



Observation Report

385687.F1.01

PROJECT NO. _____

(1) DAY: Friday DATE: 4/12/2012 WORK PERIOD: 10:00 am ^{a.m.} TO 12:00 am ^{p.m.} REPORT NO. 1

WEATHER: Overcast, light breeze TEMP. MAX 64 °F: MIN _____ °F: PRECIPITATION: none

(2) NUMBER AND CLASS OF CONTRACTOR PERSONNEL OBSERVED ON SITE:

<u>Excell 5 workers</u>	<u>At drill rig on Vermont Catherine Green.</u>	<u>Also with AECOM</u>
<u>ICS 4 workers (HDPE installation)</u>	<u>At drill rig on Vermont 2 well drillers</u>	_____
<u>Site Supervisor- Kevin Thomas AECOM</u>	_____	_____
<u>Site Wind Monitor- Patrick Vandenberg (air)</u>	_____	_____

(3) MAJOR EQUIPMENT ON PROJECT

No.	Description	Size/Capacity	In Use Y/N
1	CAT 950 Front-end Loader		N
2	Backhoe	small	Y
2	Fork Lifts		Y
	Water Truck		N
	ICS Truck for butt-fusion and 2-3 additional pickups		Y

(4) Observations:

A) **Work Activities In Progress:** The main purpose of this site visit was to observe the HDPE pipeline installation procedures, especially the welding/fusion process for connecting pipeline segments. While onsite, other general observations were made and a dust monitoring report form was also completed (in separate attachment).

Notes: The ICS crew was working on pipe installation. I observed placement of pipe, but primarily butt fusion/welding of the extraction main double-wall pipe on site (in North-South direction). The other crew was performing miscellaneous site work including checking the covers on soil piles and preparing to move an old guard shack from site apparently into a dumpster. The butt-fusion process for HDPE requires specialty equipment. The fusion process steps include clamping the pipes in the apparatus, checking for center alignment, manually shaving the pipe ends at a right angle, then shaving them perfectly straight with wheel cutter, heating up a separate heat pad to the required temperature, placing the heat pad between pipe ends, heating up two pipe ends, tightening the "clamp" that presses the two ends together and forming the final product weld "bead". Refer to photos showing each step in this process. The two-man crew performing this operation has done this before many times on other projects and their experience showed. The bead looked very well formed and uniform, indicating excellent bonding of the two pipe ends.

B) **Issues concerning conformance to specifications and/or design:** After reviewing onsite work, I drove the entire pipe route. I noticed a segment from Vermont to Budlong in the "Del Amo" right-of-way that I did not recall reviewing, therefore, I plan to recheck that segment back at the office. Apparently this was a last-minute switch since another route proved infeasible. The alley to get to IW-1 is apparently owned by a new property owner and the entire reach was just repaved (bad timing to install a trench and pipeline). Lots of overhead power was observed which is an important safety issue to avoid these with drill rigs and backhoes.

C) **Issues concerning conformance to construction schedule:** None noted at this is very early on the project. The Contractor representatives noted, however, that "most afternoons" a stiff breeze would arise blowing from west (offshore) to the east. The impact of wind related delays on the project schedule should be assessed by the contractor and reported to EPA.

D) **Work activities scheduled for next week:** Site supervisor Kevin will call CH2M HILL to come out for an observation of the pressure test when the first full segment of HDPE is completed. Work next week will include setting of two boxes for the onsite extraction wells and the last two electrical pull boxes. They will also continue welding the HDPE mains for the main trench.

E) **Communications and discussion with PRP site representative:** Kevin is very experienced in doing remedial site construction supervision. Had worked on several previous large cleanup projects which should help with "look-ahead" on this project and be a great benefit.

- F) **Photographs: Took 31 photos on the site** (see Attachment)
- G) **Additional Miscellaneous Comments:** Reportedly the exposed main trench will receive an 8-inch HDPE (extraction) and a 4-inch HDPE main, along with other conduits including electrical (2) and controls (2). This exposed trench bisects almost the entire site and will therefore be open for quite some time, somewhat hindering movement around the site. Contractor had one trench crossing which allowed access through the middle of the site.

Supervisor Kevin asked if CH2M HILL would be setting up another wind monitoring station. I told him I would check on it.

(5)

Robert L. Carley, PE (Conveyance), CH2M HILL (for EPA)

April 12, 2013

SIGNATURE/TITLE

DATE