CAR_NRW0035686

Appendix 1

NRW Comments on 'Padeswood Cement Operating Procedures PG10 Control of dust not controlled by emission limits' received by NRW 05/07/19.

Section	NRW Comment, Recommendations & Queries
General	As a recommendation the procedure could be streamlined (to avoid duplication) by consolidating sections 3.2 and 3.3
3.2, 3.3 and 3.4	Include procedural detail for Cement Mills 1,2,3 & 5– there is very little detail on the requirements for the cement mills in the document.
3.1 Key Control Measures	To include that dusty/finely divided materials shall be stored and handled within a fully enclosed area with dust extraction where necessary to prevent fugitive release to air.
General	Set out the contingency measures in the event of failure of control measures that cause or may cause an offsite amenity impact e.g. defective crane store door, building cladding, wheel wash.
General	Set out the requirements for the sheeting of vehicles carrying dusty materials on and off site.
General	The procedure states that roads will be swept daily Monday – Friday but does not specify how often. The procedure should set out the required frequency of cleaning and how is this determined. For example, a minimum requirement to sweep twice per day and a trigger to increase this further.
General	What are the requirements for the temporary storage of dusty materials on site e.g. dust arising from breakdowns, maintenance work, off specification cement. Storage within skips and sheeted, or storage within a designated building? Special provisions for maintenance tasks that may generate dust e.g. requirements for refractory removal and associated storage of waste / materials arising.
General	What are the details and requirements of routine cleaning of dust e.g. use of DISABs and vacuum systems in process areas / conveyer walkways etc to minimise risk of transfer of dust to external areas?
Section 3.2.3	This states that some transport conveyers and transfer points are partially enclosed but also says that the material can be dusty in dry weather. BAT is to cover conveyers and elevators which are constructed as closed systems, if diffuse dust emissions are likely to be released from dusty material. We seek clarification as to why these conveyers are only partially enclosed?
Section 3.2.4	This section states that the high moisture content of coal reduces the 'risk rating' of fugitive dust from the coal stockpile. However, when stored under cover (in the open sided coal store) it is conceivable that the material will dry (on the surface at least) which may lead to dust emissions particularly during any movement/handling. Given the proximity of this building to a nearby residential property (<400m) this requires further review and justification as to why the building should remain open sided / why no dust suppression is in use e.g. spray mist system. I also seek clarification that the area to the rear of the coal store is no longer used to store coal as this is completely uncovered. This should be specified in the procedure. The procedure could be strengthened to state that coal shall be delivered the crane store in preference to the coal store wherever practicable.

Section 3.2.5	Given there are several doors around the crane bay and the scale of the building itself. It is possible that the building can act as a wind tunnel (carrying fugitive dust) when more than one door is open, particularly at opposing ends. For example, consideration should be given within the procedure to avoid opening the gypsum door at the same time as the 3 doors to the front of the building. (also see comments under 'Section 3.3, table 1 'Clinker Transport' relating to the clinker transport system) Set out the requirements for the operation of the dust suppression system installed at the gypsum door.
Section 3.2.7	This section states that '*the transport conveyers are partially or fully enclosed with the exception if 341BC01, however all transfer points are within mostly fully enclosed areas'.* Please clarify if all partially enclosed transfer points and conveyer 341BC01 are within enclosed areas and if not justify why this is BAT.
Section 3.2.8	This section states that '*the feeder area is mostly enclosed…main access is through a rubber curtain…transport conveyers are partially or fully enclosed with the exception of 341BC01.* Please clarify the risk of fugitive dust release from partially enclosed conveyers and unenclosed 341BC01.
Section 3.2.9	This section states that the '*transfer point onto the main kiln feed air slide is partially enclosed'* – please clarify why this is not fully enclosed and the risk of fugitive dust releases from this location.
Section 3.2.10	This section should include provisions to prevent and minimise fugitive dust release in the event of a kiln flush or blockage or refer to the appropriate procedure.
Section 3.2.12	This section states that the *'the discharge point at the loading head is fully enclosed with plastic door strips for entry'.* Please clarify why this building does not have a door and the risk of fugitive dust releases from this location.
Section 3.2.14	Please clarify the requirements for the operation of the doors on the clinker export loading point. Doors open only for access and egress?
Section 3.2.15	There should not be a presumption that site roads are dusty in operational areas, as a default these areas should be kept clean via primary control measures and road sweeping. – the text should reflect this. However, it is foreseeable that some small spills of dust may occur and therefore the wheel wash is a final control measure to prevent the spread of dust around the site and onto the highway. As a recommendation, the procedure could specify that all vehicles should use the wheel wash as whilst some vehicles may not visit operational areas they will use the main site road that could be dusty. The procedure could specify the exceptions e.g. vehicles that are not suitable for the when wash, cars, light vehicles, vehicles with goods that may be damaged? What is the requirement for the wetting of site roads? Under what circumstances is this carried out, where and how often? Who makes the decision to call in additional resources if dust levels on site roads are found to be or may become unacceptable? How quickly can additional resource be called in – is a contract in place?
Section 3.3, table 1	'Limestone' – is dust suppression viable to reduce fugitive dust emissions from dry limestone e.g. during summer months. This point is raised given that parts of the limestone transport system are only partially enclosed.

Section 3.3, table 1	'Clinker Transport' – states that 'de-dusting on the clinker transport system to the cement mills is limited, in this case the site reliant on self-closing doors as well as properly sheeted enclosures'. Presumably this relates to the clinker transport system within the crane store? To our knowledge the crane store does not benefit from negative pressure and dedusting by fabric filter. Given the crane store doors are routinely opened to allow for deliveries of raw materials this poses a risk of fugitive dust release – please justify why the limited de-dusting of the clinker transport constitutes BAT.
Section 3.3, table 1	'Site General/Roads' states that '*during periods of extreme heat the site will be very dry, in this case the general levels of dust can increase significantly'*. Whilst we appreciate that hot [dry] weather may increase the likelihood of any spilt dust becoming airborne and may warrant increase road sweeping etc, we would not expect general levels of dust to increase 'significantly' if adequate control measures are in place to contain dust at source and therefore we seek clarification as to this statement
Section 3.5.2	The procedure should identity or define critical containment doors. The collapse of a wall or loss of cladding (containment failure) on dusty process areas (e.g. crane store/conveyers) should be added to the list of equipment deemed as high priority.
Section 3.5.3	At what frequency will the procedure be discussed during tool box talks? How often will supervisory staff etc receive training / refresher training? How will training for contractors be delivered and recorded and their activities supervised?
Section 3.5.4	This section states that significant spills (as defined) shall be cleaned up immediately, however the procedure does not set out the requirements to clean-up minor spills of dusty materials. Also, for how long will ongoing minor and significant leaks of dust be tolerated before the process / source is stopped?
Section 3.5.5	Complaint investigation – develop and refer to a complaint investigation pro forma. Consider all available information when investigating dust complaints including, wind direction, CCTV, shift logs, maintenance activities, consultation with site staff. Specify an immediate onsite inspection to identify possible source followed by offsite visit if required. Refer procedure for collecting and analysing a dust sample. Required timescales for complaint investigation, collection of samples, submission of samples to 3rd party laboratory. Logging of identified issues on internal actions database? Expectations for remedial action where applicable? How are complaints reviewed to look for trends and to ensure issues have been addressed? Additional measures to be taken for elevated levels of complaints - e.g. more intensive site inspection / investigation / pro-active measures.
Form OP002.F2	Include the integrity of cladding as an item.