CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS
AND ENGINEERING

COSMETIC WASH WATER GUIDELINES
BEST MANAGEMENT PRACTICES

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Effective Date: April 30, 2008

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I. BACKGROUND

These guidelines ("Guidelines") have been issued by the Director of Public Works and Engineering (the "Director") of the City of Houston (the "City") pursuant to Chapter 47 of the City of Houston Code of Ordinances (the "Ordinance"), as amended and effective on September 1, 2006, and the Houston-Harris County Municipal Separate Storm Sewer System ("MS4") NPDES Permit No. TXS001201 (the "Permit"). *It is not the purpose of these Guidelines to restate the provisions and requirements of the Ordinance*; rather, these Guidelines provide guidance on the City's interpretation and application of those provisions and requirements of the Ordinance and the Permit, and those elements of the City's Storm Water Management Program ("SWMP") that relate to the authorization or prohibition under the Permit and the Ordinance of non-storm water discharges to the MS4 resulting from cosmetic washing activities.

These Guidelines should be read in conjunction with the Permit and the Ordinance. Relevant provisions of those documents are summarized herein along with citations to the original text. The first section of this document presents the basis for the City's determination that cosmetic wash water discharges are eligible for authorization under the Permit. The second section of this document presents the basis for the imposition of certain conditions and limitations on cosmetic wash water discharges as a condition for that eligibility. Finally, the third section of this document presents the Guidelines applicable to authorized cosmetic wash water discharges in various types of locations.

For purposes of these Guidelines, *cosmetic wash water discharges* shall generally refer to the discharge to the MS4 of water that has been applied under pressure, from a wand, nozzle, or other portable applicator, to a fixed surface, whether indoor or outdoor, whether vertical or horizontal, for the purpose of removing dirt, oil, grease, animal feces, and other stains, whether conducted by a contractor for profit, by employees of a company, the City, or any other entity for the entity's own operations and maintenance purposes, or by a person on that person's property. These guidelines shall apply to all categories of non-storm water discharges that comply with the requirements and procedures set forth herein. An example would be discharges of wash water from a hose used to spray down sidewalks or plazas.

II. BASIS FOR AUTHORIZATION

Part I.B.1. of the Permit identifies those discharges that are authorized by the Permit. In addition to storm water discharges, these discharges include storm water mixed with those categories of non-storm water that are identified in the SWMP in accordance with Part II.A.6.a. of the Permit. This Section of the Permit states that *the City is not prohibited from allowing the dry weather discharge, via the MS4, of those categories of non-storm water discharge.* [*Part I.B.1.b.*]

Part II.A.6.a. of the Permit relates to illicit discharges and improper disposal. It effectively prohibits non-storm water discharges to the MS4, but allows that certain discharges need not be treated as illicit discharges or prohibited from entering the MS4. Such discharges include non-storm water discharges that are identified by the City in its SWMP. The City can exempt in its SWMP non-storm water discharges in two categories: (i) those listed in 40 C.F.R. § 122.26(d)(2)(iv)(B)(1) or other similar occasional incidental non-storm water discharges [*Part II.A.6.a(1)*], and (ii) other categories of non-storm water discharges exempted from the prohibition on non-storm water that are not reasonably expected (based on information available to the City) to be significant sources of pollutants to the MS4 because of either (a) the nature of the discharges, or (b) conditions placed on the discharges by the City. [*Part II.A.6.a(2)*]

In accordance with Part II.A.6.a. of the Permit, the City has identified in its SWMP numerous categories of *uncontaminated* non-storm water discharges that are allowed based on the City's belief that they will have minimal impact on storm water quality in Houston. These categories include *pavement wash waters, provided cleaning chemicals are not used.* The City has codified the authorization of such discharges by providing an affirmative defense in Section 47-741(b)(21) of the Ordinance. The City has a reasonable expectation that such *uncontaminated* discharges are not significant sources of pollutants. This reasoning is also consistent with 40 C.F.R. § 122.6(d)(2)(iv)(B)(1). However, the City retains all of its enforcement options if the water entering the MS4 contains a pollutant, and if the "discharge . . . has been determined by the city engineer to be a source of a pollutant . . . to the water of the United States or to the MS4; written notice of such determination has been provided to the discharger; and the discharge has continued after the expiration of the time given in the notice to cease the discharge." Section 47-741(c).

In summary, the City's Permit allows the discharge to the MS4, whether in dry weather or mixed with storm water, of certain categories of non-storm water discharges. The City reasonably expects them not to contain significant sources of pollutants because of the nature of the discharges or because of conditions placed on the discharges by the City. In its SWMP and Ordinance, the City has indicated that it does not prohibit the discharge of uncontaminated pavement wash waters provided cleaning chemicals are not used. The Director has determined that any cosmetic wash water discharges occurring in compliance with the relevant conditions set forth in Section III of these Guidelines do not contain significant sources of pollutants, are not illicit discharges, and are exempted from the prohibition of non-storm water discharges. The Director has further determined that any *de minimis* amounts of these discharges that may evade controls installed in accordance with Section III of these Guidelines do not represent significant sources of pollutants.

III. AUTHORIZATION FOR DISCHARGES

Part II of the City's Permit requires the City's SWMP to include controls necessary to effectively prohibit the discharge of non-storm water into the MS4, and to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable ("MEP"). Under Section 402(p)(3)(B) of the federal Clean Water Act, MEP includes the use of management practices, control techniques, design and engineering methods, and such other provisions as are appropriate for the control of pollutants. This section of these Guidelines describes the controls and conditions applicable to cosmetic wash water discharges for such discharges to be exempt from the Permit's prohibition on non-storm water discharges.

The following findings and conditions apply to all for Cosmetic Wash Water Discharges:

A. The Director has determined that cosmetic wash water discharges may be authorized as "uncontaminated pavement wash waters," provided that the discharger implements measures to ensure that the discharges are uncontaminated to the Maximum Extent Practicable, in accordance with these Guidelines.

B. Cosmetic washing discharges derived from non-potable water or water to which chemicals have been added is ineligible for consideration under these Guidelines, except for de minimis discharges that may occur notwithstanding the proper implementation of controls set forth in the relevant sections below. The only proper management strategy for such wastewaters is containment, collection, and disposal at an approved facility.

C. As an alternative to compliance with the best management practices set forth below, any person may submit an alternative method or practice to the Director for review and approval. If the Director issues written approval of the proposed method or practice, cosmetic wash water discharges in accordance with the approved method or practice shall be considered not to represent a significant source of pollutants, and shall be considered authorized under the City's Permit.

IV. CONDITIONS FOR DISCHARGES

The measures that may be taken to ensure that cosmetic wash water discharges from specific categories of activities are uncontaminated to the Maximum Extent Practicable include the following:

A. Parking Garages (interior parking surfaces) and Loading Docks

1. Site Preparation:

a) The operator shall inspect the area to be cleaned, and the path of the anticipated runoff to the nearest storm drain, for

trash, debris, and other solid materials ("Debris") that could be at risk of being carried into the storm drain as a result of the planned cosmetic washing activities. All such Debris shall be picked up and disposed of in compliance with all applicable laws.

b) The operator shall identify each storm drain or other point of entry ("POE") to the MS4 that may receive a discharge from the planned activities.

c) The operator shall effectively seal the POE with commercial storm drain mats or under-grate liners. (Note: Storm drain mats are heavy, solid rubber mats designed to be placed on top of drain grates to completely seal the drain. Under-grate liners consist of thick, flexible, impermeable plastic sheeting designed to be inserted under and held in place by heavy drain grates to prevent liquids from entering the drain.)

2. Operational Practices:

a) The operator shall conduct the cosmetic washing activity in accordance with its standard operating practices, ensuring responsible and safe operation of all mechanized equipment. Care shall be taken to prevent any displacement or other interference with the storm drain mats or under-grate liners in place at POEs.

b) At the conclusion of the cosmetic washing activities, the operator shall collect all wastewater that has pooled around sealed POEs or in other low spots within the job area by vacuum or other equally effective means.

c) Prior to removing the inlet protection from each sealed POE, the operator shall inspect the POE for any accumulated Debris, and remove such Debris for appropriate disposal.

d) After the area surrounding the POE has been inspected and confirmed free of standing liquids and accumulated Debris, the inlet protection may be removed from the POE.

e) Collected wastewater shall be disposed of as follows:

(1) If the parking garage has an interceptor connected to the City's sanitary sewer system *and* the water used for the cosmetic washing activities was City water obtained at the site, the wastewater may be disposed of either by discharging to the sanitary sewer at a point upstream of the interceptor, or;

(2) If the parking garage does not have an interceptor connected to the City's sanitary sewer system, the wastewater shall be transported offsite for treatment and/or disposal at an appropriately permitted facility.

B. Surface Parking Lots

1. Site Preparation:

a) The operator shall inspect the area to be cleaned, and the path of the anticipated runoff to the nearest storm drain, for Debris that could be at risk of being carried into the storm drain as a result of the planned cosmetic washing activities. All such Debris shall be picked up and disposed of in compliance with all applicable laws.

b) If wash water will be allowed to discharge to the storm sewer system (requiring the use of filter media as set forth in subparagraph (d)(2) below), then:

(1) The operator shall remove any standing liquids other than storm water, such as puddled fluids that have leaked from parked cars, etc., to the maximum extent practicable; and

(2) The operator shall remove or treat heavy hydrocarbon or other staining to the maximum extent practicable by application of absorbent granules or other material, which shall be collected for proper disposal at an approved disposal facility in accordance with all applicable laws;

c) The operator shall identify each POE to the MS4 that may receive a discharge from the planned activities.

d) The operator shall:

(1) Effectively seal the POE with commercial storm drain mats or under-grate liners. This shall be the required practice if chemicals or detergents will be mixed with the wash water or applied to specific areas and not removed prior to cosmetic washing, or;

(2) Install permeable inlet protection such as absorbent booms, filter socks or mats, or other products designed to block Debris and filter out hydrocarbons and other pollutants from any water that may pass through them and enter the POE. Any permeable

filter media used shall be used and maintained in accordance with the manufacturer's instructions.

2. Operational Practices:

a) The operator shall conduct the cosmetic washing activity in accordance with its standard operating practices, ensuring responsible and safe operation of all mechanized equipment. Care shall be taken to prevent any displacement or other interference with the inlet protection in place at POEs. If any inlet protection is observed not to be functioning properly, cosmetic washing activities shall cease until the inlet protection is repaired or replaced.

b) If no chemicals or detergents are applied and permeable inlet protection is used, cosmetic wash water discharges may be discharged to the storm sewer system after passing through the filtration media installed at POEs.

c) At the conclusion of the cosmetic washing activities, the operator shall inspect each POE for any accumulated Debris, and remove any such materials for appropriate disposal.

d) Inlet protection removal:

(1) If impermeable inlet protection was used, the operator shall collect all wastewater that has pooled around sealed POEs by vacuum or other equally effective means, or

(2) If permeable inlet protection has been used, the operator shall leave the inlet protection in place until the cosmetic wash water discharges have drained and any remaining wash water will evaporate or is otherwise unlikely to drain to the inlet. Visually inspect any standing water surrounding each POE for hydrocarbon sheens. Any visible sheens shall be completely removed using a skimmer or absorbent media prior to removal of the inlet protection.

e) After the area surrounding the POE has been inspected and confirmed free of Debris and any hydrocarbon sheen on standing liquids, the inlet protection may be removed from the POE. Absorbent filter media shall be recycled or disposed of in accordance with applicable laws, or if reusable, recharged and/or maintained in accordance with the manufacturer's instructions.

f) Any wastewater collected (e.g. vacuumed wastewater collected in connection with the use of impermeable inlet protection) shall be disposed of as follows:

(1) If the parking facility has an interceptor connected to the City's sanitary sewer system *and* the water used for the cosmetic washing activities was City water obtained at the site, the wastewater may be disposed of either by discharging to the sanitary sewer at a point upstream of the interceptor, or;

(2) If the parking facility does not have an interceptor connected to the City's sanitary sewer system, or the water used for the cosmetic washing activities was not City water obtained at the site, the wastewater shall be transported offsite for treatment and/or disposal at an appropriately permitted facility.

C. Sidewalks, Outdoor Plazas and Mass Transit Shelters

1. Site Preparation:

a) The operator shall inspect the area to be cleaned, and the path of the anticipated runoff to the nearest storm drain, for Debris that could be at risk of being carried into the storm drain as a result of the planned cosmetic washing activities. All such Debris, including any significant accumulations of bird or animal droppings, shall be picked up and disposed of in compliance with all applicable laws.

b) The operator shall identify each POE to the MS4 that may receive a discharge from the planned activities.

c) The operator shall either:

(1) Effectively seal the POE with commercial storm drain mats or under-grate liners. This shall be the required practice if chemicals or detergents will be mixed with the wash water or applied to specific areas and not removed prior to washing or the cosmetic wash water discharge is heated, or;

(2) Install permeable inlet protection such as absorbent booms, filter socks or mats, or other products designed to block Debris and filter out hydrocarbons and other pollutants from any water that may pass through them and enter the POE. Any permeable filter media used shall be used and maintained in accordance with the manufacturer's instructions.

2. Operational Practices:

   a) The operator shall conduct the cosmetic washing activity in accordance with its standard operating practices, ensuring responsible and safe operation of all mechanized equipment. Care shall be taken to prevent any displacement or other interference with the inlet protection in place at POEs. If any inlet protection is observed not to be functioning properly, cosmetic washing activities shall cease until the inlet protection is repaired or replaced.

   b) If no chemicals or detergents are applied cosmetic wash water may be discharged to:

      (1) the adjacent landscaped area with no discharge to the MS4; or

      (2) if permeable inlet protection is used, the MS4 after passing through the filtration media installed at POEs.

   c) At the conclusion of the cosmetic washing activities, the operator shall inspect each POE for any accumulated Debris, and remove any such materials for appropriate disposal.

   d) Inlet Protection Removal:

      (1) If chemicals or detergents and impermeable inlet protection were used, the operator shall collect all wastewater that has pooled around sealed POEs by vacuum or other equally effective means.

      (2) If permeable inlet protection has been used, the operator shall leave the inlet protection in place until the cosmetic wash water discharges have drained and any remaining wash water will evaporate or is otherwise unlikely to drain to the inlet. Visually inspect any standing water surrounding each POE for hydrocarbon sheens. Any visible sheens shall be completely removed using a skimmer or absorbent media prior to removal of the inlet protection.

   e) After the area surrounding the POE has been inspected and confirmed free of Debris and any hydrocarbon sheen on standing liquids, the inlet protection may be removed from the POE. Absorbent filter media shall be recycled or disposed of in accordance with applicable laws, or if reusable, recharged and/or maintained in accordance with the manufacturer's instructions.

f) Any wastewater collected (e.g. vacuumed wastewater collected in connection with the use of impermeable inlet protection) shall be disposed of as follows:

(1) If the parking facility has an interceptor connected to the City's sanitary sewer system and the water used for the cosmetic washing activities was City water obtained at the site, the wastewater may be disposed of either by discharging to the sanitary sewer at a point upstream of the interceptor, or;

(2) If the parking facility does not have an interceptor connected to the City's sanitary sewer system, or the water used for the cosmetic washing activities was not City water obtained at the site, the wastewater shall be transported offsite for treatment and/or disposal at an appropriately permitted facility.

D. Building Exteriors and Awnings

1. Site Preparation:

a) The operator shall inspect the area to be cleaned, and the path of the anticipated runoff to the nearest storm drain, for Debris that could be at risk of being carried into the storm drain as a result of the planned cosmetic washing activities. All such Debris, including any significant accumulations of bird or animal droppings, shall be picked up and disposed of in compliance with all applicable laws.

b) The operator shall identify each POE to the MS4 that may receive a discharge from the planned activities.

c) The operator shall either:

(1) Effectively seal the POE with commercial storm drain mats or under-grate liners. This shall be the required practice if chemicals or detergents will be mixed with the wash water or applied to specific areas and not removed prior to washing or the wash water will be heated, or;

(2) Install permeable inlet protection such as absorbent booms, filter socks or mats, or other products designed to block Debris and filter out hydrocarbons and other pollutants from any water that may pass through them and enter the POE. Any permeable filter media used shall be used and maintained in accordance with the manufacturer's instructions.

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   a) The operator shall conduct the cosmetic washing activity in accordance with its standard operating practices, ensuring responsible and safe operation of all mechanized equipment. Care shall be taken to prevent any displacement or other interference with the inlet protection in place at POEs. If any inlet protection is observed not to be functioning properly, cosmetic washing activities shall cease until the inlet protection is repaired or replaced.

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      (1) the adjacent landscaped area with no discharge to the MS4; or

      (2) if permeable inlet protection is used, the MS4 after passing through the filtration media installed at POEs.

   c) At the conclusion of the cosmetic washing activities, the operator shall inspect each POE for any accumulated Debris, and remove any such materials for appropriate disposal.

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      (1) If chemicals or detergents and impermeable inlet protection were used, the operator shall collect all wastewater that has pooled around sealed POEs by vacuum or other equally effective means.

      (2) If permeable inlet protection has been used, the operator shall leave the inlet protection in place until the cosmetic wash water discharges have drained and any remaining wash water will evaporate or is otherwise unlikely to drain to the inlet. Visually inspect any standing water surrounding each POE for hydrocarbon sheens. Any visible sheens shall be completely removed using a skimmer or absorbent media prior to removal of the inlet protection.

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f) Any wastewater collected (e.g. vacuumed wastewater collected in connection with the use of impermeable inlet protection) shall be disposed of as follows:

(1) If the parking facility has an interceptor connected to the City's sanitary sewer system and the water used for the cosmetic washing activities was City water obtained at the site, the wastewater may be disposed of either by discharging to the sanitary sewer at a point upstream of the interceptor, or;

(2) If the parking facility does not have an interceptor connected to the City's sanitary sewer system, or the water used for the cosmetic washing activities was not City water obtained at the site, the wastewater shall be transported offsite for treatment and/or disposal at an appropriately permitted facility.