked							
Odour – check for complaints, assess odour							
Litter – check complaints, litter around site							
Security – boundary condition							
Fuel storage – check for diesel leaks							
Condition of road/site surfaces – cleanliness, surface condition							
☑ if OK or nothing to report ☒ if not – see facility diary for details							

Weekly Inspections	Comments
Permit & EMS – available & up to date	
Duty of Care documents – checks current & recorded?	
Mobile & static plant maintenance – checks completed	
Accommodation/welfare facilities – toilets, mess	

Monthly Inspections	Comments
Warning/information signs – suitability, condition	
Site ID board – condition, still current	
Fire extinguishers / safety equipment	
First Aid boxes – contents & position	
Plant maintenance schedules	

Site Inspection Check Sheet

Comments:

Checks carried out by: Print Name _____ Signed _____ Date _____

Reviewed by Manager/Director: Print Name _____ Signed _____ Date _____