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PROVISIONAL ATMOSPHERIC EMISSION LICENCE AS CONTEMPLATED IN SECTION 43 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, (ACT NO. 39 OF 2004).

This Provisional Atmospheric Emission Licence (PAEL) issued to Transnet Port Terminals in terms of section 41(1) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("the Act"), in respect of Listed Activity No. 5.1: Storage and Handling of Ore and Coal. The PAEL has been issued on the basis of information provided in the company's application dated 20 June 2018 and information that became available during processing of the application, as well as the site inspection meeting held on 01 August 2018.

The PAEL is valid for a period on twelve (12) months from the date of the commissioning of the listed activity, and may be extended for an additional one (1) year on good cause shown to the Licensing Authority.

The Licensing Authority must be informed in writing regarding the date of the commissioning of the listed activity.

The reason for issuance of the current licence is **new application**.

The PAEL is issued subject to the conditions and requirements set out below which form part of the licence and which are binding on the holder.

1. ATMOSPHERIC EMISSION LICENCE ADMINISTRATION

Name of the Licensing Authority	Department of Environmental Affairs
Atmospheric Emission Licence Number	AEL/WCP/TPT/20/06/2018-2387
Atmospheric Emission Licence Issue Date	26 September 2018
Atmospheric Emission Licence Type	Provisional
Review Date, not later than	31 May 2019



2. ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

Enterprise Name	Transnet Port Terminals
Trading as	Transnet Port Terminals
Enterprise Registration Number	90/000900/06
(Registration Numbers if Joint Venture)	
Registered Address	Port of Saldanha, Saldanha Bay, West Coast District
	Municipality, Western Cape Province, South Africa
Postal Address	Not applicable
Telephone Number (General)	(022) 703 4908
Industry Sector	Port terminals
Name of Responsible Officer	Marlon Saayman
Name of Emission Control Officer	Marlon Saayman
Telephone Number	(022) 703 4908
Cell Phone Number	083 275 3140
Fax Number	(022) 703 4828
Email Address	marion.saayman@transnet.net
After Hours Contact Details	083 275 3140
Land Use Zoning as per Town Planning	Port Related Industrial
Scheme	



3. LOCATION AND EXTENT OF PLANT

Physical Address of the Premises	Port of Saldanha, Saldanha Bay, West Coast
	District Municipality, Western Cape Province,
	South Africa
Description of Site (Erf)	Saldanha Bay is located approximately 120 km
	north-north-west of Cape Town along the West
	Coast of South Africa.
Coordinates of Approximate Centre of	33°0'04.474" S (Latitude)
Operations	17°9'99.229" E (Longitude)
Extent (km²)	0.69 km²
Elevation Above Mean Sea Level (m)	0
Province	Western Cape
Metropolitan/District Municipality	West Coast District Municipality
Local Municipality	Saldanha Bay Local Municipality
Designated Priority Area	-

3.1 Description of surrounding land use (within 5 km radius)

Saldanha Bay is located approximately 120 km north-north-west of Cape Town along the West Coast of South Africa. Originally a natural bay, it was modified to accommodate port related activities. A breakwater and jetty with associated berths were constructed, the latter dividing the bay into what is known as Small Bay and Big Bay. The Port lies within the Saldanha Bay Municipal Area. Surrounding residential and tourist areas include Bluewater Bay, Vredenburg, Saldanha, St Helena Bay, Paternoster and Langebaan. The Langebaan Lagoon, a wetland of international importance and a registered Ramsar site, is located 10 kilometres to the south-east of the Port. The existing Iron Ore Terminal and associated facilities form the main operations of the Port, operating 24 hours per day, seven days a week and for 365 days per year. Other Port activities include an oil tank quay, a Port control centre, docking areas and a yachting marina. Other industries in the region of the Port include steel processing plants, petroleum storage facilities and various light industries. A number of farms also lie within the port.





Figure 1: Surrounding area of Transnet Port Terminals.

Air Quality Officer Signature: AULLELLICITURED Date: 26/09/2018 AELAVCP/TPT/26/06/2018-2387



4. GENERAL CONDITIONS

4.1. Process and ownership changes

The holder of the PAEL must ensure that all unit processes and apparatus used for the purpose of undertaking the listed activity in question, and all appliances and mitigation measures for preventing or reducing atmospheric emissions, are at all times properly maintained and operated.

No building, plant or site of works related to the listed activity or activities used by the licence holder shall be extended, altered or added to the listed activity without an environmental authorisation from the competent authority. The investigation, assessment and communication of potential impact of such an activity must follow the basic assessment procedure as prescribed in the Environmental Impact Assessment Regulations published in terms of section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended.

Any changes in processes or production increases, by the licence holder, will require prior approval by the licensing authority.

Any changes to the type and quantities of input materials and products, or to production equipment and treatment facilities will require prior written approval by the licensing authority.

The licence holder must, in writing, inform the licensing authority of any change of ownership of the enterprise. The licensing authority must be informed within 30 (thirty) days after the change of ownership.

The licence holder must immediately on cessation or decommissioning of the listed activity inform, in writing, the licensing authority.

4.2. General duty of care

The holder of the licence must, when undertaking the listed activity, adhere to the duty of care obligations as set out in section 28 of the NEMA.

The licence holder must undertake the necessary measures to minimize or contain the atmospheric emissions. The measures are set out in section 28(3) of the NEMA.

Failure to comply with the above condition is a breach of the duty of care, and the licence holder will be subject to the sanctions set out in section 28 of the NEMA.

Air Quality Officer Signature: Date: 26/09/2018 AELWCP/TPT/26/06/2018-2387



4.3. Sampling and/or analysis requirements

Measurement, calculation and/or sampling and analysis shall be carried out in accordance with any nationally or internationally acceptable standard. A different method may be acceptable to the licensing authority as long as it has been consulted and agreed to the satisfactory documentation necessary in confirming the equivalent test reliability, quality and equivalence of analyses.

The licence holder is responsible for quality assurance of methods and performance. Where the holder of the licence uses external laboratories for sampling or analysis, accredited laboratories shall be used.

4.4. General requirements for ilcence holder

The licence holder is responsible for ensuring compliance with the conditions of this licence by any person acting on his, her or its behalf, including but not limited to, an employee, agent, sub-contractor or person rendering a service to the holder of the licence.

The licence does not relieve the licence holder to comply with any other statutory requirements that may be applicable to the carrying on of the listed activity.

A copy of the licence must be kept at the premises where the listed activity is undertaken. The licence must be made available to the environmental management inspector representing the licensing authority who requests to see it.

The licence holder must inform, in writing, the licensing authority of any change to its details including the name of the emission control officer, postal address and/or telephonic details.

The holder of the PAEL is entitled to an atmospheric emission licence when the commissioned facility has been in full compliance with conditions and requirements of PAEL for a period of at least six (6) months. Should the licence holder opt to renew the PAEL in terms of section 47 or extend the PAEL in terms of section 41(3) of the act, such application must reach the licensing authority not later than sixty (60) days before the expiry of the PAEL.

4.5. Statutory obligations

The licence holder must comply with the obligations as set out in Chapter 5 of the Act.

Air Quality Officer Signature: **January Officer Signature** Date: 26/09/2018 AEL/WCP/TPT/26/08/2018-2387



5. NATURE OF PROCESS

5.1. Process description

The Port of Saldanha was identified as suitable for export of iron ore from the Northern Cape in September 1976. Transnet Port Terminals (TPT) now operates a bulk iron ore handling facility at the Port. The Multipurpose Terminal (MPT) handles a variety of cargo, such as steel coils, pig iron, iron ore, lead, zircon and rutile and more recently manganese ore. Cargo is imported and exported using a variety of modalities, including road and rail and quayside loading/discharge equipment. To cater for an increase in bulk ore volumes at the MPT, TPT recently constructed an additional storage warehouse along the quayside.

The MPT currently has sufficient space to store 90,000 tons of ore in two storage sheds and propose to store a further and 200,000 tons of ore in an open stockpile along the quayside. Manganese is to enter the terminal via rail and stored in the two warehouses as well as in the open stockpile area. Product is to then be loaded into skips and transported to the quayside for vessel loading. Figure 2 below shows the proposed layout of the MPT and capacity of the terminals infrastructure.

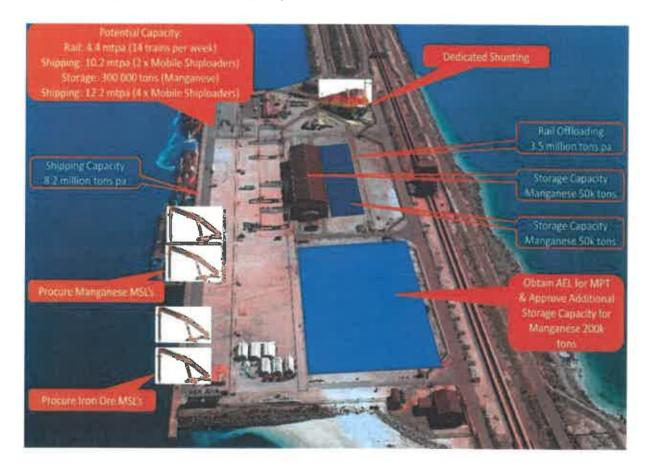


Figure 2: Simplified diagram for Transnet Port Terminals.

Air Quality Officer Signature: Date: 26/09/20/8 AELWCP/TPT/26/08/2018-2387



5.2. Listed activity or activities

List of all Listed Activities, as published in terms of Section 21 of the AQA, authorised to be conducted at the premises by the licence holder:

Category of Listed Activity	Category Name	Sub-category of the Listed Activity	Listed Activity Name	Description of the Listed Activity
5	Mineral Processing, Storage and Handling	5.1	Storage and Handling of Ore and Coal	Storage and handling of ore and coal not situated on the premises of a mine or works as defined in the Mines Health and Safety Act 29/1996.

5.3. Unit process or processes

List of all unit processes associated with the listed activities to be undertaken at the site of work.

Unit Process	Unit Process Function	Batch or Continuous Process
Storage	Storage facility	Batching

5.4. Hours of operations

Indicate hours of operation of all unit processes associated with the listed activities at the site of work.

Unit Process	Operating Hours	Days of Operation per Year
Storage	00H00 to 24H00	365 Days

6. RAW MATERIALS AND PRODUCTS

6.1. Raw materials used (material to be stored)

Raw Material	Maximum	Design	Actual	Units
Туре	Permitted	Consumption(sto	Consumption	(Quantity/Perl
	Consumption	rage) Rate	Rate (Quantity)	od)
	(storage) Rate (Quantity)	(Quantity)		
Manganese	4,400 000	4.400.000	4 400 000	Topolonnum
Manganese	4,400 000	4,400 000	4,400 000	Tons/annum

Air Quality Officer Signature: Date: 26/09/20/8 AEL/WCP/TPT/26/08/2018-2387



6.2. Production rates

Production Name	Maximum Production Capacity Permitted (Quantity)	Design Production Capacity (Quantity)	Actual Production Capacity (Quantity)	Units (Quantity/Period)
V/A	N/A	N/A	N/A	N/A

6.3. Materials used in energy sources

Materials for Energy Source	Actual Consumption Rate (Quantity)	Designed Consumption Rate	Sulphur Content of Material (%)	Ash Content of Material (%)
N/A	N/A	N/A	N/A	N/A

Air Quality Officer Signature: Date: 26/09/2018 AELWCP/TPT/26/08/2018-2387



6.4. Sources of atmospheric emission

6.4.1. Point source parameters

Type of	Emission	(Continuous	/ Batch)			N/A
Emission	Hours					N/A
		Exit	Velocity	(m/s)		N/A
Actual	Gas	Volumetric	Flow	(m³/hr)		N/A
Actual Gas	Exit	Temperature	(၁၀)			N/A
Diameter	at Stack	Tip / Vent	Exit (m)			N/A
		Nearby		Œ		N/A
Height	oę	Release	Above	Ground	Œ	N/A
Longitude	(decimal	degrees)	East			N/A
Latitude	(decimal	degrees)	South			NA
Source Name Latitude						N/A
Point	Source	Code				N/A

6.4.2. Area and/or line source parameters

Area Source Code	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuou s/
EU001	Manganese ore stockpile	Storage of manganese in open stockpile	-33.017448°	17.988954°	10	20	120	24	Intermittent (Wind
EU002	EU002 Wagon	Wagon offloading of -33.016368°	-33.016368°	17.990372°	1.5	3	8	24	Intermittent



	offloading	manganese							(Wind
									dependent)
E0003	Loading of	Loading of skips at	-33.017524°	17.989892°	1.5	2	2	24	Intermittent
	skips at	stockpile area							(Wind
	stockpile								dependent
E0004		Offloading of skips	-33,015888°	17.988270°	0	က	3	24	Intermittent
	Ship loading	into ships hatch							(Wind
									dependent)
EU005	Material	Front end loaders	-33.017298°	17.989284°	1.5	2	2	24	Intermittent
	handling at	operating at							(Wind
	stockpile	stockpile							dependent)

APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION 7.

Appliances and control measures

ssociated	Associated Appliances			Abate	ment Equipmen	ment Equipment Control Technology	nology				
Source		Appliance Serial Number	Appliance Type Description	Abatement Equipment Technology Name and Model	Abatement Equipment Technology Manufacture Date	Commission Date Date Signifi Modifi	ad cat	of Technology Design nt Type Capacity ion	Design Minimum Capacity Control Efficiency (%)	Minimum Control Efficiency (%)	Minimum Utilisation (%)
N/A	NA	N/A	N/A	N/A			WA				

Air Quality Officer Signature: Date: 26/04/2018 AEL/WCP/TPT/28/08/2018-2387



7.2. Maximum emission rates (under normal working conditions)

Point	Pollutant Name	Maximum Release Rate	Rate		Duration of Emissions
Source		(mg/Nm³)	Date to be Achieved By	Average Period	
N/A	N/A	N/A	N/A	WA	Y/A

7.3. Point source - emission monitoring and reporting requirements

ampling Duration Parameters to be Parameters to Reporting Measured be Reported Frequency	N/A N/A N/A
Sampling Sample S	N/A N/A
Emission Sampling Monitoring Method	NA
# 8 #	N/A





7.4. Area and/or line source - management and mitigation measures

Area and/or Line Source Code	Area and/or Line Source Description Manganese ore stockpile	The use of tarpaulin / shade cloth to cover open stockpile. Ensure the sweeper/ vacuum trucks are regularly operating in the area. Daily sweeping and removal of spilled material around the transfer point. Sprinkler system to be installed in the warehouse environment and used only when required to apply a light mist spray to the surface of the stockpile. TPT to	Timeframe for Achieving Required Control Efficiency	Method of Monitoring Measures Effectiveness ASTM D1739: 1970 Method	Reduced visible dust from anywhere on the transport line or stockpile area. Ensure surfaces are clear of dust and spilled manganese
EU002	Wagon offloading	take note of water restrictions. Manual removal of cargo residue from the train wagons. Wetting of all cargo before loading/offloading processes at the train wagon area	Immediately	ASTM D1739: 1970 Method	Ensure each train wagon is clear of manganese ore upon completion of offloading.

Air Quality Officer Signature: All ILLICITION Date: 26/09/20/8 AEL /WCP/TPT/26/16/2018-2387



of Contingency Measures ing is sness	Minimization of dust emissions during loading and offloading	ASTM D1739: 1970 No loading to take place during high windy conditions, if dust is created.	ASTM D1739: 1970 Reduced visible dust from anywhere along the ship loading area.	ASTM D1739: 1970 Reduced visible dust from anywhere along the ship loading area.
Measures Effectiveness				
Timeframe for Achieving Required Control		Immediately	Immediately	Immediately
Description of Specific Measures		of Daily sweeping and removal of spilled material around at the transfer point.	 Daily sweeping and removal of spilled material around the transfer point. No loading to take place during high windy conditions, if dust is created. 	 Daily sweeping and removal of spilled material around the transfer point. No loading to take place during high windy conditions, if dust is created.
Area and/or Line Source Description		Loading of skips at stockpile	Ship loading	Material handling at stockpile
Area and/or Line Source Code		EU003	EU004	E0005



7.4.1 Additional mitigation measures

The following additional management and mitigation measures, as recommended in the Atmospheric Impact Report dated December 2017, must be implemented with regard to emissions from road surfaces;

- Continue to enforce speed limit on terminal roads. <u>S</u>
- Ensure that all trucks are fitted with tailgates to prevent cargo from being spilled.
 - Ensure that truck loads are contained within the loading bin.
- All paved roads to be swept either manually or with the use of the sweeper truck on a frequent basis. G G

Air Quality Officer Signature: Date: 2e/o9/2008 AELWCPTT72808/2018-2387



7.5. Routine reporting and record-keeping

7.5.1 Complaints register

The licence holder must maintain a complaints register at its premises, and such register must be made available for inspections. The complaints register must include the following information on the complainant, namely, the name, physical address, telephone number, date and the time when the complaint was registered. The register should also provide space for noise, dust and offensive odours complaints.

Furthermore, the licence holder is to investigate and, monthly, report to the licencing authority in a summarised format on the total number of complaints logged. The complaints must be reported in the following format with each component indicated as may be necessary:

- a) Source code / name;
- b) Root cause analysis;
- c) Calculation of impacts / emissions associated with incidents and dispersion modelling of pollutants, where applicable;
- d) Measures implemented or to be implemented to prevent recurrence; and
- e) Date by which measure will be implemented.

The licensing authority must also be provided with a copy of the complaints register. The record of a complaint must be kept for at least 5 (five) years after the complaint was made.

7.5.2 Fugitive dust emission management and reporting

- a) The license holder must prepare and submit to the Licensing Authority, a Dustfall Monitoring Programme in accordance with the National Dust Control Regulations, 2013, within six months of the date of this licence.
- b) The licence holder must within three (3) months of the approval of the Dust Monitoring Programme, and quarterly thereafter, submit dustfall monitoring reports, including manganese content, to the Licensing Authority.

7.5.3 Annual reporting

The licence holder must complete and submit to the licensing authority an annual report. The report must include information for the year under review (i.e. annual year end of the company). The report must be submitted to the licensing authority not later than 60 (sixty) days after the end of each reporting period. The annual report must include, amongst others, the following items:

a) Pollutant emissions trend;

Air Quality Officer Signature: Date: 26/09/2018 AELWCP/TPT/28/06/2018-2387

Page 16|18



- b) Compliance audit report(s);
- c) Major upgrades projects (i.e. abatement equipment or process equipment); and
- d) Greenhouse gas emissions.

The holder of the licence must keep a copy of the annual report for a period of at least 5 (five) years.

7.6. Investigation

The following investigations are required:

Investigation	Purpose	Completion Date
N/A	N/A	N/A

8. DISPOSAL OF WASTE AND EFFLUENT ARISING FROM ABATEMENT EQUIPMENT CONTROL TECHNOLOGY.

The disposal of any waste and effluent arising from the abatement equipment control technology must comply with the relevant legislation and requirements of the relevant authorities.

Source Code / Name	Waste / Effluent Type	Hazardous Present	Components	Method of Disposal	i
N/A	N/A	N/A		N/A	Ī

9. PENALTIES FOR NON-COMPLIANCE WITH LICENCE AND STATUTORY CONDITIONS OR REQUIREMENTS.

Failure to comply with any of the licence and relevant statutory conditions and/or requirements is an offence, and licence holder, if convicted, will be subjected to those penalties as set out in section 52 of the AQA.

10. APPEAL OF LICENCE

- 10.1 The licence holder must notify registered interested and affected parties of the issuance of this licence, in writing and within fourteen (14) days, of receiving the Department's decision.
- 10.2 The notification referred to in 10.1, must
 - a) Specify the date on which the licence was issued:
 - b) Inform the registered interested and affected parties of the appeal procedure provided for in the National Appeal Regulations, GN 993 of 08 December 2014; and
 - c) Advise the interested and affected parties that a copy of the licence will be furnished on



request.

An appeal against the decision may be lodged with the Minister in terms of the National Appeal Regulations GN 993 of 08 December 2014 within 20 days from the date of this license, and directed to: Director: Appeals and Legal Review, Department of Environmental Affairs, Private Bag X447, PRETORIA, 0001, Tel No.: 012 399 9626, Email address: AppealsDirectorate@environment.gov.za.