MANCHESTER
CITY COUNCIL

Permit with introductory note

Pollution Prevention and Control Act 1999
Environmental Permitting (England and Wales) Regulations 2016

Tarmac Aggregates Limited
Ashbury Sidings
Bessemer Street
Gorton
Manchester,
M11 2NW

Permit Number

PPC/B/RW/19/001

Introductory Note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part 1 to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The Permit includes the conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by regulation 12 (10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description of the installation regulated by this Permit

Summary

The main purpose of the activity at the installation is the production of coated roadstone using gas oil fired dryers and mixing plant to blend asphalt from aggregate, sand, filler, bitumen and other additives.

The installation includes:

All raw material storage and handling operations.

Confidentiality

The permit requires the Operator to provide information to the Environmental Health Division of the City Council ('the Council'), which it will place onto the public register in accordance with the requirements of the PPC Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Council to have such information withheld from the register as provided in the PPC Regulations. To enable the Council to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the Permit

This Permit may be varied in the future. The Status Log within the Introductory Note to any such variation will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will not be allowed unless the Council considers that the proposed holder will not be the person who will have control over the installation or will not ensure compliance with the conditions of the transferred Permit. If the Permit authorises the carrying out of a specified waste management activity, then there is a further requirement that the transferee is considered to be a "fit and proper person" to carry out that activity.

Status log

Detail	Date	Comment
Request for Commercial Confidentiality	Not applicable	
Permit Granted	24 March 2005	Replacement of existing Authorisation with PPC Permit.
Permit Variation	06 July 2009	Use of Recovered Oil Granted with ref to AQ 17 (07) and will regular review ref Defra Guidance
Permit Reviewed	8 November 2019	Periodic review Permit variation granted in 2009 has been withdrawn after review of guidance
Permit Transferred	8 November 2019	Permit transferred to Tarmac

End of introductory Note.

MANCHESTER CITY COUNCIL

PERMIT

Environmental Permitting Regulations 2016

Manchester City Council
Environmental Health Division
PO Box 463, Manchester M60 3NY

Permit Number
PPC/B/RW/19/001

The Pollution Control Section, Environmental Health at Manchester City Council in exercise of its powers under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, SI 2016 No 1154 hereby permits

Tarmac Aggregates Limited ("the Operator")

Whose Registered Office is:-
Portland house
Bickenhill Lane
Solihill
Birmingham, B37 7BQ

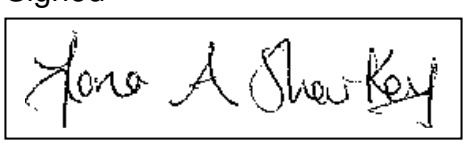
Company Registration No. 00297905

To operate an installation at

Ashbury Sidings
off Bessemer Street
Gorton
Manchester M11 2MW

to the extent permitted by and subject to the schedule of this Permit.

Signed



Dated:

8 November 2019

Fiona Sharkey
Strategic Lead Compliance, Enforcement and Community Safety

Conditions

1. Emission Limits and Monitoring

1.1 The following pollutant emission concentrations, expressed at reference conditions of 273K, 101.3 kPa without correction for water vapour shall not be exceeded in any emission to air.

Total Particulate Matter	**Emission Limits / Provisions**	**Type of Monitoring**	**Monitoring frequency (subject to condition 1.17)**
Existing roadstone coating plant	50 mg/m3	6-monthly monitoring in accordance with the main procedural requirements of BS ISO 9096:2003 **or**	6-monthly
New roadstone coating plant or where new arrestment is fitted to an existing plant	50mg/m3	annual monitoring in accordance with the main procedural requirements of BS ISO 9096:2003 in conjunction with continuously recorded indicative monitoring	Annual in conjunction with continuous
All authorised emission points	No abnormal emissions	Operator observations	Throughout operations
Silo inlets and outlets	No visible emission	Operator / driver observations; Record start and finish times	Every delivery

Sulphur Dioxide	**Maximum concentration of sulphur in fuel**	**Type of Monitoring**	**Monitoring frequency**
Gas oil	0.2% wt/wt (before 01/01/2008) and 0.1% wt/wt (from 01/01/2008) and	Certificate from supplier	Not applicable

Monitoring Records

1.2 The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. The records shall be:

- kept on site
- kept by the operator for at least two years; and
- made available for the Council regulator to examine.

1.3 Any historical records kept off-site shall be made available for inspection within one working week of any request by the Council.

Visible and Odorous Emissions

1.4 Emissions from combustion processes shall in normal operation be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:1969.

1.5 All reasonably practicable steps shall be taken to minimise the duration and visibility of visible emissions during start up and shut down, and changes of fuel or combustion load.

1.6 All releases to air, other condensed water vapour, shall be free from persistent visible emissions. All emissions to air shall be free from droplets.

1.7 There shall be no visible emission of airborne dust from the process or its operations across the site boundary, as defined in Condition 6.1.

1.8 Visual assessments of emissions shall be made frequently, and at least once a day during operations. Visual assessments of emissions shall be made during all material transfer operations and remedial action initiated where any visible emissions are observed. Visual assessment of emissions from arrestment plant to the silos shall be undertaken periodically during all bulk deliveries, particularly during the first and last five minutes. The start and finish times of all deliveries and the result of all visual assessments shall be recorded in a site log book.

1.9 Where, in the opinion of the Council, there is evidence of airborne dust from the process off-site, the operator shall make their own inspection and assessment, and monitoring may be required to identify the source and confirm the extent of the deposition. The monitoring required shall include measurements of wind direction, and methods shall be agreed with the Council. Once the source of the adverse emission is known, corrective action shall be taken without delay.

Abnormal Events

1.10 The regulator shall be informed without delay

- if there is an emission that is likely to have an effect on the local community, or
- in the event of the failure of key arrestment plant, for example bag filtration.

1.11 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall

- investigate and undertake remedial action immediately;
- adjust the process or activity to minimise those emissions;
- reduce or close down operations as soon as practicable, and
- promptly record the events and actions taken.

Continuous Monitoring

1.12 All new continuous monitoring equipment installed after the date of this permit shall be designed for less than 5% downtime over any 3-month period.

1.13 All continuous monitoring readings should be on display to appropriately trained operating staff.

1.14 Instruments should be fitted with audible and visual alarms, situated appropriately to warn the operator of arrestment failure or malfunction.

1.15 Activation of such alarms should be automatically recorded.

1.16 All continuous monitors should be operated, maintained and calibrated in accordance with the manufacturer's instructions. Such calibration or referencing should be recorded.

Calibration and Compliance Monitoring

1.17 Non-continuous emissions monitoring of particulate matter shall be carried out according to the main procedural requirements of BS ISO 9096: 2003, with averages taken over operating periods, excluding start-up and shutdown. All remaining pollutant species shall be sampled in accordance to the appropriate main procedural requirements of British or European Standards.

1.18 No result shall exceed the emission concentration limits specified in Condition 1.1.

1.19 The introduction of dilution air to achieve emission concentration limits is not permitted.

1.20 The operator shall ensure that adequate, safe facilities for periodic manual extractive sampling surveys are provided on the exhaust stack.

1.21 The frequency of testing shall be increased as specified by the Council, for example, as part of the commissioning of new or substantially changed processes, or where emission levels are near to or approach the emission concentration limits.

Information Required by the Council

1.22 The operator shall notify the Council at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. A sampling protocol shall be submitted to the Council for approval at least two weeks prior to any such sampling exercise, stating at least the proposed time and date of monitoring, pollutants to be tested and the methods to be used

1.23 The operator should provide a list of key arrestment plant and should have a written procedure for dealing with its failure, in order to minimize and adverse effects.

1.24 The results of all non-continuous emission testing shall be forwarded to the Council within 8 weeks of the completion of the sampling.

1.25 Adverse results from any monitoring activity (both continuous and non-continuous) shall be investigated by the operator as soon as the monitoring data has been obtained/received. The operator shall:

- identify the cause and take corrective action;
- record as much detail as possible regarding the cause and extent of the problem, and the action taken by the operator to rectify the situation;
- re-test to demonstrate compliance as soon as possible; and
- notify the Council of the investigation, findings and action

2. Materials Handling

2.1 All filter bags shall be inspected at the frequency stated below. If there are signs that emissions have occurred, or defects or significant filter blinding are detected, corrective action shall be taken promptly and wherever possible before another delivery occurs.

Operators shall record in the logbook all cases where deliveries are made prior to corrective action being taken.

Filter cleaning method	Frequency of visual inspection
Filters fitted with reverse jets	At least once a month

The operator shall instigate a full investigation of the operation of the plant and equipment in the event of any failure of the silo management system (i.e. high level alarms, filters or pressure relief valves).

2.2 When delivery to a silo or bulk storage tank takes place, displaced air shall either be vented to suitable arrestment plant or backvented to the delivery tanker, in order to minimise emissions. Arrestment plant fitted to silos shall be of sufficient size and be kept clean to avoid pressurisation during deliveries.

2.3 In order that fugitive emissions are minimised during the charging of silos, transfer lines shall be securely connected to the silo delivery inlet point and the tanker discharge point, in that order. Tanker drivers shall be informed of the correct procedures to be followed.

2.4 Bulk storage tanks and silos containing dry materials shall be equipped with audible and/ or visual high level alarms, or volume indicators, to warn of overfilling. The correct operation of such alarms shall be checked in accordance with manufacturers' instructions. If manufacturers' instructions do not specify, then the check shall be weekly or before a delivery takes place, whichever is the longer interval.

2.5 If emissions of particulate matter are visible from ducting, pipework, the pressure relief device or dust arrestment plant during silo filling, the operation shall cease, and the cause of the problem shall be rectified prior to further deliveries taking place. Tanker drivers shall be informed of the correct procedure to be followed.

2.6 Seating of the pressure release valves to all silos shall be checked once a week or before a delivery takes place, whichever is the longest interval. Immediately it appears that a valve may have become unseated, delivery shall cease and no further delivery shall take place. The pressure relief device shall be examined to check for defects and re-seated and a replacement fitted if necessary. Tanker drivers shall be informed of the correct procedure to follow.

2.7 Deliveries to silos from road vehicles shall only be made using tankers with an on-board (truck mounted) relief valve and filtration system. In this way, venting air from the tanker at the end of a delivery shall not take place through the silo. Use of alternative techniques may be agreed with the Council provided that they achieve an equivalent level of control with regard to potential for emissions to air.

2.8 Care shall be taken during delivery from the tankers to avoid venting of air silos at a rate which is likely to result in over pressurisation of the silos. Particular problems may arise from the release of air from the tankers at the end of deliveries and care shall, therefore, also be taken to avoid over pressurisation of silos when venting air from tankers at this stage. Tanker drivers shall be of the correct procedures to be followed.

2.9 The integrity of all pipelines, filling socks and other components of the transfer system shall be maintained so as to prevent any leakage of material.

2.10 The conveyors from the feed hoppers and storage hoppers shall be fitted with side boards sufficient to provide protection against wind whipping. Top boards or some other barrier may be required if the side boards are not sufficient to prevent dust emissions. All transfer points shall be enclosed to minimise the release of airborne dust.

2.11 Conveyors shall be fitted with an effective means for keeping the return belt clean and for collecting materials removed by this cleaning operation. Conveyor belts shall not be overloaded.

2.12 All hot storage bins shall have level indication and any overflow chutes shall have dust arrestment facilities fed into the main dust arrestment system.

2.13 Equipment for the crushing, grinding and screening of minerals shall be fitted with dust extraction which is vented to air through arrestment plant.

2.14 Plant shall be designed and operated so that emission of dust during the discharge of surplus dried stone or filler is minimised.

2.15 Truck mixers shall be loaded in such a way as to minimise airborne dust emissions for example by loading with wet pre-mixed materials. Appropriate dust control measures may include extract ventilation to arrestment plant, enclosure, water sprinklers and rubber sock type chute systems.

2.16 Site boundary walls forming part of the storage bays shall be constructed so as to avoid spillage of materials off the site.

2.17 No material shall be stored in the open except for:

(a) material that has been screened to remove material 3 mm and under;
(b) sand;
(c) scalpings;
(d) material used for road sub-bases (commonly known as "MOT material") that has been conditioned before deposition;
(e) crusher run material or blended material that has been conditioned before deposition;
(f) material under 3 mm, subject to loading to and from stockpiles and their construction and management in such a manner as to minimise wind-borne dust, using at least the controls specified in Conditions 2.18 and 2.19.

2.18 Stock shall not be piled higher than the containment walls of storage bays and shall not be forward of the bay.

2.19 If necessary, to prevent wind whipping of stored materials and during delivery and loading operations, aggregates shall be controlled by damping down and suitable water spray equipment shall be provided and maintained for such use, or covers shall be used.

2.20 Internal transfer of dusty materials shall be carried out so as to prevent or minimise airborne dust emissions.

2.21 Storage areas where there is vehicular movement within the site shall have a consolidated surface which shall be kept in good repair.

2.22 Roadways shall be kept free from particulate material as far as practicable and any spillages shall be recorded in the logbook, together with cleanup operations and other measures taken to reduce dust emissions, including road washing.

2.23 Any malfunction or breakdown leading to abnormal emission shall be dealt with promptly and process operation adjusted until normal operations can be restored. All such malfunctions shall be recorded in the logbook. If there is likely to be an effect on the local community, the Council shall be informed without delay.

2.24 All process buildings shall be made as dust tight as is necessary to prevent visible emissions.

2.25 All process buildings shall be cleaned regularly, according to a written maintenance programme, to minimise fugitive emissions.

2.26 All new buildings housing processing machinery shall be externally clad with materials that can be readily cleaned.

2.27 Where local exhaust ventilation is used, emissions shall be ducted to suitable arrestment plant.

2.28 Dusty wastes shall be stored in closed containers and handled in a manner that avoids emissions of dust.

2.29 The method of collection of product or waste from dry arrestment plant shall be such that dust emissions are minimised.

2.30 A high standard of housekeeping shall be maintained.

2.31 Any inadvertent spillages shall be removed and suitably contained as soon as is reasonably practicable and any accumulations shall be avoided. All spillages that may give rise to dust emissions shall be cleaned up promptly, normally by wet handling. Dry handling of dusty spillages shall not be permitted other than in fully enclosed buildings.

(N.B. Dry handling of dusty spillages within fully enclosed buildings must be subject to a suitable and sufficient risk assessment in accordance with the Control of Substances Hazardous to Health Regulations 2002. Major spillages should be dealt with using, for example, a vacuum cleaning system. It shall not normally be necessary for a vacuum cleaning system to be on site at all times provided that such equipment can be obtained in the event of a major spillage on the same day that it occurs and measures to minimise emissions such as dampening are taken immediately. Particular attention shall be shall be paid to preventing and cleaning up deposits of

dust on external support structures and roofs in order to minimise wind entrainment of deposited dust).

Bitumen Handling

2.32 In order to minimise emissions of fume and the associated odour, all bitumen and tar shall be stored and handled within the appropriate temperature range for its grade, in accordance with Schedule 1 to this Permit.

2.33 The temperature gauge on all hot binder storage tanks shall be displayed. A high temperature trip device, to prevent the binder overheating, shall be operational at all times.

2.34 Where practicable in relation to the viscosity and temperature of material being handled, bulk bitumen and tar storage tanks shall be fitted with a high-level alarm or volume indicator to warn of overfilling. Where the fitting of such devices is not practicable, procedures to prevent overfilling shall be agreed with the Council regulator.

Loading, Unloading and Transport

2.35 Road vehicles used to transport potentially dusty materials shall be sheeted or otherwise totally enclosed as soon as possible after loading and before leaving the site.

2.36 The following techniques shall be used to prevent emissions in transit where rail wagons are used to transport potentially dusty materials:

- For short journeys (typically of duration less than 1 hour) or for mineral loads with a minimal content of particles below 6mm, water suppression will normally be sufficient.
- For longer journeys or where a higher proportion of fine material is being transported then either application of an aqueous polymer dispersion to the surface of the load shall be used, or the material shall be transported in rail wagons that are "canopied" or aerodynamically designed to prevent or virtually eliminate product blow off.

2.37 Where stone with the potential to give rise to dust emissions in transit is being delivered to the installation, the above measures shall be complied with prior to the vehicle being admitted on site.

2.38 Loading and unloading of product for transport by road or rail shall be carried out so as to minimise the generation of airborne dust.

2.39 Tankers carrying dusty materials shall discharge only into silos fitted with an effective dust collecting system.

2.40 Internal road transport of processed materials likely to generate dust shall be carried out in closed tankers or sheeted vehicles, or the materials shall be conditioned with water.

2.41 Roadways in normal use and any other area where there is regular movement of vehicles shall have a hard surface capable of being cleaned or kept wet. They shall be adequately drained to prevent ponding of water. Wheel-cleaning facilities shall be provided and used by vehicles before leaving the site.

2.42 Where necessary to prevent visible dust being carried off site, the site access roads should be cleaned down.

2.43 A daily inspection of the public highway, immediately adjacent to the entrance/exit of the installation shall be carried out to assess the amount of dust deposited on the public highway. The inspection should be recorded and a record kept for the Council regulatory office to inspect. The record should be kept on site for a period of 12 months. Where fugitive dust is clearly raising from the public highways from such deposited dust, then action to clean the road surface must take place and a record kept of such action.

Stacks, Vents and Process Exhausts

2.44 Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.

2.45 All discharges shall be vertically upwards, and stacks shall not be fitted with any restriction at the final opening such as a plate, cap or cowl, with the exception of a cone which may be necessary to increase the exit velocity of the emissions.

2.46 Flues and discharge stacks shall be adequately insulated to minimise the cooling of waste gases and prevent liquid condensation on internal surfaces.

2.47 Exhaust gases discharged through a stack or vent shall achieve an exit velocity which is normally greater than 15m/s during normal operating conditions to achieve adequate dispersion. A lower velocity shall be acceptable to the Council provided that it achieves adequate dispersion and dilution, that aerodynamic downwash does not occur, and that any provisions of the Council's statutory duties within any Air Quality Management Area are not compromised.

3 Management

3.1 Spares and consumables, in particular, those subject to continual wear, shall be held on site, or shall be available at short notice from guaranteed suppliers, so that plant breakdowns can be rectified rapidly.

3.2 The operator should ensure that sufficient management procedures are implemented in order to achieve comprehensive compliance to the permit conditions.

3.3 The operator should have an appropriate environmental management process in place, and a review of management procedures regarding the permit conditions should be carried out regularly.

3.4 The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation which is not regulated by any other condition of this permit.

4. Training

4.1 Training of all staff with responsibility for operating the process and activities within the installation shall include:

- awareness of their responsibilities under the permit, and in particular maintenance of monitoring equipment,
- minimising emissions on start up and shut down, and
- action to minimise emissions during abnormal conditions

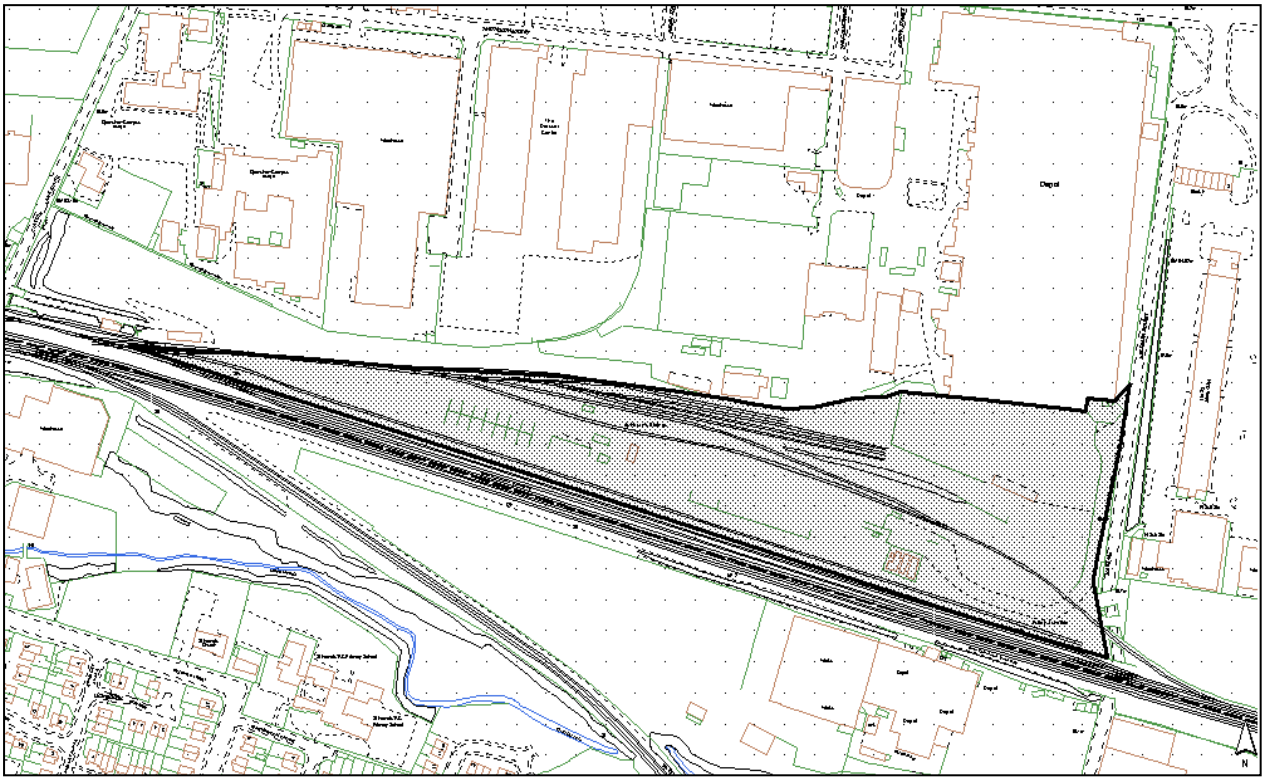
4.2 The operator shall maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents shall be made available to the Council on request.

5. Maintenance and Cleaning

5.1 A written maintenance programme shall be implemented with respect to all pollution control equipment. A record of such maintenance and the cleaning schedule shall be made available for inspection by the Council regulator.

6 The Installation Boundary

6.1 The activities authorised within the Permit shall not extend beyond the Site, being the area shown highlighted on the plan below.



Map 1: Tarmac Aggregates Ltd, Ashbury Sidings, off Bessemer Street, Gorton, Manchester.

7. Improvement Conditions

New Arrestment Plant and New Silos

7.1 New roadstone coating plant and new or replacement arrestment equipment discharging to external environment shall be designed to achieve an emission of particulate matter of less than 50mg/m^3.

7.2 Particulate emissions from new or replacement arrestment equipment discharging to external environment with exhaust flow of >300m^3/min shall be subject to continuous indicative monitoring and the results shall be recorded. Particulate emissions from new or replacement arrestment equipment discharging to external environment with exhaust flow of >100m^3/min shall be subject to continuous indicative monitoring. Particulate emissions from new or replacement arrestment equipment discharging to external environment with exhaust flow of 100m^3/min or less shall be designed and maintained to prevent visible emission of dust.

7.3 The design specification for all new silo arrestment plant shall include operation to an emission of particulate matter of less than 10mg/m^3.

7.4 Emission sampling points on new plant shall be designed to comply with the British or equivalent standards, e.g. BS ISO 9096:2003, BS EN 13284-1 or BS ISO 12141:2002 for sampling particulate matter in stacks.

7.5 Where arrestment plant is designed to meet a specific emission limit, the specification shall be available for inspection by the Council. The plant thereafter shall be maintained to meet that specification.

8. Interpretation

8.1 In this Permit, the following expressions shall have the following meanings:

"Permitted Installation"
means the activities and the limits to those activities in the production of coated roadstone using gas oil fired dryers and mixing plant to blend asphalt from aggregate, sand, filler, bitumen and other additives. The installation includes all raw material storage and handling operations.

"Permit"
means the written permission to operate an installation prescribed for LAPPC (the replacement for authorisation under LAPC).

"PPC Regulations"
means the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit.

"Daily"
means a 24 hour period commencing at 00.00 hours.

"Monitoring"
includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, test and surveys.

"Staff"
includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"year"
means calendar year ending 31 December.

9. Written agreement to changes

9.1 When the qualification "or as otherwise agreed in writing" is used in a condition of this Permit, the Operator shall seek such agreement in the following manner:

a the Operator shall give the Council written notice of the details of the proposed change, indicating the relevant part(s) of this Permit; and

b such notice shall include an assessment of the possible effects of the proposed change (including waste production) on risks to the environment from the Permitted Installation.

9.2 Any change proposed and agreed in writing by the Council shall not be implemented until the Operator has given the Council prior written notice of the implementation date for the change. As from that date, the Operator shall operate the Permitted Installation in accordance with that change, and any relevant documentation referred to in this Permit shall be deemed as amended.

9.3 The address for writing to the Council shall be as follows,

Manchester City Council
Environmental Protection
1 Hammerstone Road
Manchester, M18 8EQ

Contact Officer:	Robert Wilcock
Telephone Number:	0161 234 5025
e-mail	*r.wilcock@manchester.gov.uk*

or as otherwise notified by the Council.

End of Permit

Appeal Against Permit Conditions

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Written appeals must be sent to the Secretary of State's delegate (the Planning Inspectorate) no later than six months from the date of issue of the Permit to the following address:

The Planning Inspectorate
Environment Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
3 The Square
Temple Quay
Bristol BS1 6PN

The letter of appeal must include the following:

- A statement of the grounds of appeal;
- A statement indicating whether the appellant wishes the appeal to be dealt with by written representations or at a hearing;
- A copy of the relevant application;
- A copy of any relevant Permit;
- A copy of any relevant correspondence between the appellant and the and the regulator

At the same time, a copy of the appeal document including the first two items above must be sent to the Council at the following address

Manchester City Council
Environmental Protection
1 Hammerstone Road
Manchester, M18 8EQ

Contact Officer: Robert Willcock
Telephone Number: 0161 234 5025
e-mail *r.willcock@manchester.gov.uk*

Note:

An appeal will not suspend the conditions of the Permit from coming into effect.

In determining the appeal the Secretary of State, or the Planning Inspector, may direct the Local Authority to vary, remove or add conditions to the Permit and not solely make comment on those conditions that are the subject of the appeal itself.

Schedule 1
Bitumen Handling and Storage Temperatures

Table S1 Bitumen[1] Handling and Storage Temperatures[2]

GRADE (BS 3690)	Minimum Pumping Temperature, °C	Minimum Handling and Storage Temperature, °C
PENETRATION GRADES		
450 pen	90	190
350 pen	95	190
200 pen	100	190
100 pen	105	200
70pen	110	200
50 pen	115	200
40 pen	125	200
35 pen	125	220
25 pen	135	220
15 pen	140	220
CUTBACK GRADES		
50 secs	65	160
100 secs	70	170
200 secs	80	180

Notes

1. These figures do not apply to coal tars.
2. BS EN 1251:2000 'Bitumen and bituminous binders - specification for paving grade bitumens' is the new standard which has partially replaced BS 3690 Part 1. Under the new standard, which took effect from January 2002, there is a slight change in some of the above listed penetration grades. The new grades fall within the same overall penetration range as the previous ones, and the recommended storage and handling temperatures can be determined by 'read across' or interpolation from the above table.