

EKURHULENI METROPOLITAN MUNICIPALITY

STORMWATER MANAGEMENT BY-LAW

The Municipal Manager of the Ekurhuleni Metropolitan Municipality hereby, in terms of Section 13(a) of the Local Government: Municipal Systems Act 32 of 2000, publishes the Stormwater Management By-Laws as approved by the Council, as follows:

STORMWATER MANAGEMENT BY-LAWS

Stormwater By-Laws

Rev 1 DRAFT June 2013

Comment [JC1]: It is recommended that EMM review the City of JHB Stormwater Management By-law as a guideline for finalising the EMM draft Stormwater By-law.

Preamble -

WHEREAS Section 156(2) and (5) of the Constitution provides that a municipality may make and administer By-laws for the effective administration of the matters which it has the right to administer, and to exercise any power concerning a matter reasonably necessary for, or incidental to, the effective performance of its functions;

AND WHEREAS Part B of Schedule 4 to the Constitution lists stormwater management systems in built up areas as a local government matter to the extent set out in Section 155(6)(a) and (7);

AND WHEREAS the National Environmental Management Act, 1998 (Act 107 of 1998) gives effect to the constitutional right aimed at protecting the environment by providing environmental management principles that apply throughout the Republic to the actions of all organs of state that may significantly affect the environment;

AND WHEREAS the National Water Act, 1998 (Act 36 of 1998) recognises that water is a scarce and unevenly distributed national resource and that the ultimate aim of water resource management is to achieve the sustainable use of water for the benefit of all users;

BE IT ENACTED by the Council of Ekurhuleni Metropolitan Municipality, as follows:-

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1. DEFINITIONS

- (1) In these by-laws words used in the masculine gender also include the feminine, the singular includes the plural and vice versa, unless inconsistent with the context, and unless the context otherwise indicates =

“**authorised agent**” means a person authorised by the Municipality to perform any act, function or duty in terms of, or exercise any power under, these by-laws;

“**authorised official**” means an employee of the Municipality or any other person who is appointed or authorised thereto to perform any act, function or duty related to the

Comment [JC2]: It is proposed that a section dealing with **Storm water runoff from private premises which may impact on public health** be inserted at section 9. Numbering of the following sections to be amended accordingly.

The proposed new section has been extracted and deleted from the EMM Public Health By-law.

Comment [JC3]: It is proposed that the definitions be re-arranged in terms of alphabetical order.

provisions of these by-laws, or exercise any power in terms thereof, and “official” has a corresponding meaning;

“best management practice” means any physical, structural or managerial practice that, when used singly or in combination with any other such practice, prevents or reduces pollution of stormwater, erosion or sedimentation which may be caused by stormwater, and which has been approved by the Council;

Comment [JC4]: Proposed new definition from the City of JHB Stormwater Management By-Law

“diversion” means the routing of stormwater in a direction other than its natural discharge direction and “divert” has a corresponding meaning;

Comment [JC5]: Proposed new definition from the City of JHB Stormwater Management By-Law

“flood level” means that level reached by flood waters resulting from a storm designated in terms of recognised engineering criteria as being of a frequency to be expected once in every 100 years;

“flood plain” means the land or area next to a watercourse which, in the opinion of the Municipality, is susceptible to inundation by floods up to a 100 year recurrence interval;

“geotechnical engineer” means a practising professional engineer who has at least four years of professional experience in geotechnical and landslide evaluation;

Comment [JC6]: Proposed new definition from the City of JHB Stormwater Management By-Law.

Reference is made to a ‘geotechnical engineer’ and ‘geotechnical report’ at section 5 (2)(iv) below. We therefore propose that a definition of these two terms be included in the definitions section.

“geotechnical report” means a written report prepared by a geotechnical engineer based on a study of the effects of stormwater drainage and drainage facilities on soil characteristics, geology and groundwater;

“impervious surface” means:-

Comment [JC7]: Proposed new definition from the City of JHB Stormwater Management By-Law

(a) a hard surface area on a property which prevents or retards the entry of stormwater into the soil; and

Comment [JC8]: Proposed new definition from the City of JHB Stormwater Management By-Law

(b) a hard surface area on a property which causes stormwater to run off its surface in a greater quantity or at an increased rate of flow, compared to the pre-development condition of that property,

and includes any roof, walkway, patio, driveway, parking lot, storage area, concrete or asphalt paving, gravel road with compacted sub-grade, compacted earth material,

naturally compacted earth surface such as a path or swept garden, an oiled or macadamised surface and any other surface which may similarly impede the natural infiltration of stormwater, and any open uncovered attenuation or detention facility;

“maintenance” means any activity which is necessary to keep a stormwater facility in good working order so as to function as designed and includes:-

(a) complete reconstruction of a stormwater facility if reconstruction is needed in order to return the facility to good working order; and

(b) the correction of any problem on the property concerned which may directly impair the functioning of a stormwater facility;

“Municipality” means the Ekurhuleni Metropolitan Municipality established in terms of section 12 of the Local Government: Municipal Structures Act, 117 of 1998, and includes duly authorised agent/s, service provider/s or any employee/s thereof acting in connection with these by-laws by virtue of a power vested in the Municipality and delegated or sub-delegated to such agent/s or service provider/s or employee/s;

“non-stormwater discharge” means any discharge into the stormwater system which is not composed entirely of stormwater.

“occupier”, in relation to any premises, means any person occupying, leasing the premises or who is not occupying the premises but is entitled to do so;

“owner” means the person in whom is vested the legal title to the premises, lessee, resident, director of a company, member of a close corporation, the person in control of any premises, or any person who obtains a benefit from the premises or is entitled thereto and includes the person administering an estate as curator, executor, proxy, trustee or administrator of a person in whom the legal title in immovable property is vested and who is insolvent, dead or of unsound mind;

“premises” means any privately-owned land or land on which buildings or other structures are situated;

“flood plain” means the land or area next to a watercourse which, in the opinion of the Municipality, is susceptible to inundation by floods up to a 100 year recurrence interval;

Comment [JC9]: Proposed new definition from the City of JHB Stormwater Management By-Law

Comment [JC10]: For purposes of consistency with the other EMM By-laws, it is proposed for consideration that the term “Municipality” be substituted with “Council”.

~~“Municipality” means the Ekurhuleni Metropolitan Municipality established in terms of section 12 of the Local Government: Municipal Structures Act, 117 of 1998, and includes duly authorised agent/s, service provider/s or any employee/s thereof acting in connection with these by-laws by virtue of a power vested in the Municipality and delegated or sub-delegated to such agent/s or service provider/s or employee/s;~~

Comment [JC11]: Definition repeated above

“National Water Act” means the National Water Act, 1998 (Act No.36 of 1998);

“**non-stormwater discharge**” means any discharge into the stormwater system which is not composed entirely of stormwater.

“**occupier**”, in relation to any premises, means any person occupying, leasing the premises or who is not occupying the premises but is entitled to do so;

“**owner**” means the person in whom is vested the legal title to the premises, lessee, resident, director of a company, member of a close corporation, the person in control of any premises, or any person who obtains a benefit from the premises or is entitled thereto and includes the person administering an estate as curator, executor, proxy, trustee or administrator of a person in whom the legal title in immovable property is vested and who is insolvent, dead or of unsound mind;

“**premises**” means any privately-owned land or land on which buildings or other structures are situated;

“**private stormwater system**” means a stormwater system owned, operated or maintained by a person other than the Municipality;

“**pollution**” means contamination, or other alteration of the physical, chemical, or biological properties, of surface water or stormwater and includes any change in temperature, taste, colour, turbidity or odour of the water and the discharge of any liquid, gaseous, solid, radioactive or other substance into any watercourse or stormwater system, and “pollute” and “pollutant” have corresponding meanings;

Comment [JC12]: Proposed new definition from the City of JHB Stormwater Management By-Law

“**stormwater**” means water resulting from natural precipitation and/or the damming up or accumulation thereof and includes groundwater and spring water ordinarily conveyed by the stormwater system, but excludes water in a drinking water or waste water reticulation system;

“**stormwater drain**” means any closed or open drain used or intended to be used for carrying stormwater within any premises to the stormwater system;

“**stormwater catchment area**” means an area of land in its natural state, from which stormwater runoff originates;

Comment [JC13]: Proposed new definition from the City of JHB Stormwater Management By-Law

“**Stormwater quantity control**” means the control of the rate and volume of stormwater released from a development site, and includes any attenuation, detention and retention facility;

Comment [JC14]: Proposed new definition from the City of JHB Stormwater Management By-Law

“**stormwater system**” means both the constructed and natural facilities, including pipes, culverts and watercourses, whether over or under public or privately owned land, used or required for the management, collection, conveyance, temporary storage, control, monitoring, treatment, use and disposal of stormwater.

“**water pollution incident**” means an incident or occurrence whereby a substance or matter, other than stormwater, is discharged directly or indirectly into the stormwater system and which may be a danger to health or may adversely affect the general quality of water in the stormwater system to such an extent that public health or the health of natural ecosystems may be threatened; and

Comment [JC15]: Would the stormwater system also provide for the drainage of stormwater? If so, would a stormwater system include an attention facility? If so, it is proposed that the definition of a stormwater system be amended to include a reference to an attenuation facility? Alternatively EMM may consider introducing a separate definition for an attenuation facility. In this regard the City of JHB Stormwater Management By-law provides the following definition:

“**attenuation facility**” means any drainage facility designed to store stormwater for gradual release of that stormwater by infiltration into the soil or into an existing drainage system;

“**watercourse**” bears the meaning assigned to it in the National Water Act, 1998 (Act 36 of 1998).

“**water quality sensitive area**” means any area that is sensitive to a change in water quality and includes any lake, ground water management area, aquifer as defined in the National Water Act, 1998, and a closed depression;

Comment [JC16]: Proposed new definition from the City of JHB Stormwater Management By-Law

Purpose of By-Laws

- (2) The purpose of these by-laws is to manage, control and regulate the quantity, quality, flow and velocity of stormwater run-off from any premises which is proposed to be developed, or is in the process of being developed or redeveloped or is fully developed, in order to
 - (i) prevent or mitigate— (a) erosion and degradation of watercourses;

- (b) sedimentation in any watercourse and the stormwater system;
 - (c) degradation of water quality in the stormwater system;
 - (d) excess stormwater runoff onto any public road or public place which may pose a danger to life or property or both.
- (ii) require and provide for—
- (a) stormwater sensitive urban design and planning;
 - (b) preparation and approval of stormwater management plans when development and/or redevelopment of premises is undertaken;
 - (c) quantity attenuation and quality management of stormwater;
 - (d) preserving of flood plains, wetlands, [water quality sensitive areas](#) and open spaces;
 - (e) the operation, maintenance and monitoring of stormwater systems;
 - (f) any other aspect related to stormwater management deemed relevant by the Municipality in its area of jurisdiction.

Requirements of Other Legislation

- (3) The provisions of these by-laws do not remove the need for any other permit, consent or authorisation required under any other statute or law, such as Water Use Licences, [Environmental Impact Assessments](#), [Environmental Authorisations or Waste Management Licences](#). Where a permit, consent or authorisation is required under these by-laws as well as another statute or law, applications for approval shall be lodged at the same time for all such permits, consents or authorisations and under these By-Laws.

Level of Service

- (4) Stormwater disposal services are to be provided in accordance with the level of service prescribed in the Guideline for Human Settlement Planning and Design (CSIR Building and Construction Technology: 2000, as amended) or any other stormwater service levels that may be approved by the Municipality, as amended from time to time.

Application of By-Laws

- (5) These by-laws—
- (a) bind all organs of state;
 - (b) prevail over the provisions of any other by-law which contains a provision regarding stormwater management which is in conflict with these by-laws;

- (c) apply to stormwater systems in built-up areas within the Metropolitan Area;
- (d) the community in general.
- (e) must be read with any applicable provisions of the National Water Act and the environmental management principles listed in section 2 of National Environmental Management Act, 1998 (Act No.107 of 1998).

Comment [JC17]: Proposed new subsection for insertion. Numbering of following sections to be amended accordingly.

(6) Enforcement of Environmental Management Principles

Comment [JC18]: Proposed new section for insertion. Numbering of following sections to be amended accordingly.

(1) The Council must, when exercising any function within the Metropolitan area which may affect any water resource or surface stormwater, give effect to the environmental management principles listed in section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998). The principles shall apply throughout the Metropolitan area to the actions of the Council that may significantly affect a water resource or surface stormwater and:-

(a) serve as guidelines by reference to which any decision in terms of these By-laws or any statutory provision concerning the protection of a water resource or surface stormwater; and

(b) guide the interpretation, administration and implementation of these By-laws in relation to the protection or management of a water resource or surface stormwater;

Administration and Enforcement

(6)

- (a) the Municipal Manager is responsible for the administration and enforcement of these by-laws.
- (b) the Municipal Manager may in writing delegate any power granted to him in terms of these by-laws to any competent official in the Municipality.

2. PROHIBITED DISCHARGES

- (1) Subject to subsection (2), no person may, except with the written consent of the Municipality and subject to any conditions the Municipality may impose,

discharge, and permit to enter or place anything other than stormwater into a stormwater system.

- (2) Nothing in these by-laws prevents the discharge into the stormwater system of flow from—
- (a) potable water sources;
 - (b) rising groundwater;
 - (c) ~~fire fighting~~ firefighting activities;
 - (d) individual resident car washing;
 - (e) swimming pools, provided that the pool is drained in such a way as not to cause a nuisance; and

3. PROTECTION OF STORMWATER SYSTEM

- (1) No person may, except with the written consent of the Municipality and subject to any conditions the Municipality may impose—
- (a) adjust, alter, damage, endanger, destroy or undertake any action likely to damage, endanger or destroy, the stormwater system, any part thereof or the operation thereof;
 - (b) subject to subsection 2(2) discharge from any place, or place onto any impervious surface, anything other than stormwater, where that substance could reasonably be expected to find its way into a stormwater system;
 - (c) shall construct, use, allow, maintain or continue any unauthorized drain or conveyance which allows discharge into a stormwater system;
 - (d) shall obstruct, ~~or~~ interfere ~~or divert with~~ the normal flow of stormwater into, through or out of a stormwater - system;
 - (e) discharge, permit to enter or place anything likely to damage the stormwater system or interfere with the operation thereof or contaminate or pollute the water therein;
 - (f) construct or erect any structure or thing over or in such a position or in such a manner so as to interfere with or endanger the stormwater system or the operation thereof;
 - (g) make an opening into a stormwater pipe, canal or culvert;
 - (h) drain, abstract or divert any water directly from the stormwater system;

- (i) fill, excavate, shape, landscape, open up or remove the ground above, within, under or immediately next to any part of a stormwater system.

4. PREVENTION OF FLOOD RISK, MANAGEMENT AND STANDARDS

- (1) No person may, except with the prior written consent of the Municipality and subject to any conditions the Municipality may impose -
 - (a) obstruct or reduce the capacity of the stormwater system;
 - (b) change the design or the use of, or otherwise modify any aspect of the stormwater system which, alone or in combination with other existing or future uses, may cause an increase in flood levels or create a potential flood risk; or
 - (c) undertake any activity which, alone or in combination with other existing or future activities, may cause an increase in flood levels or create a potential flood risk;
 - (d) take or divert water artificially from one catchment area over a natural watershed to another catchment area.
- (2) In circumstances deemed appropriate by the Municipality, it may require from the owner of any premises—
 - (a) to allow the owner of a higher lying property, at his cost, to lay a stormwater drain pipe or gutter over his or any lower-lying premises for the draining of concentrated stormwater;
 - (b) to retain and/or attenuate stormwater on such premises or, at the cost of such owner, to lay a stormwater drain pipe or gutter to a suitable place indicated by the Municipality, irrespective of whether the course of the pipe or gutter will traverse private premises or not.

5. **STORMWATER MANAGEMENT**

- ~~(1) A holistic approach should be applied to stormwater catchment development, taking into account all relevant several factors.~~
- ~~(2) All developers, owners, professionals and contractors shall,~~
- ~~(a) before development takes place upstream of or near to an existing development or in a catchment, investigate and assess the effects of the increased runoff on the existing downstream stormwater system and plan any new or upgraded stormwater works required in such a way that-~~

Comment [JC19]: Repeated below

- ~~i) — the peak flow immediately downstream of the new development or redevelopment is no greater than it was before the development took place; and~~
- ~~ii) — where existing detention and/or storage is provided in a stormwater system, that the increases in the volume of runoff due to increased impermeable areas and lower surface frictions in the upstream developments, the effectiveness of any downstream detention or storage dams is not decreased; and~~
- ~~iii) — new development must incorporate flood attenuation measures into the township layout and relevant stormwater management plan;~~
- ~~iv) — will require a compulsory geotechnical report prepared by a geotechnical engineer, to accompany a stormwater management plan~~
- ~~(b) — Where it is not possible to avoid an increase in the downstream peak flow, development will only be allowed to proceed if the Municipality is satisfied that the downstream stormwater systems have spare capacity to accommodate the additional peak flow.~~

5. STORMWATER MANAGEMENT

- (1) A holistic approach should be applied to stormwater catchment [development area](#), taking into account all relevant several factors.
- (2) All developers, owners, professionals and contractors shall,
 - (a) before development takes place upstream of or near to an existing development or in a [stormwater catchment area](#), investigate and assess the effects of the increased runoff on the existing downstream stormwater system and plan any new or upgraded stormwater works required in such a way that -
 - i) the peak flow immediately downstream of the new development or redevelopment is no greater than it was before the development took place; and
 - ii) where existing detention and/or storage is provided in a stormwater system, that the increases in the volume of runoff due to increased [impervious impermeable surface](#) areas and lower surface frictions in the upstream developments, the effectiveness of any downstream detention or storage dams is not decreased; and

- iii) new development must incorporate flood attenuation measures into the township layout and relevant stormwater management plan;
 - iv) will require a compulsory geotechnical report prepared by a geotechnical engineer, to accompany a stormwater management plan
- (b) Where it is not possible to avoid an increase in the downstream peak flow, development will only be allowed to proceed if the Municipality is satisfied that the downstream stormwater systems have spare capacity to accommodate the additional peak flow.
- (c) All applications for township establishment shall on submission be accompanied by a stormwater management report which shall have been prepared by a suitably qualified and registered engineer acceptable to the Municipality, which sets out how the proposed development will comply with the provisions of these by-laws and any applicable policy. In the case of redevelopment which does not require township establishment, such report shall be submitted with any application for the approval of a building plan/ site development plan, as the case may be.
- (d) Adequate provision must be made for stormwater servitudes in favour of the Municipality where overland flow can occur, either naturally or as a result of the development, or when the minor stormwater system infrastructure is overloaded or will be rendered ineffective by the development.
- (e) Concentration of stormwater runoff both spatially and in time must be prevented wherever possible.
- (f) Steep slopes and soil profiles, where they occur, require careful assessment before, during and after construction. Detailed plans to control and prevent erosion by water must be approved by the Municipality prior to the commencement of any works, including site clearance on any portion of the site. Removal of vegetation cover must be carried out with care and attention to the effect that this removal will have on erosion potential.
- (g) Stormwater management systems must be constructed before any building construction commences on the site. As construction progresses,

the stormwater management measures are to be monitored and adjusted to ensure complete erosion control and appropriate runoff control at all times.

- (h) Walls and fences around properties that cross natural drainage channels must, as far as possible, avoid concentration of flow onto downstream properties and must be designed so as not to impede the drainage process or cause a flood hazard by unsafely storing stormwater runoff on the property.
 - (i) Where the submission of a stormwater management plan is a condition of approval, plans detailing the proposed stormwater control measures are to be submitted to the Municipality and no prior construction work is to be undertaken without the approval of the Municipality.
 - (j) Stormwater management plans must describe the measures to be implemented before and during the construction period, as well as the final stormwater management measures required for the premises on completion of the development. Plans must indicate who is responsible for the design of the measures and who is or will be designated as the responsible person on the premises during each stage of the implementation of the management measures.
 - (k) In the event of failure to adequately implement the approved stormwater management plan, the owner/developer shall be responsible for making good all consequential environmental and other damages at his own cost.
- (3) The Municipality may regularly inspect the construction of buildings, structures and earthworks in order to minimize risk or to evaluate the stormwater system and for this purpose it may-
- (a) declare areas as stormwater management areas in respect of which special requirements will apply with regard to construction and earthworks of any activity which, in the opinion of the Municipality, may reduce the risk of floods;
 - (b) require that the general plan or lay-out plans of the development or subdivision of any property indicate lines, in an acceptable form, which will indicate the maximum level which will probably be reached in an average of 50 years and 100 years by flood water;

- (c) subject to the provisions of other relevant legislation, refuse any new permanent residential, commercial or industrial development or request for densification or any other plans for development under the 100 years line. Where such development or application is approved within the flood plain, the lowest level of any new building, structure or addition thereto, must be above the 100 year flood surface lines where possible;
- (d) stipulate that all services required by the development shall be designed to withstand the effects of flooding without risk of environmental pollution, or risk of damage, injury or loss to the property owner, residents and general public;
- (e) allow flood protection embankments, provided the construction of a levee does not materially affect the direction and velocity of a main stream or its tributary watercourses, and that levee serves a useful purpose and that the risks of damage or injury are not increased.

6. STUDIES, ASSESSMENTS AND CONDITIONS WHICH THE MUNICIPALITY MAY IMPOSE

- (1) The Municipality may require, either prior to development being undertaken or by imposing as a condition or approval any of the following:
 - (a) the establishment of flood lines;
 - (b) the undertaking of a report on the impact of stormwater on the environment;
 - (c) to receive copies of environmental impact studies or investigations which may be required in terms of any applicable environmental legislation; and
 - (d) any other requirement or condition which the Municipality may deem necessary.
- (2) All stormwater management services located on dolomite land will comply with the minimum level of service and specifications standards as required in terms of South African National Standard, SANS 1936, Parts 1 to 4 (2012), or any amendment thereto.
- (3) The costs of any study undertaken in terms of the provisions of sub-sections (1) and (2), shall be for the account of the applicant.

7. WATER POLLUTION INCIDENTS

Comment [JC20]: We recommend that EMM develop standard forms and procedures for the reporting of water pollution incidents to the Council.

(1) Whenever a water pollution incident takes place or has the potential to take place on any property or premises—

- (a) the owner of the property or premises on which the incident took place, ~~or~~ is still in the process of taking place or may take place; ~~or~~
- (b) the person responsible for the incident, if the incident is not the result of natural causes; or
- (c) the person who owns or is in control of the substance involved in the incident

must immediately report the incident to the Municipality, and at own cost, take all reasonable steps and measures which will contain, minimise and/or mitigate the effects of the pollution.

(2) If the owner, ~~or~~ person responsible for the pollution incident or person who owns or is in control of the substance involved fails to introduce measures to contain and minimise the effects of the pollution or has introduced insufficient measures, the Municipality may, at the cost of such owner or person, and after reasonable notice to such person—

- (a) undertake cleaning-up procedures;
- (b) rehabilitate the environment;
- (c) take any other reasonable measures to neutralise the effect of the pollution incident.

8. STORMWATER SYSTEMS ON PRIVATE PREMISES

(1) An owner of property on which a private stormwater system is located -

- (a) may not carry out any activity which ~~will or which~~, in the opinion of the Municipality, could reasonably be expected to affect the functioning of such stormwater system;
- (b) must keep such stormwater system functioning effectively at his own cost and in terms of the original design; and
- (c) must undertake the refurbishment and/or reconstruction thereof if, in the opinion of the Municipality, it should be reconstructed or refurbished.

(2) In cases where the flow of stormwater in a private stormwater system has been increased as a result of new development or changes to the stormwater system by the Municipality, the Municipality may, either on request of the owner or on

own volition, decide to take over the responsibility for the private stormwater system.

- (3) The provisions of sub-section (1) do not apply to the extent that the Municipality has accepted responsibility for any of the duties contained therein, either in a formal agreement or in terms of a condition of servitude.

9. Storm water runoff from private premises which may impact on public health

(1) Every owner or occupier of premises must erect adequately designed, constructed and maintained hydraulic and hydrological structures on those premises -

- (a) to divert the maximum storm water runoff, which could be expected within a period of 24 hours with an average frequency of recurrence of once in 100 years, from any part of the premises on which any waste, likely to create a public health nuisance, is or was handled, produced, stored, dumped or spilled;
- (b) to collect all polluted runoff water from any part of the premises on which waste, likely to create a public health nuisance is or was handled, produced, stored, dumped or spilled, for reuse, treatment or purification;
- (c) to separate all effluent from storm water systems;
- (d) to prevent the erosion or leaching of material from any slimes dam, ash dam and any dump or stock-pile on the premises, and to contain any eroded or leached material in the area where it originated;
- (e) to prevent any waste or waste water from entering any borehole, well, spring, vlei or water course; and
- (f) to prevent any adverse impact on the quality of surface and ground water occurring, due to the location of any dump, stock-pile, dam, drain, canal, conduit, sewer or any other structure on the premises.

(2) An owner or occupier of premises –

- (a) must keep all water passages open and free of obstruction from matter which may impede the flow of water or effluent;
- (b) may not locate any dump within the one hundred year flood line of any water [re]source;

Comment [JC21]: It is proposed that this section taken from the EMM Public Health By-law be deleted from the Public Health By-law and inserted as a new section in the EMM draft Stormwater By-law, as it is more suitable to the issues dealt with in the EMM draft Stormwater by-law.

Please note if the insertion of the new section is accepted, the numbering of the following sections will need to be amended accordingly in this by-law as well as in the EMM Public Health by-law.

- (c) may not use coal, coal discard, carbonaceous material or any other material for the construction of any slurry, evaporation or catchment dam, or any embankment, road or railway in a way likely to create a public health nuisance;
- (d) must construct bund walls around any tank, or group of tanks, containing any substance that can create a public health nuisance, of a size that is capable of containing the volume of the largest tank plus an additional 10% in the event of any unlawful or accidental discharge from the tank or group of tanks; [and]
- (e) must clean any industrial surface area so as to prevent the pollution of storm water which may result in an adverse impact on the quality of any surface or ground water[.]; and
- (f) must effectively seal the ground surface in the bunded area to ensure that any discharge from the tank or group of tanks will not cause surface pollution.

9. PROVISION OF INFRASTRUCTURE

- (1) The Municipality has the power to
 - (a) At all reasonable times enter upon any premises or any portion thereof with the aim of carrying out any inspection or test to determine the current status of a stormwater system and ensure that the stormwater facilities are being properly maintained and that stormwater quality control is not detrimentally affected and that pollution is curtailed;
 - (b) construct, expand, alter, maintain or lay any drains, pipes or other structures related to a stormwater system on or under any premises, and ownership of these drains, pipes or structures shall vest in the Municipality;
 - (c) with approval of the department of Water Affairs, drain stormwater or discharge water from any municipal service works into any natural watercourse; and
 - (d) do any other thing necessary or desirable for or incidental, supplementary or ancillary to any matter contemplated by sub-sections (a) and (b).

(2) In undertaking an inspection described in subsection (1)(a) the Municipality must develop and adopt a maintenance manual applicable to all stormwater facilities which must be maintained by the owner of the property concerned.

(3) A manual contemplated in subsection (2), must contain requirements relating to:-

(a) the frequency of inspections;

(b) what has to be checked in carrying out an inspection; and

(c) what action needs to be taken to properly maintain stormwater facilities.

(4) An authorised official of the Municipality may, if he or she is satisfied that any requirement of a manual contemplated in subsection (3), has not been complied with, by written notice served on the owner of the property concerned require such owner to take the steps specified in that notice within a period so specified.

(5) The Municipality must for the purpose of ensuring regular and effective inspection of storm water facilities by an authorised official, adopt an inspection schedule in respect of stormwater facilities which are not maintained by it, dealing with the frequency and extent of inspections.

Comment [JC22]: Proposed new subsections relating to inspections by the Municipality of stormwater facilities not maintained by the Municipality has been extracted from the City of JHB Stormwater Management By-law.

The numbering of the following sections to be amended accordingly.

Furthermore, where EMM has no maintenance manual in place as well as an inspection schedule, it is recommended that EMM develop such documents in line with the proposed new subsections.

10. GENERAL

(1) The Municipality may—

(a) demolish after following due process, or alter or otherwise deal with any building, structure or other thing constructed, erected or laid in contravention of the provisions of these by-laws;

(b) fill in, remove and make good any ground excavated, placed or removed in contravention with the provisions of these by-laws and recover the costs for such action from the contravener;

- (c) repair and make good any damage done in contravention of the provisions of any of these by-laws or resulting from a contravention and recover its costs from the contravener;
 - (d) remove anything discharged, permitted to enter into the stormwater system or natural watercourse in contravention of the provisions of any these by-laws;
 - (e) remove anything damaging, obstructing or endangering or likely to obstruct, endanger or destroy any part of a stormwater system;
 - (f) seal off or block any point of discharge from any premises if such discharge point is in contravention of any of the provisions of these by-laws, irrespective of whether the point is used for lawful purposes;
 - (g) cancel any permission granted in terms of these by-laws if the conditions under which the permission was granted are not complied with;
 - (h) with approval of the department of Water Affairs, discharge stormwater into any watercourse.
 - (i) by written notice instruct any owner –
 - (i) to retain stormwater on his property or to lay, at the cost of such owner, a stormwater system to a suitable place indicated by the Municipality, irrespective of whether the course of such pipe or gutter will run over private property or not;
 - ii) to allow the owner of a higher lying property to lay a stormwater system over his or her property for draining of concentrated stormwater;
- (2) The Municipality may, in any case where it appears likely that any action or neglect by any person or owner may lead to a contravention of a provision of these by-laws, give notice in writing to such person or owner to comply with such requirement as the Municipality may deem necessary to prevent the occurrence or repetition of such contravention.
- (3) The Municipality may recover all reasonable costs incurred as a result of -
- (a) any action taken in terms of sub-section (1) from a person who was responsible therefore; or
 - (b) a contravention of any provisions of these by-laws, or the owner of the property on which a contravention occurred.

11. POLICY

- (1) The Municipality may adopt and implement policy measures and guidelines for the regulation of stormwater and activities and matters incidental thereto.
- (2) The application of the provisions of the policy may be limited to specific areas and/or any category of development and premises, or activity, and may permit deviation and exemptions from, and the relaxation of any of such provisions on reasonable grounds.
- (3) Any person contravening the provisions of these by-laws and the policy or who furnishes false or misleading information, is guilty of an offence, and on conviction liable to a fine or imprisonment, or both such fine and imprisonment.
- (4) The policy must be made public and conveyed to the community in terms of section 21A of the Local Government: Municipal Systems Act, Act 32 of 2000.

12. AUTHENTICATION AND SERVICE OF NOTICES AND OTHER DOCUMENTS

- (1) An order, notice, approval, refusal or other document issued by the Municipality must be in writing and signed by the Municipal Manager or a person authorised by him.
- (2) Any notice or other document served must be in accordance with the provisions of section 115(1) of the Local Government: Municipal System Act, Act 32 of 2000 with the inclusion of
 - (a) in the event of a body corporate, that it be delivered at the registered office or the business premises of such body corporate;
or
 - (b) that it may be delivered, at the request of that person, to his or her electronic mail address.
- (3) Service of a copy of a notice or document shall be deemed to be service of the original.
- (4) When any notice or other document must be authorised or served on the owner, occupier, or holder of any property, or right in any property, it is sufficient if that person is described in the notice or other document as the owner, occupier, or holder of the property or right in question, and it is not necessary to name that person.

- (5) Any legal process is effectively and sufficiently served on the Municipality when it is delivered to the Municipal Manager or a person in attendance at the Municipal Manager's office.

13. EXEMPTIONS

- (1) Any person may by means of a written application, in which the reasons are given in full, apply to the Municipality for exemption from any provision of these by-laws.
- (2) The Municipality may—
 - (a) grant an exemption in writing and the conditions in terms of which, and the period for which such exemption is granted, must be stipulated therein;
 - (b) alter or cancel any exemption or a condition in an exemption; or
 - (c) refuse to grant an exemption.
- (3) An exemption does not take effect before the applicant has undertaken in writing to comply with all conditions imposed by the Municipality under sub-section (2). If an activity is commenced with before such undertaking has been delivered to the Municipality, the exemption lapses.
- (4) If any condition of an exemption is not complied with, the exemption lapses immediately.

14. OFFENCES AND PENALTIES

- (1) Any person who continues to commit an offence after notice has been served on him or fails to cease committing such offence after he has been convicted of such offence, is guilty of a continuing offence.
- (2) Any person who—
 - (a) contravenes any provision of these by-laws; and/or
 - (b) fails to comply with the terms of any condition of an approval, permission or a notice issued in terms of these by-laws; and/or

- (c) threatens, resists, hinders or obstructs an official or contractor of the Municipality in the exercise of any powers or performance of any duty or function in terms of these by-laws; and/or
- (d) furnishes a false statement, or false, incorrect or misleading information, is guilty of an offence and, on conviction, liable to -
 - i) a fine or imprisonment or to both a fine and imprisonment;
 - ii) in the case of a continuing offence, to an additional fine or an additional period of imprisonment or to such additional imprisonment without the option of a fine or to both such additional fine and imprisonment for each day on which such offence is continued; and
 - iii) an amount equal to any costs and expenses found by the court to have been incurred by the Municipality as result of such contravention or failure.

15. SHORT TITLE AND COMMENCEMENT

These by-laws shall be known as the Stormwater Management By-Laws and shall come into operation on the date of publication thereof in the Provincial Gazette.