



235 Montgomery Street, Suite 935, San Francisco, CA 94104
Tel. 415-955-4775, Fax 415-955-4776, www.aspeneg.com

PROJECT MEMORANDUM

PG&E EMBARCADERO-POTRERO 230 KV TRANSMISSION PROJECT

To: Billie Blanchard, Project Manager, CPUC
From: Vida Strong, Aspen Project Manager
Date: December 19, 2014
Subject: Monitoring Report #13 – December 8 to December 14, 2014

This report provides a summary of the construction and compliance activities associated with the PG&E Embarcadero-Potrero (E-P) 230 kV Transmission Project.

A summary of the Notices to Proceed (NTPs) for construction and Minor Project Change (MPC) activities are provided in Tables 1 and 2, respectively (below).

CPUC Environmental Monitor (EM): Jody Fessler

CPUC NTPs

E-P Potrero Switchyard Site Preparation

NTP #1 was issued on August 21, 2014 for the site preparation of the Potrero Switchyard on 23rd Street adjacent to the existing Potrero Substation on the corner of 23rd Street and Illinois Street in San Francisco. NTP #1 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. Foundation demolition occurred on Saturday and excavation activities occurred Wednesday, Friday, and Saturday.
2. Breaking up of concrete occurred Monday through Wednesday, and Friday.
3. Removal of rebar from concrete for recycling occurred Monday through Wednesday (see Figure 1).
4. Concrete was hauled off site Wednesday and Friday.
5. Asbestos abatement of pipe and removal of pipe was conducted by PSC on Monday and Tuesday.
6. Street sweeping occurred Monday through Wednesday, Friday and Saturday.
7. The fence and gate were moved on Monday.
8. Blaine Tech Services was onsite to conduct water sampling on Friday.
9. No work was conducted on Thursday due to the inclement weather and heavy rains.

Environmental Compliance:

1. Cultural monitoring was conducted Wednesday, Friday, and Saturday.
2. Air quality monitoring was conducted Monday through Wednesday, Friday and Saturday.
3. PG&E's Environmental Inspector conducted monitoring of this area throughout the week, including SWPPP inspections.
4. PG&E's Environmental Inspectors noted no compliance issues at this location.



E-P Horizontal Directional Drill (HDD) Construction

NTP #2 was issued on August 28, 2014 for the HDD Construction on Spear Street, at the northern end of the project, and 23rd Street, at the southern end of the project, in San Francisco. Both HDDs would terminate within the San Francisco Bay and will be tied together in the future via a subsea cable. NTP #2 included conditions that had to be satisfied prior to the start of construction, as well as prior to the start of any work in the Bay.

Summary of Activity at the Northern Bore (Spear Street):

1. A HDD air pressurized drill was used for locating the bore head in the Bore 3 receiving pit on Monday and Tuesday; however, Vortex divers were unsuccessful in locating the drill head in the Bore 3 receiving pit on Monday and Tuesday even with the use of an air lift at the receiving pit (see Figure 2).
2. On Wednesday, the HDD jetting assembly drill head was installed and bored to the Bore 3 receiving pit Wednesday and Friday. The HDD bore punched out into the Bore 3 receiving pit on Saturday. Vortex located the drill head in the Bore 3 receiving pit on Saturday, removed stiffeners from drill head, and prepared for assembly of Bore 3 back-reamer.
3. The HDD drill head attachment was welded on Sunday to be used for the Bore 3 conduit pull back.
4. Traffic controls have been established at the corner of Spear Street and Harrison Street by Bay Area Traffic Solutions (BATS). Limited access is provided to Spear Street (a dead end street) including deliveries and people with parking garage permits, as well as construction personnel.
5. An 8-foot-tall chain link fence with sound blankets are in place around the HDD equipment and work area.
6. Street sweeping occurred Monday through Sunday.
7. No work activities occurred on Thursday due to the inclement weather.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work activities throughout the week, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
2. On December 13th, the PG&E Environmental Inspector noted that two porta-potties on the Vortex barge did not have secondary containment. This issue was rectified by December 17th.
3. PG&E's Environmental Inspector noted no other compliance issues at this location.
4. Herring monitoring was conducted Monday through Wednesday, and Friday through Sunday.

Summary of Activity at the Southern Bore (23rd Street):

1. HDD drilling occurred at Bore 2 Monday through Wednesday, and Friday.
2. The HDD bore head punched out into the Bore 2 receiving pit on Friday. Vortex divers located the drill head in the Bore 2 receiving pit the same day and attached the back-reamer. The back-reaming of Bore 2 was also completed on Friday (see Figure 3).
3. HDPE pipe was pulled back through Bore 2 on Sunday. Vortex facilitated the HDPE conduit pull-back and insertion at Bore 2 on Sunday.
4. Equipment maintenance and housekeeping was conducted on Saturday.
5. High density polyethylene (HDPE) pipe hydrotesting was conducted on Tuesday.

6. Street sweeping occurred Monday through Wednesday, and Friday through Sunday.
7. No work activities occurred on Thursday due to inclement weather.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work activities throughout the week, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
2. PG&E's Environmental Inspectors noted no compliance issues at this location.
3. Herring monitoring was conducted Monday through Wednesday, and Friday through Sunday.

E-P Underground Duct Bank Construction

NTP #3 was issued on October 9, 2014 for the underground duct bank and vault installation component of the Embarcadero-Potrero 230 kV Transmission Project between the horizontal directional drill (HDD) transition on Spear Street to the Embarcadero Substation on Folsom Street in the northern section, and between the HDD transition on 23rd Street to the Potrero Switchyard in the southern section, in the City of San Francisco. NTP #3 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity for the Duct Bank North (Folsom St. and Spear St.):

1. No work occurred due to the City holiday moratorium which is in place until January 1st.

Summary of Activity for the Duct Bank South (23rd Street):

1. Potholing for utilities occurred on Monday through Wednesday.
2. Removal of abandoned pipes in potholes occurred Monday through Wednesday (see Figure 4).
3. Street sweeping occurred Monday through Wednesday.
4. No work activities occurred Thursday through Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted on Monday through Wednesday.
2. Air Quality monitoring was conducted Monday through Wednesday.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities throughout the week, including SWPPP inspections.
4. PG&E's Environmental Inspectors noted no compliance issues at this location.

E-P Submarine Rock and Debris Removal

NTP #4 was issued on November 21, 2014 for the rock removal obstructing the path of the submarine cable component of the Embarcadero-Potrero 230 kV Transmission Project along the submarine cable line and off shore of Pier 50 in the San Francisco Bay. NTP #4 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. Dredging of rock and debris occurred Monday through Wednesday, Friday, and Saturday.
2. No work activities occurred on Thursday due to inclement weather.

Environmental Compliance:

- 1. The PG&E’s Environmental Inspectors noted no compliance issues regarding this work.
- 2. Herring monitoring was conducted on Monday through Wednesday, and Friday and Saturday.

Amador Staging and Laydown Yard

A Minor Project Change #1 was issued on July 23, 2014 for the use of the Amador Staging and Laydown Yard on Amador Street, San Francisco. The Minor Project Change #1 included conditions that had to be satisfied prior to the staging of equipment and materials at the yard.

Summary of Activity:

- 1. Office trailer use occurred Monday through Sunday at the yard.
- 2. Tailboard meetings occurred at the yard Monday through Wednesday, and Friday.

Environmental Compliance:

- 1. PG&E’s Environmental Inspector conducted monitoring of the work area and activities throughout the week, including SWPPP inspections.
- 2. PG&E’s Environmental Inspectors noted no compliance issues at this location.

Notices to Proceed

Table 1 summarizes the Notices to Proceed (NTP) for the Embarcadero-Potrero Project. A Modification to NTP #3 was reviewed and approved during the subject week to allow for trenching from the new Potrero Switchyard to the existing switchyard for the 230 kV/115 kV connections across the Trans Bay Cable.

Table 1
Notice to Proceeds (NTPs)
(Updated 12/19/14)

NTP #1	Date Requested	Date Issued	Phase	Description
NTP #1	6/23/14	8/21/14	Potrero Site Preparation	Site preparation and excavation of the 230 kV Potrero Switchyard site on 23 rd St., SF.
NTP #2	7/31/14	8/28/14	HDD	Horizontal directional drilling on Spear St. and 23 rd St. connecting to the SF Bay.
NTP #3	9/18/14	10/09/14	Underground Duct Bank and Vaults	Underground duct bank and vault installation between the HDD transition on Spear St. to the Embarcadero Substation on Folsom St. in the northern section, and between the HDD transition on 23 rd St. to the Potrero Switchyard in the southern section, SF.
NTP #3 MOD	11/13/14	11/14/14	Underground Duct Bank and Vaults	Trench from the new Potrero Switchyard to the existing switchyard for the 230 kV/115 kV connections across the Trans Bay Cable.
NTP #4	11/19/14	11/21/14	Subsea Cable	Rock and debris removal along subsea cable route.

Minor Project Changes

Table 2 summarizes the Minor Project Changes submitted for the Embarcadero-Potrero Project.

Table 2
Minor Project Changes (MPCs)
(Updated 12/19/14)

MPC	Date Requested	Date Issued	Phase	Description
MPC #1	7/16/14	7/23/14	Amador Staging and Laydown Yard	Use of an existing staging and laydown yard adjacent to Alternate Staging Area #3 (as identified in the IS/MND) on Amador St., SF.

PROJECT PHOTOS



Figure 1 – Removal of rebar for recycling at Potrero Switchyard. View east-southeast, December 9, 2014. (Photo courtesy of PG&E.)



Figure 2 – Vortex conducting air lift at Bore 3 receiving pit at HDD North. View north, December 8, 2014. (Photo courtesy of PG&E.)



Figure 3 – Vortex staged to locate Bore 2 at receiving pit at HDD South. View southeast, December 12, 2014. (Photo courtesy of PG&E.)



Figure 4 – Abandoned pipe removed at Duct Bank South. View north, December 9, 2014. (Photo courtesy of PG&E.)