PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Incident Date:	11/17/2020-3/17/2021 (for MM HY-1 and MM HY-3)	**Report No.:**	NCR-007
Date Submitted:	5/13/2021	**Location:**	Basin located on southwest corner of the Mesa Substation site adjacent to Markland Drive
Level:	Level 1	**Relevant Plan/Measure:**	MM HY-1 (including SWPPP) MM HY-3 (including SWPPP)
Current Land Use:	Mesa Substation	**Sensitive Resources:**	N/A

Description of Incident: On February 4, 2021 the CPUC Compliance Monitors observed that stormwater from recent rain events were circumventing erosion and sediment control best management practices (BMPs) installed on the banks of the far west basin on Markland Drive, eroding soil at the base, and accumulating in the basin. Additionally, Southern California Edison's (SCE's) Inspection Report, dated 11/17/2020 (prior to 2020/2021 storm events) and in subsequent reports, indicated that the banks of the basin required BMP maintenance. The reports demonstrate that the contractor did not begin implementing repairs or design changes to BMPs within 72 hours of identification or completed changes as soon as possible. This conflicts with the Construction General Permit and the Mesa 500-kV Substation Project Stormwater Pollution Prevention Plan (SWPPP).

As a result, heavy sediment-laden water accumulated in the basin over time and was not draining within 96 hours (per the CASQA BMP Fact Sheet for basins), and therefore a vector control issue was discovered post storm (ponded water photographs were documented in SCE's Inspection Report, dated 1/5/21, in subsequent reports, and during CPUC Compliance Monitor site visits from 1/6/21 – 3/17/21). Relevant photographs are included in Attachment 1.

Background:

A memorandum prepared by WSP USA on 2/12/21, provided a summary of a stormwater compliance visual monitoring activity that occurred on 2/4/21 for the Mesa 500-kV Substation (Mesa Substation) Project in Los Angeles County, California. Stormwater compliance monitoring was performed to ensure that all project-related activities conducted by SCE and their contractors are in compliance with the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP), Order No. 2009-0009-DWQ, NPDES No. CAS000002 as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ.

Onsite compliance monitoring by the CPUC compliance team during this site visit focused on spot-checks of ongoing construction activities and best management practices (BMPs) that were being implemented onsite to mitigate offsite stormwater and non-stormwater discharges. The CPUC Compliance team (Compliance Monitor and Water Quality Manager) visited the site on February 4, 2021. Photographic documentation of their findings along with applicable terms and conditions of the CGP and required actions were summarized in the memorandum. The Mesa Substation Project's Stormwater Multi Application Reporting and Tracking System (SMARTS) accounts were also audited to verify CGP reporting compliance.

The following was noted during the site visit on 2/4/2021:

- Drawdown time for detained stormwater runoff exceeds 96 hours creating a potential vector concern.

The Contractor's Qualified SWPPP Practitioner (QSP) indicated that erosion and sediment control BMPs installed on the banks of the basin needed maintenance (as noted in SCE's Inspection Report, dated 11/17/20, and in consecutive reports thereafter). Per the California Stormwater Quality Association (CASQA) BMP Fact Sheet SE-02 for sediment basins, sediment that accumulates in the basin must be periodically removed when sediment accumulates to maintain BMP

effectiveness. The reports demonstrate that contractor did not begin implementing repairs or design changes to BMPs within 72 hours of identification or completed the changes as soon as possible.

The basin not draining within 96 hours, was a vector control issue discovered post storm (ponded water photographs documented in SCE's Inspection Report, dated 1/5/21 and in subsequent weekly reports and as noted in CPUC Compliance Monitor photographs). It should also be noted that observations of the turbidity in the standing/ponded water increased over time as shown in Attachment 1. Per CASQA BMP Fact Sheet SE-02, standing water from basin shall be removed within 96 hours. If the basin does not drain adequately (e.g., due to storms that are more frequent or larger or other unforeseen site conditions), dewatering should be conducted in accordance with appropriate dewatering BMPs and in accordance with local permits as applicable.

CPUC Compliance Monitor Observations:
On January 6, 2021, the CPUC Compliance Monitor observed that the small triangular catch basin (far west basin on Markland Drive) was full of water following recent rain events (see photograph dated 1/6/21 in Attachment 1). According to the photograph, the water appeared to be relatively clear – since most of the natural light passing through continues in the original direction. Additionally, a "V" ditch connecting to this basin contained sediment and required maintenance.

On January 20, 2021, the CPUC Compliance Monitor again observed turbid water in the basin. The "V" ditch still contained sediment and needed maintenance.

On February 4, 2021, the CPUC Compliance Monitor and Water Quality Manager, observed a significant amount of sediment laden water in the basin. The water appeared cloudy and with a low level of scattered light indicating a high turbidity level. Additionally, a standpipe in the basin appeared to be plugged since the water level was substantially higher than the previous week - indicating inadequate draining.

On March 5, 2021, the CPUC Compliance Monitor observed the sediment laden water in the basin being pumped through a filter system (dewatering) and into the larger detention basin at the Mesa Substation.

On March 9, 2021, the CPUC Compliance Monitor noted that the basin was almost dry.

On March 17, 2021, the CPUC Compliance Monitor noted that the basin was almost completely dry. The "V" ditch connecting to the basin, however, remained full of sediment.

Although the Contractor's QSP expressed repeated deficiencies of BMP maintenance at the banks of the basin prior to storm events, SCE failed to repair/upgrade the BMPs within 72-hours. Because sediment-polluted water was not adequately draining within 96-hours via the perforations near the base of the standpipe, it is evident that the basin presented a potential vector control issue, which was a previous CPUC concern at the Mesa Substation basin.

Based on the descriptions above, the CPUC has determined that these incidents warrant a Level 1 Non-Compliance. Photographs documenting the incident are provided in Attachment 1.

Pertinent Plans/Permits/Mitigation Measures:

The Mitigation, Monitoring, Compliance, and Reporting Program (MMCRP) was created based on the Final Environmental Impact Report and serves as a working guide for maintaining environmental compliance for the Mesa Substation Project. The mitigation measures (MMs) and applicant proposed measures within the MMCRP are required to be followed by SCE, including the following, which are relevant to this non-compliance incident. Relevant portions of MMs and associated applicable plans and permits (SWPPP and CGP) are provided below (with underlines) for reference.

MM HY-1: Stormwater Pollution Prevention Plan. The applicant will obtain coverage for the project under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The applicant will prepare a SWPPP to reduce the potential for water pollution and sedimentation from construction. BMPs to be included in the SWPPP that must be submitted to the SWRCB shall include, but are not limited to, the following:

- Runoff, sedimentation, and erosion would be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures will be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties. BMPs would be included for areas where helicopters would be landed, fueled, and serviced or used for construction activities.
- Implement measures such as silt screens, cleanup of spills of hazardous materials, cleanup of sediment, secondary containment for hazardous materials, and avoidance of activities that disturb sediment or have a high potential for hazardous materials spills immediately before or during rain to prevent polluted (with sediment or hazardous materials) runoff from staging areas from draining into water ways such as washes, drainages, and ditches and from entering municipal storm drain systems.

Verification of Construction General Permit coverage approval and the approved SWPPP(s) will be provided to the California Public Utilities Commission (CPUC) at least 30 days prior to start of construction. Updated SWPPPs will be provided to the CPUC on request during construction.

Relevant Sections of the Storm Water Pollution Prevention Plan, per California 2009-0009-DWQ, as Amended by 2010-0014-DWQ and 2012-0006-DWQ

- Mesa Substation SWPPP, Section 4.1.1 Visual Inspections: If deficiencies are identified during BMP inspections, repairs or design changes shall be initiated within 72 hours of identification.
- Mesa Substation SWPPP, Section 4.1.5 Maintenance and Repair: The QSP and/or delegated personnel shall begin implementing repairs or design changes to BMPs within 72 hours of identification of BMPs that:
  - Need Maintenance to operate effectively
  - Have failed; or
  - Could fail to operate as intended.

  If the problem warrants an amendment (e.g. a new procedure or BMP that needs to be implemented) the QSD shall be notified.

Relevant Sections of the Construction General Permit Order No. 2009-0009-DWQ, as Amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ

- Construction General Permit, page 48, Section M, Storm Water Pollution Prevention Plans: The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. A SWPPP must be appropriate for the type and complexity of a project and will be developed and implemented to address project specific conditions.

MM HY-3: Construction Drainage Plan. SCE shall prepare and implement a Drainage Plan, or incorporate the requirements of this mitigation measure into the SWPPP, which ensures runoff during construction activities at the Mesa Substation site will not exceed drainage capacity of the storm water system and other drainage facilities. Measures that can be employed can include:

- Constructing the detention basin earlier in construction.
- Constructing temporary detention basins on site.
- Creating infiltration areas to limit runoff that enters the storm water system.

If the SWPPP is not used to satisfy the conditions of this mitigation measure, SCE shall submit the plan to Monterey Park and CPUC for review and approval prior to beginning construction activities at the substation site.

On 2/3/17, SCE submitted request for CPUC approval for compliance with Mitigation Measure HY-3. The CPUC agreed that the SWPPP would satisfy the conditions of this mitigation measure.

Proposed Resolution:

The CPUC requests that SCE develop and incorporate a strategy to ensure that the basin functions to drain within 96-hours. The strategy or design should ensure that onsite wet-weather flow is fully contained within the basin and that the basin shall properly drain within 24 to 96-hours (also referred to as "drawdown time"). The 24-hour limit is specified to provide adequate settling time; the 96-hour limit is specified to mitigate vector control concerns.

If the basin does not drain adequately (e.g., due to storms that are more frequent or larger than the design storm or other unforeseen site conditions), dewatering should be conducted in accordance with appropriate dewatering BMPs and in accordance with local permits as applicable.

BMPs must be inspected and maintained in accordance with Construction General Permit Order No. 2009-0009-DWQ, as Amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ for the associated Mesa Substation Project risk level. It is recommended that at the minimum, basins be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Specifically, checking inlet and outlet structures for any damage or obstructions, and repair damage and remove obstructions as needed. In addition, checking the inlet and outlet areas for erosion and stabilize if required. Furthermore, to maintain the effectiveness of the basin, sediment that accumulates in the basin must be periodically removed.

Furthermore, the CPUC requests that SCE ensure that if deficiencies are identified during BMP inspections, repairs or design changes shall be initiated within 72 hours of identification. The QSP and/or delegated personnel shall begin implementing repairs or design changes to BMPs within 72 hours of identification of BMPs that require maintenance to operate effectively, have failed, or could fail to operate as intended (in accordance with SWPPP for the Mesa 500-kV Substation Project, Section 4.1.1 and 4.1.5).

To support compliance with pertinent permits, plans, and mitigation measures CPUC requests that SCE inspection reports are incorporated in the SWPPP on-site binders and uploaded on SCE's Field Reporting Environmental Database (FRED), immediately following the inspections. If SCE discovers a non-compliance incident of any magnitude (including but not limited to identifying the same deficiencies noted in consecutive BMP weekly inspection reports), they must notify the CPUC CM of the incident (self-report) and ensure that corrective repairs or design changes are completed.

Repeated compliance incidents resulting from the same action or individual may result in elevating the non-compliance level.

Recommended Timeline for Follow-up: The CPUC requests that SCE develop and incorporate a strategy to ensure that the basin functions to drain within 96-hour to control potential vector issues. Additionally, CPUC requests that SCE implement a strategy to ensure the deficiencies identified in BMP weekly inspections are repaired or re-designed within 72-hours in accordance with pertinent plans, permits, and mitigation measures for the Mesa 500-kV Substation Project.

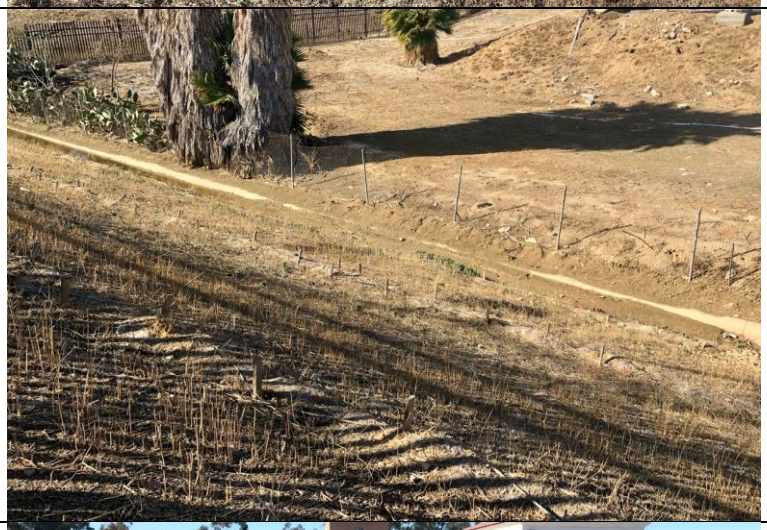
Approvals	Date	Name (print)	Signature	Comments
CPUC Compliance Manager	6/7/2021	Fernando Guzman		
CPUC Compliance Monitor (if applicable)				
CPUC Project Manager (if applicable)	6/7/2021	Connie Chen		
SCE Environmental Project Manager (if applicable				

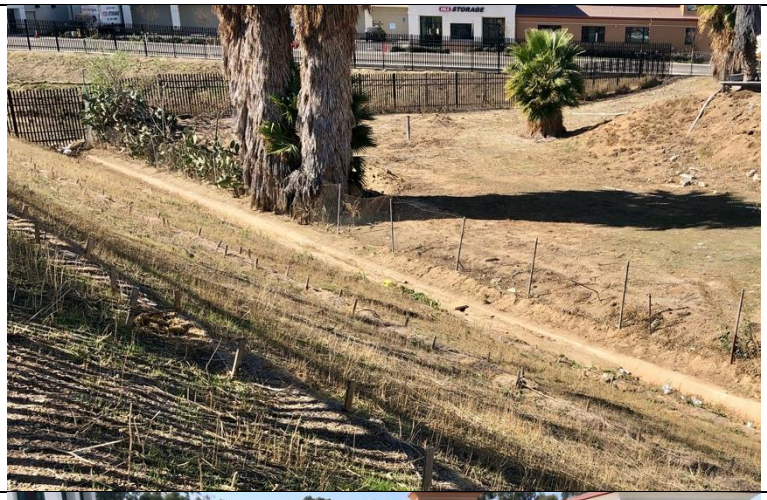
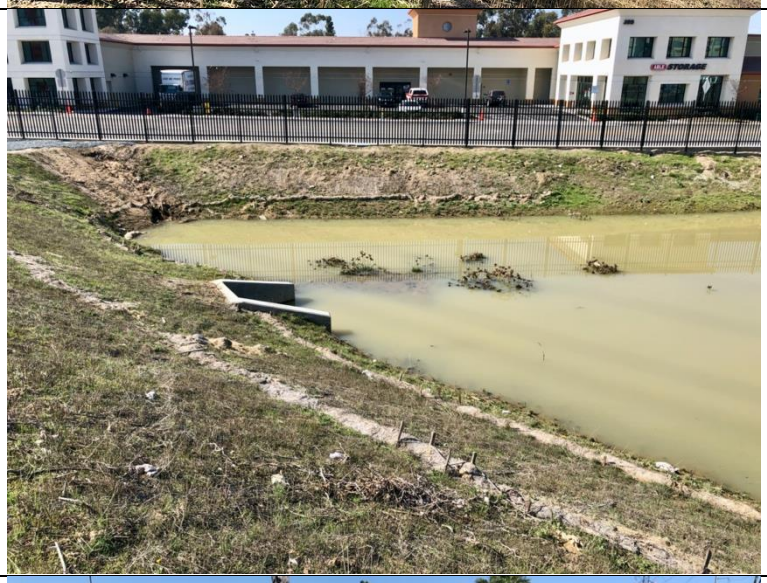
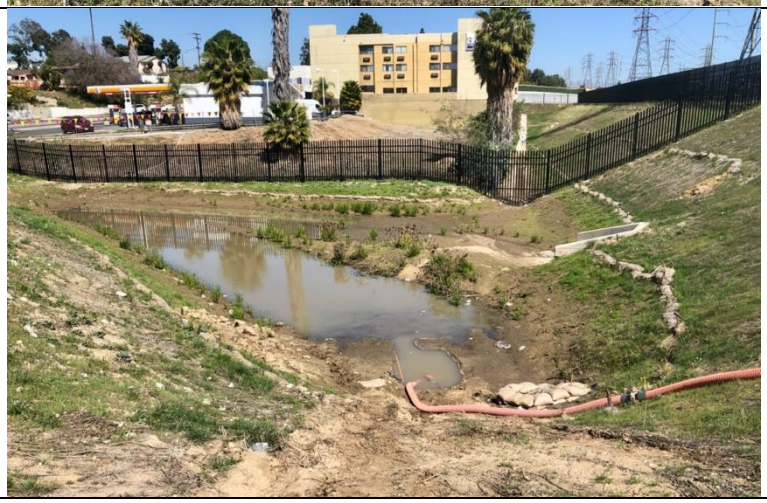
Prepared by: Fernando Guzman, Silvia Yanez **Date:** 5/14/2021

Non-compliance Level	Example
A Level 1 non-compliance incident is an action that deviates from project requirements or results in the partial implementation of the mitigation measures, but has not caused, nor has the potential to cause impacts on environmental resources.	i. Failure to implement adequate dust control measures resulting in no impact on resources; ii. Improperly installed, repaired, or maintained erosion or sediment control devices (with no resultant harm to sensitive resources or release of sediment to waters); iii. Inadvertent minor incursion into exclusion area resulting in no harm to sensitive biological or cultural resources; iv. Work outside the approved work limits where the incident is within a previously disturbed area, such as a gravel lot
A Level 2 non-compliance incident is an action that deviates from project requirements or mitigation measures and has caused, or has the potential to cause minor impacts on environmental resources.	i. Work without appropriate permit(s) or approval; ii. Failure to properly maintain an erosion or sediment control structure, but the structure remains functional, and results in minor impacts on resources (e.g. water courses); iii. Working outside of approved hours; iv. Repeated documentation of Level 1 incidents
A Level 3 non-compliance incident is an action that deviates from project requirements and has caused, or has the potential to cause major impacts on environmental resources. These actions are not in compliance with the APMs, mitigation measures, permit conditions, approval requirements (e.g. minor project changes, notice to proceed), and/or violates local, state, or federal law.	i. Construction activities occurring in an exclusion zone with direct impacts to sensitive or endangered species, cultural resources, human remains, or an archaeological site; ii. Eminent danger or documented impact to a sensitive or T&E species; iii. Repeated deviations from required mitigation measures/requirements that have been documented as Level 2 (Minor Incidents); iv. Improper installation of erosion or sediment control structures resulting in substantial sedimentation or impacts to water quality or putting sensitive resources at risk

Attachment 1

NCR-007 Incident Photographs

REPRESENTATIVE SITE PHOTOGRAPHS			
Date	**Location**	**Photo**	**Description**
1/6/21	Mesa substation		Photo 1 – Small triangular (lower) catchbasin full of water. Photo facing northwest
1/6/21	Mesa Substation		Photo 2 – "V" ditch connecting to the small triangular (lower) catchbasin contains sediment.
1/20/21	Mesa substation		Photo 3 – Triangular (lower) catchbasin with water. – This basin is still holding water. Photo facing west

REPRESENTATIVE SITE PHOTOGRAPHS			
Date	**Location**	**Photo**	**Description**
1/20/21	Mesa substation		Photo 4 – "V" ditch connecting to the triangular (lower) catchbasin still containing sediment. Photo facing west
2/4/21	Mesa substation		Photo 5 – Triangular (lower) catch basin with sediment and water. – The standpipe within the small triangular basin appears to be plugged and water level in the basin was quite high.
3/05/21	Mesa substation		Photo 6 – Triangular (lower) catchbasin..- The water was being pumped through a filter system and into the detention basin. Photo facing east

REPRESENTATIVE SITE PHOTOGRAPHS			
Date	**Location**	**Photo**	**Description**
3/09/21	Mesa substation		Photo 7 – Small triangular (lower) catchbasin is almost dry. Photo facing northeast
3/17/21	Mesa substation		Photo 8 – Small triangular (lower) catchbasin. Photo facing northeast

REPRESENTATIVE SITE PHOTOGRAPHS			
Date	**Location**	**Photo**	**Description**
3/17/21	Mesa substation		Photo 8 – "V" ditch connecting to the triangular (lower) catchbasin remains full of sediment. Photo facing northeast