City of Vernon
Development Construction Program

Soil disturbing activities during construction and demolition exacerbate sediment losses. Sediment is a primary pollutant impacting beneficial uses of watercourses. Sediments, and other construction activity pollutants must be properly controlled to reduce or eliminate adverse impacts to our waterways.

A) BACKGROUND

The Federal Clean Water Act is the principal vehicle for control of stormwater pollution. Under the Federal Clean Water Act, each municipality throughout the nation is issued a stormwater permit through the National Pollutant Discharge Elimination System (NPDES) program. The primary goal of each Stormwater permit is to stop polluted discharges from entering the storm drain system and local receiving and coastal waters. In California, the NPDES stormwater permitting program is administered by the State Water Resources Control Board (SWRCB) through its nine Regional Boards.

The requirement to implement the Permit is based on federal and state statutes, including Section 402(p) of the Federal Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990, and the California Water Code. The Federal Clean Water Act amendments of 1987 established a framework for regulating stormwater discharges from municipal, industrial, and construction activities under the NPDES program. The primary objectives of the stormwater program requirements are to:

- Effectively prohibit non-stormwater discharges, and
- Reduce and eliminate the discharge of pollutants from stormwater conveyance systems to the Maximum Extent Practicable statutory standard.

On November 8, 2012 the Los Angeles Regional Board adopted Order No. R4-2012-0175 (Municipal NPDES Permit). The Municipal NPDES Permit was issued to the Los Angeles County, the Los Angeles County Flood Control District and 84 cities, including the City of Vernon (Permittees). The Municipal NPDES Permit requires the development and implementation of a construction program to address the following:

- Prevent illicit construction-related discharges of pollutants into the municipal separate storm sewer system (MS4) and receiving waters.
- Implement and maintain structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites.
- Reduce construction site discharges of pollutants to the MS4 to the maximum extent practicable.
- Prevent construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

In November 2013, the City of Vernon amended Chapter 21, Article V Storm Sewer System of the Municipal Code to include the Development Construction Program provisions of the Municipal NPDES Permit (Ordinance No. 1216). The purpose of the provisions in Chapter 21 is to enhance and

protect the water quality of the receiving waters of the United States in a manner that is consistent with the Clean Water Act and the Municipal NPDES Permit. The intent of Chapter 21 is to protect and control the City's sanitary sewer system; and to reduce stormwater and urban runoff pollutants by improving the quality of stormwater that are discharged into the regional stormwater system within Los Angeles County known as the MS4.

Chapter 21 Article V Storm Sewer System can be accessed from the City of Vernon's website link at:
http://www.amlegal.com/nxt/gateway.dll/California/vernon_ca/thecodeofthecityofvernoncalifornia?f=templates$fn=default.htm$3.0$vid=amlegal:vernon_ca

B) APPLICABILITY

The requirements contained in the City of Vernon's Development Construction Program apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered under this program include but are not limited to grading, vegetation clearing, soil compaction, paving, repaving, and linear underground/overhead projects (LUPs).

The following provisions apply exclusively to **construction sites less than one (1) acre**.

i. For construction sites less than one (1) acre, the permit applicant shall:

(1) Apply for a City of Vernon building, grading, and/or encroachment permit prior to any soil disturbance and/or construction;
(2) Submit a signed Statement of Intent to Comply with Minimum Requirements of the Stormwater Permit (Appendix A), and;
(3) Implement an effective combination of erosion and sediment control Best Management Practices (BMPs) from Table 1 (see below) to prevent erosion and sediment loss, and the discharge of construction wastes.

Table 1. Minimum Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Stormwater Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

ii. The following provisions (ii.(1)-(3) and C through F) apply exclusively to **construction sites one (1) acre or greater**:

(1) Apply for a City of Vernon building, grading, and/or encroachment permit prior to any soil disturbance and/or construction;
(2) Apply for a State of California General Construction Activities Stormwater NPDES Permit. Provide the City with proof of coverage under the State of California General Construction Activities Stormwater NPDES Permit.
(3) Submit to the City of Vernon, for review and written approval, an Erosion and Sediment Control Plan (ESCP) prior to the disturbance of land. ESCP requirements are defined below under Part C.
(4) Implement, inspect and monitor the provisions of the ESCP.

Please note the State of California General Construction Activities Stormwater NPDES Permit may include additional requirements. Refer to the General Construction Activities Stormwater NPDES Permit for additional information and requirements.

C) EROSION & SEDIMENT CONTROL PLAN (ESCP) REQUIREMENTS

An ESCP is a plan for projects including but not limited to soil disturbance, grading, vegetation clearing, soil compaction, paving, re-paving and linear underground or overhead project; and identifying potential pollutant sources and describing the design, placement and implementation of BMPs to effectively prevent non-stormwater discharges and reduce pollutants in stormwater discharges during construction activities. The ESCP requirements are as follows:

i) The construction site operator is prohibited from commencing construction activity prior to receipt of written approval by the City of Vernon.

ii) The City of Vernon will not approve any ESCP unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements as specified below.

iii) ESCPs must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the General Construction Activities Stormwater NPDES Permit can be accepted as ESCPs.

iv) At a minimum, the ESCP must address the following elements:

(a) Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area.

(b) Methods used to protect native vegetation and trees.

(c) Sediment/Erosion Control.

(d) Controls to prevent tracking on and off the site.

(e) Non-storm water controls (e.g., vehicle washing, dewatering, etc.).

(f) Materials Management (delivery and storage).

(g) Spill Prevention and Control.

(h) Waste Management (e.g., concrete washout/waste management; sanitary waste management).

(i) Identification of site Risk Level as identified per the requirements in Appendix 1 of the General Construction Activities Stormwater NPDES Permit.

v) The ESCP must include the rationale for the selection and design of the proposed BMPs, including quantifying the expected soil loss from different BMPs.

vi) The ESCP shall be developed and certified by a Qualified SWPPP Developer (QSD).

vii) All structural BMPs shall be designed by a licensed California Engineer.

viii) All BMPs shall be designed, constructed, and operated in such a manner as to prevent the breeding and harborage of vectors, nuisance pests, or any other vermin.

ix) The landowner or the landowner's agent sign a statement on the ESCP as follows:

(a) "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP may result in revocation of grading and/ or other permits or other sanctions provided by law."

x) The construction site operators shall provide proper documentation establishing existing coverage under applicable permits, including, but not limited to the State Water Board's General Construction Activities Stormwater NPDES Permit, and State Water Board 401 Water Quality Certification.

D) BMP IMPLEMENTATION LEVEL

The selection, installation, implementation and maintenance of construction BMPs must comply with the City of Vernon's erosion and sediment control provisions of the City Code.

As a guidance manual to assist contractors in complying with the City's requirements of the Development Construction Program regulations the City of Vernon utilizes the California Stormwater Quality Associations' Stormwater Best Management Practice Handbook Portal: Construction hereinafter referred to as the CASQA Construction BMP Manual. The CASQA Construction BMP Manual can be accessed at: https://www.casqa.org/resources/bmp-handbooks.

The use of BMPs are to be tailored to the risks posed by the project. Sites are to be ranked from Low Risk (Risk 1) to High Risk (Risk 3). Refer to the General Construction Activities Stormwater NPDES Permit for Risk Determination. Project risks are to be calculated based on the potential for erosion from the site and the sensitivity of the receiving water body. The City of Vernon drains exclusively to the Los Angeles River. Receiving water bodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered High Risk. Likewise, water bodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be High Risk. The combined (sediment/receiving water) site risk shall be calculated using the methods provided in Appendix

1 of the General Construction Activities Stormwater NPDES Permit. At a minimum, construction BMPs shall include requirements for High Risk sites as defined in Table 2 below.

Table 1 below catalogs the minimum set of stormwater BMPs for all construction sites.

Tables 2 and 4 below catalog the minimum applicable stormwater BMP implementation requirements for construction sites equal or greater to one (1) acre and for paving projects.

Table 3 catalogs the minimum applicable stormwater BMP implementation requirements for High Risk sites.

Maintenance requirements for all BMPs, or category of BMPs shall be to periodically inspect, maintain and repair to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is necessary to ensure that all BMPs are functioning as intended.

Table 1. Minimum Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Stormwater Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

Table 2. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
Sediment Controls	Fiber Rolls
	Gravel Bag Berm
	Street Sweeping and/or Vacuum
	Storm Drain Inlet Protection
	Scheduling
	Check Dam
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/Exit

	Stabilized Construction Roadway
	Entrance/Exit Tire Wash
	Advanced Treatment Systems*
Non-Stormwater Management	Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Spill Prevention and Control

*Applies to public roadway projects.

Table 3. Additional Enhanced BMPs for High Risk Sites

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
	Slope Drains
Sediment Controls	Silt Fence
	Fiber Rolls
	Check Dam
	Gravel Bag Bern
	Street Sweeping and/or Vacuum
	Sand Bag Barrier
	Storm Drain Inlet Protection
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/Exit
	Stabilized Construction Roadway
	Entrance/Exit Tire Wash
	Advanced Treatment Systems*
Non-Stormwater Management	Water Conservation Practices
	Dewatering Operations (Ground water dewatering only under NPDES Permit No. CAG994004)
	Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management

*Applies to public roadway projects.

Table 4. Minimum Required BMPs for Roadway Paving or Repair Operation (For Private or Public Projects)

1.	Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions.
2.	Install gravel bags and filter fabric or other equivalent inlet protection at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat.
3.	Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
4.	Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
5.	Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
6.	Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
7.	Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
8.	Cover the "Cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
9.	Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
10.	Minimize airborne dust by using water spray or other approved dust suppressant during grinding.
11.	Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near stormwater drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain.

E) CONSTRUCTION SITE INSPECTION

The inspection procedures are as follows:

i) Inspection of public and private construction sites are specified in Table 5 below.

Table 5. Inspection Frequencies for Sites One (1) Acre or Greater

Site	Inspection Frequency Shall Occur
a. All sites one (1) acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under the CWA § 303(d)	(1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA (www.srh.noaa.gov/forecast), (2) within 48 hours of a ½ -inch rain event, and at (3) least once every two weeks
b. Other sites one (1) acre or more determined to be a significant threat to water quality (in evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-stormwater discharges; past record of non-compliance by the operators of the construction site; and	

	any water quality issues relevant to Municipal NPDES Permit)	
c.	All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria above	At least monthly

ii) The City of Vernon shall inspect all phases of construction as follows:

(a) Prior to Land Disturbance
Prior to allowing an operator to commence land disturbance the City of Vernon shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the ESCP.

(b) During Active Construction, including Land Development[1] and Vertical Construction[2]
In accordance with the frequencies specified above and Table 5, the City of Vernon shall perform an inspection to ensure all necessary erosion and sediment structural and nonstructural BMP materials and procedures are available per the ESCP throughout the construction process.

(c) Final Landscaping / Site Stabilization[3]
At the conclusion of the project and as a condition of approving and/or issuing a Certificate of Occupancy, the City of Vernon shall inspect the constructed site to ensure that all graded areas have reached final stabilization and that all trash, debris, and construction materials, and temporary erosion and sediment BMPs are removed.

iii) Based on the required frequencies above, each construction project shall be inspected a minimum of three times.

iv) Inspection Standard Operating Procedures

Inspections of construction sites and the standard operating procedures include, but are not limited to:

(a) Verification of active coverage under the General Construction Activities Stormwater NPDES Permit for sites disturbing one (1) acre or more, or that are part of a planned development that will disturb one (1) acre or more and a process for referring non-filers to the Regional Water Board.
(b) Review of the applicable ESCP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan and subsequent approved revisions.
(c) Assessment of the appropriateness of the planned and installed BMPs and their effectiveness.
(d) Visual observation and record keeping of non-storm water discharges, potential illicit discharges and connections, and potential discharge of pollutants in stormwater runoff.
(e) The City of Vernon shall maintain notes of all construction inspections and minimum required frequencies on a Check List (Appendix B) and electronically.

[1] Activities include cuts and fills, rough and finished grading; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; stockpiling of select material for capping operations; and excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvement.
[2] The build out of structures from foundations to roofing, including rough landscaping.
[3] All soil disturbing activities at each individual parcel within the site have been completed.

Appendix A

Statement of Intent to Comply with Minimum Requirements of the Stormwater Permit

CITY OF VERNON

PUBLIC WORKS, WATER & DEVELOPMENT SERVICES DEPARTMENT

Construction Stormwater Program

Permit Number: _____ Date: _____

Applicant: _____

Project Address: _____

Property Owner: _____

Contractor: _____

Contractor's Address: _____

Phone: _____

The National Pollutant Discharge Elimination System (NPDES) is a portion of the Clean Water Act that applies to the protection of receiving waters. Under permits from the Los Angeles Regional Water Quality Control Board (RWQCB), certain activities are subject to RWQCB enforcement. To meet the standards of the Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watershed of Los Angeles County, Except those Discharges Originating from the City of Long Beach MS4 (CAS004001), the City of Vernon has adopted minimum standards for stormwater runoff from development construction activities.

These minimum standards require the implementation of an effective combination of erosion and sediment control Best Management Practices (BMPs) to prevent erosion and sediment loss, and the discharge of construction waste at each site. At a minimum, the construction activity associated with the construction project identified above shall be conducted in such a manner that:

- Prevents illicit construction-related discharges of pollutants into the MS4 and receiving waters.
- Implements and maintains structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites.
- Reduces construction site discharges of pollutants to the MS4 to the maximum extent practicable.
- Prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

Note: The Stormwater BMP Construction Handbook sheets developed by the California Stormwater Quality Association shall be used as guidance in determining and implementing required BMPs. The BMP sheets may be reviewed at the Public Works, Water & Development Services Department counter during regular business hours. A General Construction Permit shall be obtained and maintained for all construction sites one (1) acre or greater. Additional conditions may be required for these sites.

I have read and understand the requirements listed above and certify that I will comply with the minimum requirements above.

Signature: _____ Print Name: _____

Title: _____

Property Owner: _____

Appendix B

DEVELOPMENT CONSTRUCTION PROGRAM
EROSION & SEDIMENT CONTROL PLAN (ESCP) AND INSPECTION CHECK LIST

The following is a list of information required as part of the ESCP/SWPPP required to be submitted to the Development Services Department in order for the project to be reviewed by the Public Works, Development Services and the Health Departments for compliance with the stormwater runoff requirements and the City of Vernon Municipal Code Chapter 21 - Storm Sewer System:

For projects that disturb one (1) acre or more of land, obtain the following information for tracking purposes and input information into the building permit database:

- ☐ Contact information for project (i.e. name, address, phone, email, etc. for the owner and contractor)
- ☐ Basic site information including location, status, size of the project and area of disturbance.
- ☐ The proximity to the Los Angeles River.
- ☐ Ranking of project from Low Risk (Risk 1) to High Risk (Risk 3). Calculations are to be based on the potential for erosion from the site and the sensitivity of the receiving water body. The City of Vernon drains exclusively to the Los Angeles River. Receiving water bodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered High Risk. Likewise, water bodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be High Risk. The combined (sediment/receiving water) site risk shall be calculated using the methods provided in Appendix 1 of the General Construction Activities Stormwater NPDES Permit. At a minimum, construction BMPs shall include requirements for High Risk sites as defined in Table 3 of the Development Construction Program information sheet.
- ☐ Current construction phase where feasible.
- ☐ The required inspection frequency per Table 5 of the Development Construction Program information sheet.
- ☐ The project start date and anticipated completion date.
- ☐ Proof of coverage under the General Construction Activities Stormwater NPDES Permit.
- ☐ The date the City of Vernon approved the ESCP.
- ☐ Post-construction structural BMPs subject to operation and maintenance requirements.

Prior to issuing a grading, building or encroachment permit the City requires each operator of a construction activity to prepare and submit an ESCP prior to the disturbance of land for review and approval.

☐ Submitted proper ESCP/SWPPP if project disturbs one (1) acre or more of land. The minimum requirements of an ESCP are as follows:

- ESCP meets erosion and sediment control provisions of the City Code.
- ESCPs must include the elements of a Stormwater Pollution Prevention Plan (SWPPP) and prepared in accordance with the requirements of the General Construction Activities Stormwater NPDES Permit, at a minimum:
  - Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area.
  - Methods used to protect native vegetation and trees.
  - Sediment/Erosion Control.
  - Controls to prevent tracking on and off the site.
  - Non-storm water controls (e.g., vehicle washing, dewatering, etc.).
  - Materials Management (delivery and storage).
  - Spill Prevention and Control.
  - Waste Management (e.g., concrete washout/waste management; sanitary waste management).
  - Identification of site Risk Level as identified per the requirements in Appendix 1 of the General Construction Activities Stormwater NPDES Permit.
  - Rationale for the selection and design of the proposed BMPs, including quantifying the expected soil loss from different BMPs.
  - ESCP is developed and certified by a Qualified SWPPP Developer (QSD).
  - All structural are BMPs designed by a licensed California Engineer.
  - All BMPs are designed, constructed, and operated in such a manner as to prevent the breeding and harborage of vectors, nuisance pests, or any other vermin.
  - The landowner or the landowner's agent signed a statement on the ESCP as follows: "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP may result in revocation of grading and/ or other permits or other sanctions provided by law."
  - The construction site operator provided proper documentation establishing existing coverage under applicable permits, including, but not limited to the State Water Board's General Construction Activities Stormwater NPDES Permit, and State Water Board 401 Water Quality Certification.

Inspection Standard Operating Procedures – the following inspection of construction sites requirements and standard operating procedures shall be implemented:

☐ Verified proof of coverage under the General Construction Activities Stormwater NPDES Permit if project disturbs one (1) acre or more of land or that are part of a planned development that will disturb one (1) acre or more. If proof of coverage is not submitted, refer non-filers to the Regional Water Board.

- ☐ Reviewed ESCP and inspected constructions site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved ESCP.
- ☐ Assessed the appropriateness of the planned and installed BMPs and their effectiveness.
- ☐ Visual observation and record keeping of non-stormwater discharges, potential illicit discharges and connections, and potential discharge of pollutants in stormwater runoff.
- ☐ Other _____

12/2014