Licensee Name: Woodville Pig Farms Ltd				
EPA Licence No: P0467				
Application	n Reference No: LA004791			
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	Objective	Licensee Response	Applicability	
5.1.1	Tanks	·		
5.1.1.1	General principles to prevent and reduce emissions			
1	BAT for a proper design is to take into account at least the following:  • the physico-chemical properties of the substance being stored • how the storage is operated, what level of instrumentation is needed, how many operators are required, and what their workload will be • how the operators are informed of deviations from normal process conditions (alarms) • how the storage is protected against deviations from normal process conditions (safety instructions, interlock systems, pressure relief devices, leak detection and containment, etc.) • what equipment has to be installed, largely taking account of past experiences of the product (construction materials, valve quality, etc.) • which maintenance and inspection plan needs to be implemented and how to ease the maintenance and inspection work (access, layout, etc.) • how to deal with emergency situations (distances to other tanks, facilities and to the boundary, fire protection, access for emergency services such as the fire brigade, etc.).	The primary storage facilities at the site would be for the storage of slurry. All current and proposed slurry tanks at the Woodville and Ballyknockane farms are designed to Department of Agriculture and Food Specifications S123 (Minimum Specification for Bovine Livestock units and Reinforced Tanks) September 2017.  Emergency generator diesel tanks for each farm have been designed for the storage and supply of diesel.	Yes	
2	BAT is to apply a tool to determine proactive maintenance plants and to develop risk-based inspection plans such as the risk and reliability based maintenance approach; see Section 4.1,22.1.	Leak detections systems installed on current and proposed slurry tanks would inform maintenance requirements. Integrity assessments would be carried out on tanks and pipework connections as per EPA licence requirements.  Diesel tanks and connections are inspected as part of maintenance checks on emergency generators at Woodville and Ballyknockane.	Yes	
3	BAT is to locate a tank operating at, or close to, atmospheric pressure aboveground. However, for storing flammable liquids on a site with restricted space, underground tanks can also be considered.	Following standard design for the industry, current and proposed slurry tanks would be underground, but open to the surface. Therefore, this BAT is not considered applicable. Emergency generator diesel tanks are located above ground.	Not Applicable	
4	BAT is to apply either a tank colour with a reflectivity of thermal or light radiation of at least 70 %, or a solar shield on aboveground tanks which contain volatile substances	This is not applicable to slurry storage tanks.  Diesel tanks are coloured dark green, as recommended. The tanks on the Woodville and Ballyknockane farms are also located within buildings / sheds.	Yes	
5	BAT is to abate emissions from tank storage, transfer and handling that have a significant negative environmental effect	There would be no significant emissions from diesel tanks.  Air emissions from slurry storage would primarily be abated through regular removal of slurry to covered tanks.	Yes	
6	On sites where significant VOC emissions are to be expected, BAT includes calculating the VOC emissions regularly. BAT is to calculate the VOC emissions regularly with validated calculation methods.	There would be no significant VOC emissions from farm storage.	Not Applicable	
7	BAT is to apply dedicated systems, see Section 4.1.4.4.	All storage at the site is dedicated to single materials.	Yes	

5.1.1.2	Tank specific considerations		
8	Open top tanks  If emissions to air occur, BAT is to cover the tank by applying:  • a floating cover, see Section 4.1.3.2  • a flexible or tent cover, see Section 4.1.3.3, or  • a rigid cover, see Section 4.1.3.4.  Additionally, with an open top tank covered with a flexible, tent or a rigid cover, a vapour treatment installation can be applied to achieve an additional emission reduction, see Section 4.1.3.15.  The type of cover and the necessity for applying the vapour treatment system depends on the substances stored and must be decided on a case-by-case basis.	Slurry tanks beneath buildings would use rigid slatted concrete covering, as detailed in Section 11 of Department of Agriculture and Food Specifications S123 (Minimum Specification for Bovine Livestock units and Reinforced Tanks) September 2017. Proposed external slurry storage tanks would use a flexible or rigid cover (to be confirmed).  Air abatement / vapour treatment is not implemented or proposed for the farm slurry storage.	Yes
9	To prevent deposition that would call for an additional cleaning step, BAT is to mix the stored substance (e.g. slurry), see Section 4.1.5.1.	As is standard practice for agriculture, continuous mixing is not applied to stored slurry in order to minimise air and odour emissions from storage.  Mixing would not be required for building slatted tanks in new buildings due to frequent removal.  Agitation would be used during emptying of the pre-existing building slatted tanks and proposed external storage tanks to liberate settled solids within the tanks.	Not Applicable
10	Atmospheric horizontal tanks are used for the storage of flammable and other liquids, such as oil products and chemicals in all levels of flammability and toxicity, see Section 3.1.4.  BAT is to apply a vapour treatment installation.  For other substances, BAT is to do all, or a combination, of the following techniques, depending on the substances stored:  • apply pressure vacuum relief valves; see Section 4.1.3.11  • up rate to 56 mbar; see Section 4.1.3.11  • apply vapour balancing; see Section 4.1.3.13  • apply a vapour holding tank, see Section 4.1.3.15.	Atmospheric horizontal tanks for emergency generator diesel are smalls calle (c.600 gal). Design and fixtures are as supplied.	Yes
5.1.1.3	Preventing Incidents and (major) accidents		
11	BAT in preventing incidents and accidents is to apply a safety management system as described in Section 4.1.6.1.	An Environmental Management Plan is in place for the farms in compliance with their EPA licence. This includes an accident prevention procedure, to assist in preventing incidents and accidents.	Yes
12	BAT is to implement and follow adequate organisational measures and to enable training and instruction of employees for safe and responsible operation of the installation as described in Section 4.1.6.1.1.	All staff are trained in accident and incident prevention and response.	Yes
13	BAT is to prevent corrosion by:  • selecting construction material that is resistant to the product stored  • applying proper construction methods  • preventing rainwater or groundwater entering the tank and if necessary, removing water that has accumulated in the tank  • applying rainwater management to bund drainage  • applying preventive maintenance, and	Slurry tanks are designed to Department of Agriculture and Food Specifications S123 (Minimum Specification for Bovine Livestock units and Reinforced Tanks) September 2017. Leak detection is in place and integrity assessment is carried out as per the site licence.	Yes
14	For an underground tank, BAT is to apply to the outside of the tank:  • a corrosion-resistant coating  • plating, and/or  • a cathodic protection system.	Slurry tanks are designed to Department of Agriculture and Food Specifications S123 (Minimum Specification for Bovine Livestock units and Reinforced Tanks) September 2017. External coating is not standard design for slurry tanks.	Not Applicable

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15	BAT is to implement and maintain operational procedures – e.g. by means of a management system – as described in Section 4.1.6.1.5, to ensure that:  • high level or high pressure instrumentation with alarm settings and/or auto closing of valves is installed  • proper operating instructions are applied to prevent overfill during a tank filling operation, and  • sufficient volume is available to receive a batch filling.	Overfill of slurry tanks is prevented by design. Tanks are sized based upon animal stocking and including a freeboard.  Overfilling of diesel tanks is prevented through the use of suppliers with experienced, trained staff.	Yes
16	BAT is to apply leak detection on storage tanks containing liquids that can potentially cause soil pollution. The four different basic techniques that can be used to detect leaks are:  • release prevention barrier system  • inventory checks  • acoustic emission method  • soil vapour monitoring.	Leak detections systems are in place on slurry tanks for modern houses at the Woodville and Ballyknockane farms. Leak detection would be installed on the new proposed houses and tanks.  Leak detection is in the form of perforated pipework in a herringbone layout beneath the tanks, leading to a collection / inspection sump.  There is no leak detection on diesel tanks. However, these tanks are above concrete within storage sheds and leaks would be detected during maintenance checks.	Yes
17	BAT is to achieve a 'negligible risk level' of soil pollution from bottom and bottom-wall connections of aboveground storage tanks. However, on a case-by-case basis, situations might be identified where an 'acceptable risk level' is sufficient.	There is a negligible level of risk to soils from diesel tanks as the tanks are relatively small and are stored on impermeable concrete. Connections would be inspected during maintenance checks.	Yes
18	BAT for aboveground tanks containing flammable liquids or liquids that pose a risk for significant soil pollution or a significant pollution of adjacent watercourses is to provide secondary containment, such as:  • tank bunds around single wall tanks;  • double wall tanks;  • cup-tanks;  • double wall tanks with monitored bottom discharge;	Diesel tanks are single skinned and are not located within an external bund. The osk to soil from these tanks is considered negligible as they are stored within buildings with an impermeable floor.	Yes
5.1.2	Storage of packaged dangerous substances	or street	
19	ago de la companya de	An Environmental Management Plan is in place for the farms in compliance with their EPA licence. This includes an accident prevention procedure, to assist in preventing incidents and accidents.	Yes
20	BAT is to appoint a person or persons who is or are responsible for the operation of the store.	There is no chemical store at the farms. Chemicals, cleaning chemicals and maintenance materials are brought to the farm by the relevant personnel as required. There is no significant storage of dangerous substances at the farms.	Not Applicable
21	BAT is to provide the responsible person(s) with specific training and retraining in emergency procedures as described in Section 4.1.7.1 and to inform other staff on the site of the risks of storing packaged dangerous substances and the precautions necessary to safely store substances that have different hazards.	Contractors coming onsite are required to have sufficient training for the responsible storage and use of the materials in use.	Yes
22	BAT is to apply a storage building and/or an outdoor storage area covered with a roof, as described in Section 4.1.7.2.	There is no chemical store at the farms.	Not Applicable
23	BAT is to separate the storage area or building of packaged dangerous substances from other storage, from ignition sources and from other buildings on- and off-site by applying a sufficient distance, sometimes in combination with fire-resistant walls.	There is no chemical store at the farms.	Not Applicable
24	BAT is to separate and/or segregate incompatible substances.	There is no chemical store at the farms.	Not Applicable
25	BAT is to install a liquid-tight reservoir according to Section 4.1.7.5, that can contain all or a part of the dangerous liquids stored above such a reservoir.	There is no chemical store at the farms.	Not Applicable

	Valves		
5.2.2.2	Vapour treatment		Not Applicable
33	For existing underground piping it is BAT to apply a risk and reliability based maintenance approach as described in Section 4.1.2.2.1.	Leak detection systems installed on current and proposed slurry tanks would inform maintenance requirements. Integrity assessments would be carried out on tanks and pipework connections as per EPA licence requirements.	Yes
32	BAT is to apply aboveground closed piping in new situations, see Section 4.2.4.1.	As onsite slurry tanks are below ground level, and gravity feed is used in so far as is possible for transfer of slurry, underground pipework is standard. The proposed new buildings would also use underground pipework to avail of gravity flow, where possible.  There are no sub-surface connections from emergency generator diesel tanks.	Not Applicable
5.2.2.1	Piping		
5.2.2	Considerations on transfer and handling techniques		
31	BAT is to implement and follow adequate organisational measures and to enable the training and instruction of employees for safe and responsible operation of the installation as described in Section 4.1.6.1.1.	All staff are trained in accident and incident prevention and response.	Yes
30	BAT in preventing incidents and accidents is to apply a safety management system as described in Section 4.1.6.1.	An Environmental Management Plan is in place for the farms in compliance with their EPA licence. This includes an accident prevention procedure, to assist in preventing incidents and accidents.	Yes
29	BAT is to abate emissions from tank storage, transfer and handling that have a significant negative environmental effect, as described in Section 4.1.3.1.	There would be no significant emissions from diesel tanks.  Air emissions from slurry storage would primarily be abated through regular removal of slurry to covered tanks.	Yes
28	BAT is to apply a tool to determine proactive maintenance plans and to develop risk-based inspection plans such as, the risk and reliability based maintenance approach;	Leak detections systems installed on current and proposed slurry tanks would inform maintenance requirements. Integrity assessments would be carried out on tanks and pipework connections as per EPA licence requirements.  Diesel tanks and connections are inspected as part of maintenance checks on emergency generators.	Yes
5.2.1	General principals to prevent and reduce emissions		
5.2	Transfer and handling of liquids and liquified gas		Not Applicable
5.1.7	Floating Storage		Not Applicable
5.1.6	Salt leached caverns		Not Applicable
5.1.4 5.1.5	Atmospheric mined caverns Pressurised mined caverns		Not Applicable Not Applicable
5.1.3	Basins and lagoons		Not Applicable
27	4.1.7.6.1.	There is no chemical store at the farms.	Not Applicable
26	fire-fighting measures. The appropriate protection level has to be decided on a case-by-case basis in agreement with the local fire brigade.  BAT is to prevent ignition at source as described in Section	There is no chemical store at the farms.	Not Applicable
	BAT is to apply a suitable protection level of fire prevention and		

BAT for valves include:  * correct selection of the packing material and construction for the process application.  * with monitoring focus on those valves most at risk (such as taing steen careful valves in continual operation).  * applying cotating control (valves or variable speed pumps.  * where trotic, cardingness or other hazardous substances are movived, fit diaphragm, bellows, or double valved in the transfer or storage system or to a vapour treatment system.  5.2.2.4 Pumps & Compressors  The following are some of the main factors which constitute BAT: proper fixing of the pump or compressor unit to its bass-plate or frame.  * having connecting pipe forces within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance.  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance.  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance.  * alignment of shirt and casing within producers' recommendations.  * proper design of suction pipework to minimise hydraulic imbalance.  * alignment of shirt and casing				
The following are some of the main factors which constitute BAT:  • proper fixing of the pump or compressor unit to its base-plate or frame  • having connecting pipe forces within producers' recommendations  • proper design of suction pipework to minimise hydraulic imbalance  • alignment of shaft and casing within producers' recommendations  • alignment of driver/pump or compressor coupling within producers' recommendations when fitted  • correct level of balance of rotating parts  • effective priming of pumps and compressors prior to start-up  • operation of the pump and compressors within producers' recommended performance range (The optimum performance is achieved at its best efficiency point.)  • the level of not positive suction head available should always be in excess of the pump or compressor  • regular monitoring and maintenance of both rotating equipment and seal systems, combined with a repair or replacement programme.  BAT is to use the correct selection of pump and seal_types for the process application, preferably pumps that are technologically designed to be tight such as canned motor pumps, magnetically coupled pumps, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and a quench or buffer system, pumps with	34	correct selection of the packing material and construction for the process application     with monitoring, focus on those valves most at risk (such as rising stem control valves in continual operation)     applying rotating control valves or variable speed pumps instead of rising stem control valves     where toxic, carcinogenic or other hazardous substances are involved, fit diaphragm, bellows, or double walled valves     route relief valves back into the transfer or storage system or		Yes
Proper fixing of the pump or compressor unit to its base-plate or frame	5.2.2.4	Pumps & Compressors		
process application, preferably pumps that are technologically designed to be tight such as canned motor pumps, magnetically coupled pumps, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and seals dry to the atmosphere, diaphragm pumps or bellow pumps.  BAT for compressors transferring non-toxic gases is to apply gas lubricated mechanical seals.  BAT for compressors, transferring toxic gases is to apply double seals with a liquid or gas barrier and to purge the process side of the containment seal with an inert buffer gas.  Selection and installation of appropriate compressor seals for the compressed air system is as per supplier and engineering contractor specifications.  Yes  Selection and installation of appropriate compressor seals for the compressed air system is as per supplier and engineering contractor specifications.  Not Applicable to the containment seal with an inert buffer gas.  Selection and installation of appropriate pumps / compressors is as per supplier and engineering contractor specifications.  Yes  Selection and installation of appropriate pumps / compressors is as per supplier and engineering contractor specifications.  Yes  Not Applicable to the compressors transferring toxic gases is to apply double seals with a liquid or gas barrier and to purge the process side of the containment seal with an inert buffer gas.  Not Applicable to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage is within silos.	35	<ul> <li>proper fixing of the pump or compressor unit to its base-plate or frame</li> <li>having connecting pipe forces within producers' recommendations</li> <li>proper design of suction pipework to minimise hydraulic imbalance</li> <li>alignment of shaft and casing within producers' recommendations</li> <li>alignment of driver/pump or compressor coupling within</li> </ul>		Yes
BAT for compressors transferring non-toxic gases is to apply gas lubricated mechanical seals.  BAT for compressors, transferring toxic gases is to apply double seals with a liquid or gas barrier and to purge the process side of the containment seal with an inert buffer gas.  S.2.2.5 Sampling Connections  Storage of Solids  5.3 Storage of Solids  Satist to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  Compressed air system is as per supplier and engineering compressed air system is as p	36	process application, preferably pumps that are technologically designed to be tight such as canned motor pumps, magnetically coupled pumps, pumps with multiple mechanical seals and a quench or buffer system, pumps with multiple mechanical seals and seals dry to the atmosphere, diaphragm pumps or bellow	Selection and installation of appropriate pumps / compressors is	Yes
seals with a liquid or gas barrier and to purge the process side of the containment seal with an inert buffer gas.  Not Applicable  5.2.2.5 Sampling Connections  Storage of Solids  5.3.1 Open storage  BAT is to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  Not Applicable Not Applicable Storage is within silos.  Not Applicable Not Applicable Storage is within silos.	37		compressed air system is as per supplier and engineering	Yes
5.3 Storage of Solids  5.3.1 Open storage  BAT is to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage is within silos.  Not Applicable	38	seals with a liquid or gas barrier and to purge the process side of	No transfer of toxic gasses at the farms.	
5.3.1 Open storage  BAT is to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage is within silos.  Not Applicable	-			Not Applicable
BAT is to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  BAT is to apply enclosed storage by using, for example, silos,  Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage is within silos.				
bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as  Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage is within silos.  Not Applicable	3.3.1			
	39	bunkers, hoppers and containers, to eliminate the influence of wind and to prevent the formation of dust by wind as far as	1	Not Applicable

40	BAT for open storage is to carry out regular or continuous visual inspections to see if dust emissions occur and to check if preventive measures are in good working order.	There is no open storage of materials at the site.  Dust checks are carried out as part of daily farm checks.	Not Applicable
41	BAT for long-term open storage are one, or a proper combination, of the following techniques:  • moistening the surface using durable dust-binding substances, see Section 4.3.6.1  • covering the surface, e.g. with tarpaulins, see Section 4.3.4.4  • solidification of the surface, see Table 4.13  • grassing-over of the surface, see Table 4.13.	There is no open storage of materials at the site.	Not Applicable
42	BAT for short-term open storage are one, or a proper combination, of the following techniques:  • moistening the surface using durable dust-binding substances, see Section 4.3.6.1  • moistening the surface with water, see Sections 4.3.6.1  • covering the surface, e.g. with tarpaulins, see Section 4.3.4.4.	There is no open storage of materials at the site.	Not Applicable
5.3.2	Enclosed storage		
43	BAT is to apply enclosed storage by using, for example, silos, bunkers, hoppers and containers.	Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage is within silos.	Not Applicable
44	BAT for silos is to apply a proper design to provide stability and prevent the silo from collapsing.	Animal feed is stored offsite (proposed licence boundary) at Tipperary Milling Ltd. Storage silos are structurally sound.	Not Applicable
45	BAT for sheds is to apply proper designed ventilation and filtering systems and to keep the doors closed.	There's it is storage of solid materials in sheds at the farms.	Not Applicable
46	BAT is to apply dust abatement and a BAT associated emission level of 1 – 10 mg/m3, depending on the nature/type of substance stored. The type of abatement technique has to be decided on a case-by-case basis. See Section 4.3.7.	There is no storage of solid materials at the farms.	Not Applicable
5.3.3	Storage of packaged dangerous solids		Not Applicable
5.3.4	Preventing Incidents and (major) accidents		
47	BAT in preventing incidents and accidents is applying a safety management system as described in Section 4.1.7.1.	There is no storage of dangerous solid materials at the farms.	Not Applicable
5.4	Transfer and handling of solids		
5.4.1	General approaches to minimise dust from transfer and handling		
48	BAT is to prevent dust dispersion due to loading and unloading activities in the open air, by scheduling the transfer as much as possible when the wind speed is low.	There is no such handling (loading / unloading) of solid materials at the farm.	Not Applicable
49	BAT is to make transport distances as short as possible and to apply, wherever possible, continuous transport modes.	There is no such handling of solid materials at the farms.	Not Applicable
50	When applying a mechanical shovel, BAT is to reduce the drop height and to choose the best position during discharging into a truck; see Section 4.4.3.4.	There is no such handling of solid materials at the farms.	Not Applicable
51	While driving, vehicles might swirl up dust from solids spread on the ground. BAT then is to adjust the speed of vehicles on-site to avoid or minimise dust being swirled up; see Section 4.4.3.5.2.	There is no such handling of solid materials at the farms.  Vehicle speeds within the farms are limited for safety and to prevent general dust and noise.	Not Applicable

52	BAT for roads that are used by trucks and cars only, is applying hard surfaces to the roads of, for example, concrete or asphalt, because these can be cleaned easily to avoid dust being swirled up by vehicles, see Section 4.4.3.5.3.	Access roads at the farms are hardcore. Traffic volumes are typically low and dust would not be a significant issue.	Not Applicable
53	BAT is to clean roads that are fitted with hard surfaces according to Section 4.4.6.12.	Public roads would be checked as part of daily farm checks and would be cleaned as necessary.	Yes
54	Cleaning of vehicle tyres is BAT.	There would be a low risk of wheel fouling as farm roads are old hardcore and traffic volumes are typically low.	Not Applicable
55	For loading/unloading activities, BAT is to minimise the speed of descent and the free fall height of the product; see Sections 4.4.5.6 and 4.4.5.7 respectively. Minimising the speed of descent can be achieved by the following techniques that are BAT:  • installing baffles inside fill pipes  • applying a loading head at the end of the pipe or tube to regulate the output speed  • applying a cascade (e.g. cascade tube or hopper)  • applying a minimum slope angle with, e.g. chutes.	There is no such handling of solid materials at the farms.	Not Applicable
5.4.2	Considerations on transfer techniques		
56	For applying a grab, BAT is to follow the decision diagram as shown in Section 4.4.3.2 and to leave the grab in the hopper for a sufficient time after the material discharge.	There is no such handling of solid materials at the farms.	Not Applicable
57	BAT for new grabs, is to apply grabs with the following properties (see Section 4.4.5.1):  • geometric shape and optimal load capacity  • the grab volume is always higher than the volume that is given by the grab curve  • the surface is smooth to avoid material adhering, and  • a good closure capacity during permanent operation.	There is no such handling of solid materials at the farms.	Not Applicable
58	For all types of substances, BAT is to design conveyor to conveyor transfer chutes in such a way that spillage is reduced to a minimum.	Feed conveyors and augers are appropriately designed and sealed so as not to loose feed, or allow for contamination of feed.	Yes
59	For non or very slightly drift sensitive products (\$5) and moderately drift sensitive, wettable products (\$4), BAT is to apply an open belt conveyor and additionally, depending on the local circumstances, one or a proper combination of the following techniques:  • lateral wind protection, see Section 4.4.6.1  • spraying water and jet spraying at the transfer points, see Sections 4.4.6.8 and 4.4.6.9, and/or  • belt cleaning, see Section 4.4.6.10.	The feed delivery at the farms are a wet feed system. Dust is not considered to be an issue.	Yes
60	For highly drift sensitive products (S1 and S2) and moderately drift sensitive, not wettable products (S3) BAT for new situations, is to: apply closed conveyors, or types where the belt itself or a second belt locks the material (see Section 4.4.5.2), such as: • pneumatic conveyors • trough chain conveyors • screw conveyors • tube belt conveyor • loop belt conveyor • double belt conveyor	There is no handling of these materials at the farms.	Not Applicable
61	For existing conventional conveyors, transporting highly drift sensitive products (S1 and S2) and moderately drift sensitive, not wettable products (S3), BAT is to apply housing; see Section 4.4.6.2.	There is no handling of these materials at the farms.	Not Applicable

62	When applying an extraction system, BAT is to filter the outgoing air stream; see Section 4.4.6.4.	There is no extraction system for the feed systems at the farms.	Not Applicable
	• a good conveyor design inclining idlers and idler snacing	Selection and installation of appropriate conveyors is as per supplier and engineering contractor specifications.	Yes

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