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NV

January 26, 2023

SUBMITTED VIA E-PERMITTING PORTAL

Mr. Nelson Velez, Environmental Specialist - Advanced
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: 2023 Monitoring Well Replacement Work Plan – Gallegos Canyon Unit #124E Site
El Paso CGP Company – Pit Groundwater Remediation Sites
NMOCD Incident Number: nAUTOAB000205

Dear Mr. Velez:

Stantec Consulting Services Inc. (Stantec), on behalf of El Paso CGP Company, LLC (EPCGP), is submitting the enclosed 2023 Monitoring Well Replacement Work Plan (Work Plan) for the Gallegos Canyon Unit #124E Site (Site). The enclosed document contains the proposed methodology for over-drilling and replacing monitoring well MW-1 at the Site. Unless otherwise noted, the procedures outlined in this Work Plan meet or exceed the requirements established in EPCGP's "Remediation Plan for Groundwater Encountered During Pit Closure Activities" document approved by the New Mexico Oil Conservation Division (NMOCD) on November 30, 1995. The scope of work contained herein is scheduled to begin the week of April 10, 2023.

Please contact Mr. Joseph Wiley of EPCGP at (713) 420-3475, or me if you have any questions or comments concerning the enclosed Work Plan.

Sincerely,

Stantec Consulting Services Inc.

A handwritten signature in blue ink, appearing to read "Stephen Varsa".

Stephen Varsa
Project Manager
Phone: (515) 251-1020
steve.varsa@stantec.com

/srv:imd

cc: Joseph Wiley, EPCGP (via electronic mail)
Steve Austin, Navajo Environmental Protection Agency



**2023 MONITORING WELL
REPLACEMENT WORK PLAN**

GALLEGOS CANYON UNIT #124E
SITE
NMOCD Incident #
nAUTOfAB000205
SAN JUAN COUNTY, NEW MEXICO

Prepared for:

El Paso CGP Company, LLC
1001 Louisiana
Houston, Texas 77002

Prepared by:

Stantec Consulting Services Inc.
11311 Aurora Avenue
Des Moines, Iowa 50322

January 26, 2023

2023 MONITORING WELL REPLACEMENT WORK PLAN
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO

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Figure 1 – Gallegos Canyon Unit #124E - Proposed Monitoring Well Location

**2023 MONITORING WELL REPLACEMENT WORK PLAN
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

SECTION 1 - INTRODUCTION

This Monitoring Well Replacement Work Plan (Work Plan) presents the scope of work to be completed to over-drill and replace one existing monitoring well at the former El Paso CGP Company, LLC (EPCGP) Gallegos Canyon Unit #124E remediation site (Site) located in the San Juan River Basin near Farmington, New Mexico. There are currently seven EPCGP monitoring wells (MW-1, and MW-3 through MW-8) at the Site. Light non-aqueous phase liquid (LNAPL) has historically been present in monitoring well MW-1 and has been removed via completion of several mobile dual-phase extraction (MDPE) events in 2017, and by manual LNAPL recovery activities. Due to the age of the monitoring well, replacement of it is planned in order to facilitate future monitoring efforts.

The purpose of this Work Plan is to provide the field methods and an implementation schedule for over-drilling and replacing existing monitoring well MW-1. Section 2 describes the Site and the purpose behind the proposed monitoring well replacement. Section 3 provides details on the field methods to be used. Section 4 presents the anticipated implementation schedule.

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GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

SECTION 2 - SCOPE OF WORK

The replacement monitoring well (designated MW-1R) is intended to facilitate future monitoring efforts and provide more representative groundwater samples from this location, and to move the Site toward regulatory closure. Details of the proposed replacement of monitoring well MW-1 are provided below.

There are currently seven monitoring wells (MW-1, and MW-3 through MW-8) at the Site. Monitoring well MW-1 will be over-drilled and replaced with monitoring well MW-1R.

The existing monitoring wells and proposed replacement monitoring well location are depicted on Figure 1.

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SECTION 3 - FIELD METHODS

The following subsections describe field procedures to be followed during the Site activities. Prior to conducting monitoring well installation activities, a permit for the monitoring well will be obtained from the Navajo Nation Department of Water Resources (DWR).

3.1 WELL OVER-DRILLING AND REPLACEMENT

Existing monitoring well MW-1 will be over-drilled and replaced. Activities will consist of first initiating NM811 notifications and completing underground utility and line locates, followed by clearing around the existing well pad with hand tools (i.e., shovel, post-hole digger, and hand-auger) to confirm no unmarked subsurface utilities or other obstructions are present prior to drilling activities. A truck-mounted, hollow-stem auger drill rig will be mobilized to the Site to remove the at-grade completion around MW-1 and over-drill and remove the existing well screen and casing. Once the existing well screen and casing are removed, augers will be advanced to a depth of 40 feet below ground surface (bgs) to facilitate installation of the replacement well, MW-1R. A Stantec field geologist will oversee the drilling activities. No soil sampling is proposed.

3.2 REPLACEMENT MONITORING WELL INSTALLATION

Replacement monitoring well MW-1R will be constructed of 4-inch-diameter, Schedule 40, 0.010-slot polyvinyl chloride (PVC) screen and 4-inch-diameter, Schedule 40 PVC riser casing. A 20-foot screen will be installed to the depth described in Figure 1, which is anticipated to intersect the groundwater surface (approximately 13 feet of well screen below the water table and approximately 7 feet of well screen above the water table) to provide sufficient water column for sample collection. The riser casing will extend from the top of the screen to approximately 0.5 foot below the ground surface. The annular space adjacent to the well screen will be filled with 10-20 silica sand from the bottom of the borehole to 2 feet above the top of the screen. Three (3) feet of hydrated bentonite chips will be placed above the silica sand to prevent downward migration of surface water. Bentonite grout will be placed above the bentonite chips to approximately 0.5 foot below the bottom of the well vault.

A bolt-down, traffic rated steel manhole, centered in an approximately 3-foot diameter concrete pad, will be installed at grade to protect MW-1R. Well development will be performed using a surge block and down-hole pump until sediment has been removed and visibly clear water is observed or until the well runs dry. Stantec will survey the location and elevation of the monitoring well upon completion of development. Assuming LNAPL is not encountered, the well will be fitted with a HydraSleeve™ no-purge groundwater sampling device. A zip tie will be used to secure the well.

3.3 GENERAL PROTOCOLS

This subsection presents a discussion of health and safety, documentation procedures, buried piping or utility identification, waste handling, and other procedures to be performed as part of the investigation.

**2023 MONITORING WELL REPLACEMENT WORK PLAN
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO****3.3.1 Health and Safety**

A Site-Specific Health and Safety Plan (HASP) will be prepared for groundwater monitoring, operations, maintenance, and drilling activities. The HASP includes guidance on the personal protective equipment (PPE) necessary for field activities, identified hazards associated with the field activities, and directions to the nearest medical facility. Flame-resistant clothing and Level D protective equipment will be worn, as required. A copy of the HASP will be on site at all times while work is being performed. The HASP will apply to Stantec employees, Stantec's subcontractors, and visitors at the Site.

3.3.2 Documentation Procedures

Data generated during the field investigation will be recorded on a well construction log. The well construction log will include the drilling method employed, and well screen, sand pack, wellbore seal, and surface completion details.

The field geologist will maintain a field logbook. At the end of each day of field activities, the notes will be dated and signed by the field geologist.

The daily field logbook will contain information such as:

- Date
- Name, location, and objective of the work activities
- Weather conditions
- Equipment calibration information
- Personnel and visitors on site
- Photograph numbers and descriptions (if applicable)
- Description of decontamination activities (if applicable)
- Any deviations from the Work Plan
- Other relevant observations as the fieldwork progresses
- Problems and corrective actions

3.3.3 Boring Locations and Utility Identification

Prior to any drilling or excavation, a call will be made to the New Mexico 811 "One Call" to verify utility clearance and to notify the operator. "One Call" will be notified that the drilling location is staked or flagged and that the entire Site and areas surrounding the drilling location should be marked. The clearance call must be made at least two working days prior to drilling, and site work must be completed within fifteen days of the clearance. In addition, access will be coordinated with the current operator of the Site prior to any drilling activities to allow location of any underground infrastructure and to comply with operator safety guidance.

3.3.4 Equipment Decontamination

Prior to drilling, down-hole equipment will be steam cleaned or scrubbed with a non-phosphate detergent (e.g., Liquinox®). Where feasible, equipment to be decontaminated will be disassembled to permit adequate cleaning of the internal

**2023 MONITORING WELL REPLACEMENT WORK PLAN
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

portions of the equipment. Equipment to be steam cleaned will be placed into a self-contained decontamination trailer with metal cleaning racks that support the equipment for cleaning, rinsing, and air drying. Heavy waterproof gloves will be worn during steam cleaning to protect against skin contact with steam and potential contaminants.

3.3.5 Investigation-Derived Waste

Soil cuttings generated from over-drilling activities will be containerized in labeled 55-gallon drums and staged on site for removal by a contracted transport and disposal company.

Decontamination and purge water generated through the development of the replacement monitoring well will be containerized in labeled 55-gallon drums and staged on site for removal with the soil cuttings.

Other investigation-derived wastes (i.e., excess well materials, bags, buckets, gloves), and debris, will be removed from the Site by the waste hauler for disposal as general construction/demolition debris.

Disposable equipment and PPE waste generated during field activities, including scrap PVC, concrete, steel, rope, disposable bailers, nitrile gloves, and Tyvek® suits, will be disposed of in standard industrial dumpsters. In the event the waste is grossly contaminated, it will be containerized for proper disposal along with the other investigation-derived waste.

3.3.6 Field Equipment Calibration Procedures

With regard to organic vapor meters, field personnel will use a 10.6 electron volt (eV) PID for measuring ambient air in worker breathing zones during over-drilling and advancement of the replacement well. This instrument will be calibrated prior to use according to the manufacturer's specifications. The instrument calibration will be checked at the beginning of each day of use and any time meter drift is suspected. Calibration information will be recorded in the field logbook.

**2023 MONITORING WELL REPLACEMENT WORK PLAN
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

SECTION 4 - SCHEDULE

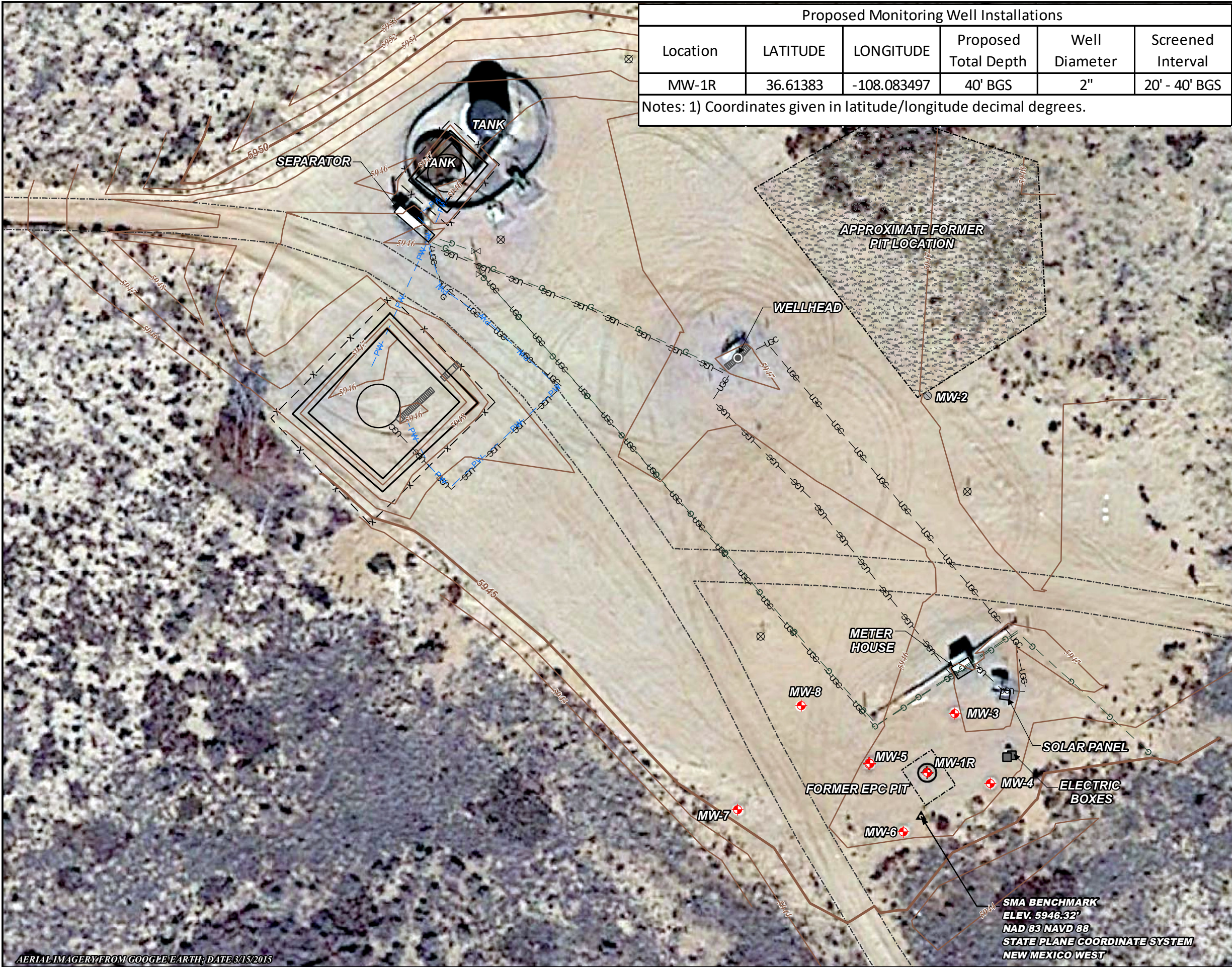
It is anticipated that well replacement activities will commence the week of April 10, 2023. Utility locates must be verified prior to the work. Assuming LNAPL is not encountered; following development, a HydraSleeve™ no-purge groundwater sampler and tether will be placed in the new well to prepare the well for groundwater sample collection. The replacement well will be sampled on at least a semi-annual basis, with the first sampling event expected to occur in May 2023.

The well replacement activities, well construction log, and groundwater analytical results will be documented in the 2023 Annual Report, anticipated to be submitted by April 1, 2024.

FIGURE



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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 180013

CONDITIONS

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID: 7046
	Action Number: 180013
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. Incident on tribal land.	5/19/2023