APPROVED
By Nelson Velez at 8:56 am, Apr 27, 2022

Review of Remedial Work Plan: **Content satisfactory**

1. Proposed remedial action per Section 3.0 of this report is approved.

2. Provide or complete the following;
   a. pre-start up sampling per Section 4.6
   b. date of AS & SVE system start up per Section 4.7
   c. documentation of O & M activities per Section 5.0 and 5.1
   d. sampling schedule per Section 5.2
   e. date of any waste generated and disposed of off-site per Section 5.4
   f. reporting schedule per Section 6.1
   g. notifications to OCD per Section 7.0

3. Submit to the OCD the information noted above within the next Annual Groundwater Report due no later than March 31, 2023.

Stantec

Remedial Work Plan

Knight #1
NMOCD Incident No: nAUTOfAB000324

April 12, 2022

Prepared for:

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

Prepared by:

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Des Moines, Iowa 50322

Table of Contents

LIST OF FIGURES

APPENDICES

Abbreviations

AS	Air Sparge
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
catox	Catalytic Oxidizer
FEUS	Farmington Electric Utility Services
GAC	Granular Activated Carbon
GFCI	Ground Fault Circuit Interrupter
HDPE	High Density Polyethylene
Hp	Horsepower
LNAPL	Light Non-Aqueous Phase Liquids
MDPE	Mobile Dual-Phase Extraction
NMOCD	New Mexico Oil Conservation Division
NMOSE	New Mexico Office of the State Engineer
NMWQCC	New Mexico Water Quality Control Commission
PLC	Programmable Logic Controller
SVE	Soil Vapor Extraction
UIC	Underground Injection Control

1.0 INTRODUCTION

This Remediation Work Plan (Work Plan) has been prepared on behalf of El Paso CGP Company, LLC (EPCGP), for the Knight #1 pit site (Site) for the installation and operation of a soil vapor extraction (SVE) and air sparge (AS) system at the Site.

The Site is currently regulated by the New Mexico Oil Conservation Division (NMOCD) and is located on Private/Fee land owned by R. McGee Ranches, Ltd. (McGee). The site location is shown on Figure 1, and the site plan is shown on Figure 2.

2.0 SITE HISTORY AND CONCEPTUAL MODEL

2.1 SITE HISTORY

A natural gas well was completed at the Site on March 30, 1960 and began operation in April 1960. The Site was formerly operated by Fuller Production, Inc. and is no longer active. The wellhead was plugged and abandoned in August 2006, and the surface infrastructure was subsequently removed.

An initial site assessment of the EPCGP dehydrator pit was completed in January 1995, and an excavation of 60 cubic yards (cy), to a depth of approximately 12 feet below ground surface (bgs), was completed in January 1995. An oxygen release compound (ORC) injection was completed in November 1996. Monitoring wells were installed in 1995 (MW-1 through MW-4), 2000 (MW-5), and 2015 (MW-6 through MW-13). A soil assessment was completed in 2016 (GP-1 through GP-24). Two additional monitoring wells (MW-14 and MW-15), one soil vapor extraction (SVE) test well (SVE-1), and two air sparge (AS) test wells (AS-1 and AS-2) were installed in April 2018. AS and SVE feasibility testing was conducted in May 2018. Fourteen additional AS wells (AS-3 through AS-16) and seven additional SVE wells (SVE-2 through SVE-10) were installed in September 2019. In November 2020, AS and SVE piping and associated infrastructure were installed at the Site.

2.2 SITE CONCEPTUAL MODEL

2.2.1 Release History

An unlined dehydrator pit was used at the Site during site production activities until January 1995, and an unknown quantity of hydrocarbons was released (NMOCD Incident Number AUTOfAB000324).

Dugan Petroleum is the responsibility party for a second release (NMOCD Incident Number nAUTOfAB000325) from a fiberglass storage tank that was located near monitoring well MW-2. The NMOCD issued a No Further Action letter for the Dugan Petroleum release on October 20, 1999.

2.2.2 Geology

Based on the previous site investigation activities, the site geology consists of clay, silt, and sand to depth ranging from 20 to 24 feet bgs, underlain by sand and gravel to a depth of approximately 44 feet bgs. Sandstone bedrock is encountered at 44 feet bgs.

2.2.3 Hydrogeology

Depth to groundwater across the Site averages approximately 25 feet bgs. Historically, the depth to groundwater has ranged from approximately 17 to 29 feet bgs. Groundwater flow across the Site is generally to the south-southwest.

2.2.4 Extent of Hydrocarbons in Soil and Groundwater

The extent of hydrocarbons in soil that exceed NMOCD Soil criteria have been adequately delineated, as depicted on Figure 3. Based on the results of soil sampling, soil hydrocarbons are present at depths of 11 to 25 feet bgs.

The extent of hydrocarbons in groundwater that exceed applicable New Mexico Water Quality Control Commission (NMWQCC) have also been adequately delineated, as depicted on Figure 4. Based on the results of previously completed site investigation activities, hydrocarbons do not extend into the sandstone underlying the sand and gravel unit.

2.2.5 Light Non-Aqueous Phase Liquids

Historically, light non-aqueous phase liquid (LNAPL) has been observed in monitoring wells MW-1, MW-3, MW-4, MW-11, MW-12, and MW-13. In 2021, measurable LNAPL was present in monitoring wells MW-4 and MW-12. Most recently, in March 2022, measurable LNAPL was present only in monitoring well MW-12.

2.2.6 Past Remedial Activities

Past remedial activities at the Site include the excavation and removal of approximately 60 cy in January 1995 as part of pit closure activities, an ORC injection in November 1996, and mobile dual-phase extraction (MDPE) events from monitoring wells MW-4, MW-11, and MW-12 in July 2017. Manual LNAPL recovery events continue to be conducted at the site on a quarterly basis.

3.0 PROPOSED REMEDIAL ACTION

The proposed remedial strategy consists of SVE and AS to remediate hydrocarbons in soil and groundwater, in addition to LNAPL. An SVE blower is used to provide a negative pressure (vacuum) to wells installed in the vadose zone, removing hydrocarbons in the vapor phase, and encouraging volatilization of remaining hydrocarbons in soil and smeared LNAPL by increasing vapor pressure. Simultaneously, air sparging consists of injecting compressed air into the saturated zone to increase volatilization of LNAPL and dissolved hydrocarbons and promote biodegradation of hydrocarbons in both the saturated and vadose zone by increasing the amount of oxygen in the subsurface.

Onsite work will be completed in compliance with the access agreement established with the property owner and pursuant to the Site health and safety plan.

4.0 REMEDIAL SYSTEM DESIGN AND INSTALLATION

AS and SVE feasibility testing was performed at the Site in 2018. The findings, reported in the 2018 annual groundwater report, indicated AS and SVE should be effective as a remediation technology for hydrocarbon impacts at the Site. The AS and SVE feasibility testing, in addition to data collected during the 2017 MDPE events, also yielded data used in completing the system design. An effective design radius of 25 feet for SVE, and 20 feet for AS, was determined from the testing, and was utilized when designing the system, as depicted on Figures 3 and 4, respectively.

4.1 PERMITTING

The need for the following permits has been evaluated prior to completing applicable remediation activities at the Site.

4.1.1 Building Permit

Based on discussions with the San Juan County Community Development Department, building permits are not required for the installation of oilfield-related equipment, including remediation systems.

4.1.2 Well Installation Permit

Prior to installation of the site remediation wells, well permits were obtained from the New Mexico Office of the State Engineer (NMOSE).

4.1.3 Pollution Recovery Permit

Based on discussions with the NMOSE, an amendment for pollution recovery to the existing well permit for Point of Division (POD) 18 (well SVE-1) will be obtained for any liquids recovered by the SVE system. The NMOSE permit amendment will be obtained prior to system start-up.

4.1.4 Discharge Permit

An evaluation of potential emissions from the proposed SVE system and need for permitting through the New Mexico Environmental Department has been completed, and it was determined neither Title V air permitting, nor a New Mexico notice of intent for the system, is required (Appendix A).

4.1.5 Underground Injection Control Permit

Based on previous discussions with the NMOCD regarding the need for an Underground Injection Control (UIC) Permit for sparged air, a UIC Permit is not required (Appendix B).

4.2 PREVIOUSLY COMPLETED REMEDIAL SYSTEM INSTALLATION ACTIVITIES

Based on the results of the AS and SVE feasibility testing, installation of the AS and SVE wells, and installation of remediation system piping and earthwork activities were completed in 2020 and 2021.

4.2.1 AS and SVE Well Installation

A total of fourteen additional AS wells and seven additional SVE wells were installed in September 2019 to facilitate adequate remediation of the subsurface. The final layout of the 8 SVE wells, 16 AS wells, and other features are shown on Figure 2. The AS and SVE scope of work was detailed in the August 27, 2019, Remedial Wells Installation Activities Work Plan, and details of the installation of the AS and SVE wells was documented in the 2019 Annual Report for the Site, both previously submitted to the NMOCD.

4.2.2 AS/SVE Piping Installation and Earthwork

In November 2020, high density polyethylene (HDPE) piping was connected to each AS and SVE well and installed in shallow trenches between the AS and SVE wells and a gallery location to the south, as shown in Figure 2. A gravel pad was installed on the southern portion of the Site, to stage the remediation equipment. A HDPE culvert was installed along with other drainage improvements, and perimeter fencing and gates were also established. The piping installation scope of work was detailed in the November 4, 2020, AS and SVE Piping Installation Work Plan, and details of the installation of the piping and earthwork activities were documented in the 2020 Annual Report for the Site, both previously submitted to the NMOCD.

4.3 AS AND SVE REMEDIATION EQUIPMENT

A trailer-mounted remediation system, owned by EPCGP and previously used at an out-of-state location, has been sourced for use at the Site. The system includes a 25 horsepower (hp) Sutorbilt positive displacement vacuum blower, a 25 hp Rietshle DLR air compressor, and an 80-gallon air/water separator tank with a Myers transfer pump. The operation of these components is controlled and monitored by actuated three-way valves, Dwyer vacuum gauges, Dwyer pressure gauges, Erdco flowmeters, Kunkle pressure relief valves, a 3-float level switch, and a programmable logic controller (PLC). The specifications of the equipment have been reviewed and are adequate based on

the observed geology and feasibility testing results. Equipment modifications will be completed prior to arrival at the Site allowing the system to cycle subsets of laterals between an open and closed (on and off) position.

Separately, an EPCGP owned FALCO 300 catalytic oxidizer (catox) will be used at the site for destruction of recovered vapor phase hydrocarbons (Appendix 2). Once operating, the oxidizer preheats the catalyst with SVE effluent vapors and achieves destruction efficiencies greater than 99%. This oxidizer may be removed or replaced with granular activated carbon (GAC) when hydrocarbon concentrations in SVE emissions fall below practical operational thresholds.

An exterior double-walled storage tank will also be placed next to the system to allow for any recovered liquids to the removed for off-site disposal.

4.4 POWER SOURCE

Electrical power for the remediation system will be provided by Farmington Electric Utility Services (FEUS) with a three-phase line extension from the existing infrastructure west of the Site. FEUS has finalized a utility easement with the property owner to bring electrical service to the Site. A service pole will also be installed next to the equipment pad, and the major connections between electrical components will be made by an electrician licensed with the State of New Mexico. The system includes ground fault circuit interrupters (GFCI), where applicable.

Following completion, an Arc Flash survey will also be completed prior to energizing the system.

4.5 AS AND SVE REMEDIATION EQUIPMENT INSTALLATION

Following completion of the electrical service construction, the remediation trailer will be delivered to the Site and will be placed by crane in the equipment pad location designated on Figure 2, leveled, and inspected for damaged or loose equipment, valves, and piping. An irrigation line located along the access road to the Site will either be protected during the crossing or will be temporarily removed and replaced during installation (Figure 5). Following the placement of the trailer, the 16 AS and 8 SVE laterals will be attached to the trailer using a combination of flexible tubing, HDPE heat fusion, and galvanized steel or camlock fittings. The catox will be installed on the effluent side of the SVE blower, downstream of the moisture knockout tank, according to manufacturer's instructions. The FALCO Vapor Control Valve (VCV) will actuate the incoming vapors and will add dilution air as necessary to regulate catalyst temperature and ensure destruction efficiencies.

4.6 PRE-STARTUP SAMPLING

Prior to start-up of the AS/SVE system, Stantec will gauge and sample the 15 site monitoring wells, sampling each well that does not contain LNAPL to confirm baseline conditions prior to initiating remediation activities. The collected groundwater samples will be submitted for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8260. One trip blank and one field duplicate sample will also be collected. If groundwater sampling of the site wells is completed by November 2022, the results of the November 2021 groundwater sampling event will be considered representative of baseline conditions, and additional monitoring well sampling immediately prior to system start-up may not be conducted.

The three water wells on the McGee property, previously sampled in November 2018, will also be sampled prior to system start-up. The collected samples, in addition to a trip blank and one field duplicate sample, will be also analyzed for BTEX constituents using EPA Method 8260.

4.7 EQUIPMENT STARTUP AND TEST-OUT

Once the system is assembled and visually inspected, each piece of equipment will be tested for proper operation. This will, at a minimum, include:

- Control panel
- AS Compressor
- SVE Blower
- Valves
- Sample ports
- Flowmeters
- Pressure indicators
- Water knockout tank
- Water transfer pump
- High water alarm
- High-high water alarm
- FALCO 300 oxidizer

During equipment initial startup and testing EPCGP, Stantec, Stantec's operation and maintenance (O&M) subcontractor, and a representative from the company who most recently used the remediation equipment for EPCGP will be onsite. The following will be checked as part of start-up and shake-down activities:

- System startup
- Meter readings
- System shutdown

- Telemetry connections and remote responses
- Alarm states, interpretation, troubleshooting, and resetting
- Vapor sampling from sample ports
- Knockout water transfer and removal

The soil vapor extraction vacuum will be increased in a step-wise manner to evaluate system response and performance, as will the air sparge system. Following completion of the initial start-up activities, Summa canister samples will be collected prior to and after the catox unit to confirm its performance and complete air emission calculations. The samples will be submitted for analysis of BTEX using Method TO-3, and Total Petroleum Hydrocarbons (TPH) using Method TO-15.

5.0 OPERATION AND MAINTENANCE

Operation of the system may be varied to optimize hydrocarbon remediation and recovery. Initially, when vapor concentrations are high, the system will operate continuously. After concentrations begin to drop, whether observed by sampling or by increased use of electricity to preheat the oxidizer catalyst, various pulsing patterns may be implemented in AS/SVE laterals to target different areas and allow vapor concentrations in the subsurface to rise prior to removal. Cycling the laterals also has the added benefit of displacing and mixing the groundwater to reset air channels and encourage diffusion.

5.1 ON-SITE O&M

Operation and Maintenance (O&M) of the system will be completed by qualified Stantec and O&M subcontractor individuals. On-site staff will be 40-hour HAZWOPER certified and have completed appropriate EPCGP safety training.

The following will be serviced according to manufacturer's specification:

- AS Compressor
- SVE Blower
- Actuated valves
- Catalytic oxidizer

Other system components will be inspected regularly and serviced or replaced, as necessary.

O&M visits will occur monthly. O&M activities will be documented on O&M forms for O&M history documentation and summarization in annual reports. Site visits to address system alarm states may occur as frequently as weekly or more. These forms will document:

- Time and personnel on-site
- System condition (including any alarm states) and issues observed
- Actions taken to address issues
- Flow rates and air pressures/vacuums
- SVE system monitoring with a calibrated photoionization detector (PID) and 4-gas meter
- Any routine maintenance completed
- Any wastewater removed from the Site
- Any sample collection activities
- Any well gauging and monitoring information
- Change in site conditions
- Electrical meter usage

- Securing system prior to departure

5.2 SAMPLING

Semi-annual groundwater sampling will be competed to evaluate system operational performance and overall remediation progress at the site.

5.2.1 SVE system sampling

On a calendar quarterly basis, an influent summa sample will be collected by Stantec prior to any dilution air and the catox unit, and an effluent sample collected after the catox unit. The summa samples are being collected to evaluate recovery and emission rates, and catox performance. The summa samples will be submitted to Eurofins for analysis of BTEX using EPA Method TO-3, and TPH using EPA Method TO-15.

5.2.2 Groundwater Sampling

On a calendar quarter basis, Stantec will conduct site-wide groundwater monitoring well gauging, vacuum influence monitoring, and dissolved oxygen monitoring. More frequent monitoring

On a semi-annual basis, groundwater samples will be collected from selected monitoring wells where baseline groundwater sample results indicate concentrations exceed applicable NMWQCC standards, or where LNAPL was present. The collected groundwater samples, in addition to one trip blank and one duplicate sample, will be submitted to Eurofins for analysis of BTEX constituents using EPA Method 8260.

Groundwater sampling from the 15 site monitoring wells will be conducted within six months following remediation system start-up, and annually thereafter. The collected groundwater samples, in addition to one trip blank and one duplicate sample, will be submitted to Eurofins for analysis of BTEX constituents using EPA Method 8260.

5.2.3 McGee Water Well Sampling

Groundwater sampling of the three McGee water wells will be conducted immediately prior to system startup, then within six months following remediation system start-up, and annually thereafter. The collected groundwater samples, in addition to one trip blank and one duplicate sample, will be submitted to Eurofins for analysis of BTEX constituents using EPA Method 8260.

5.2.4 Post Remediation Sampling

Quarterly site-wide groundwater monitoring and sampling will be completed from the site monitoring wells for at least 4 calendar quarters following system shutdown to confirm

groundwater meets NMWQCC standards, pursuant to the *Remediation Plan for Groundwater Encountered During Pit Closure Activities*" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). The collected groundwater samples, in addition to one trip blank and one duplicate sample, will be submitted to Eurofins for analysis of BTEX constituents using EPA Method 8260.

Given the depth of the hydrocarbons at the Site and the primary goal of achieving NMWQCC standards at the Site, post remediation soil sampling is not proposed.

5.3 REMOTE MONITORING

Besides on-site observations, system status monitoring will be achieved remotely with callouts from the PLC, located on the control panel. Responses to alarms that result in the system remaining shut down will be conducted within 48 hours of notification, when possible. Paged alarm messages may include:

- Phase fault
- A/W separator high alarm
- Low vacuum
- High vacuum
- Heat exchanger high temp
- Heat exchanger high pressure
- Infiltration gallery high level
- Oxidizer fault

Response to alarms will be completed by Stantec's O&M subcontractor, or by qualified Stantec personnel.

5.4 WASTE MANAGEMENT

Water generated from the moisture knockout tank will be containerized and transported to Basin Disposal in Bloomfield New Mexico (Basin) for disposal. New Mexico form C-138, pre-signed by EPCGP, will be provided to the waste hauler prior to wastewater removal and disposal.

Other O&M derived wastes (i.e., spent filters, gloves, buckets, etc.) will be containerized and removed from the Site by the O&M contractor for disposal as commercial wastes.

6.0 REPORTING

Periodic monitoring will be completed to document site activities and progress, and to comply with NMOSE permit requirements.

6.1 ANNUAL REPORTING

Documentation of system installation, start-up and shake down, and operation, maintenance and monitoring activities will be included in the annual report for the Site. The documentation will include updated data tables and a site plan, the approximate duration of AS and SVE system operation during the reporting period, estimated amount of hydrocarbons removed from the SVE system during the reporting period, groundwater, private well, and air emissions laboratory reports, system installation photo-documentation, waste disposal documentation, and NMOCD notification documentation. The report will also summarize, in aggregate, system downtime and any major issues encountered during installation or operation, or modifications to the activities proposed in the O&M work plan.

Each annual report will be submitted by April 1 for the preceding calendar year.

6.2 WATER METER REPORTING

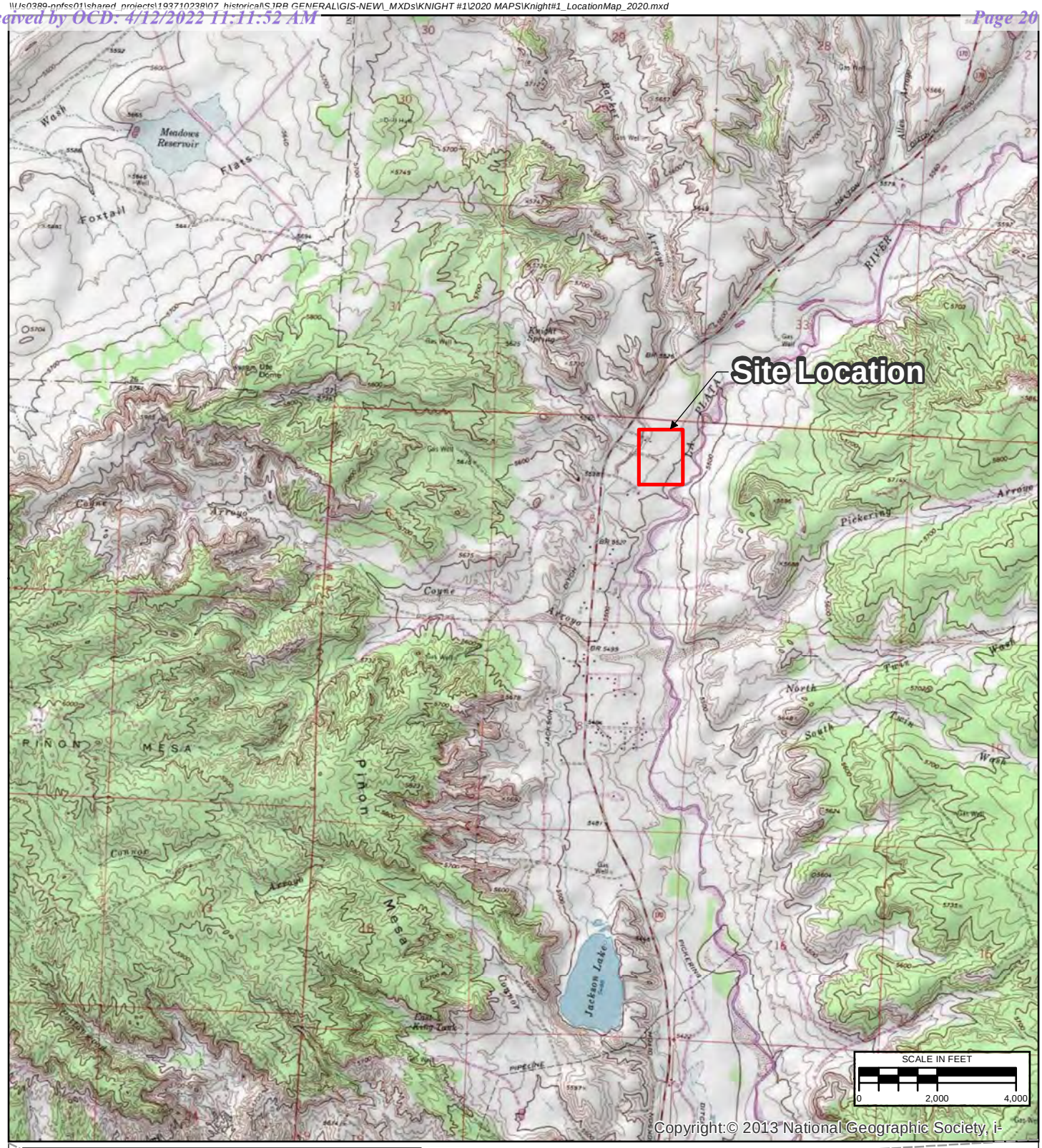
Pursuant to the NMOSE Pollution Recovery Amendment to POD 12, quarterly water meter reports will be prepared for submittal to the NMOSE by the last day of the month following the 3-month reporting period. The water meter reports will be prepared and submitted while the system remains in operation.

7.0 INSTALLATION AND O&M SCHEDULE

Equipment installation is contingent on the timing of the electric utility line extension, availability of parts to complete the AS/SVE remedial trailer upgrades and modifications, and availability of contractors to complete the system installation and start-up activities. It is expected that the line extension, equipment installation, system start-up and shakedown, and initiation of O&M will occur in 2022. The system is expected to operate for approximately 3 to 5 years before NMWQCC standards are achieved.

EPCGP proposes to notify NMOCD at least 48 hours before the date of the planned arrival of the remediation system equipment and setup, system startup (if significantly delayed following system installation), quarterly O&M and sampling events, upon recommendation of system shutdown and closure monitoring, and post-remediation sampling events.

FIGURES



N

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/17/2021	SAH	SAH	SRV

TITLE
SITE LOCATION

Stantec

PROJECT
KNIGHT #1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

FIGURE
1

\\Us0389-ppfss01\shared_projects\193710238\07_historical\SJRB GENERAL\GIS-NEW_MXDs\KNIGHT #1\2020 MAPS\Remediation System Figures\Knight#1_SVE_2020_Site Layout_WP_V2.mxd

LEGEND

- ACCESS ROAD
- FENCE
- GATE
- GAS LINE
- UNKNOWN LINE
- FORMER WELLHEAD
- MONITORING WELL
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- SMA BENCHMARK
- EARTHEN BERM
- CULVERT
- SWALE
- MULTIPLE BURIED CONDUIT
- SINGLE BURIED CONDUIT

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
B	3/10/2021	SAH	SAH	SRV

TITLE:

SITE PLAN

PROJECT:

KNIGHT #1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.:

2

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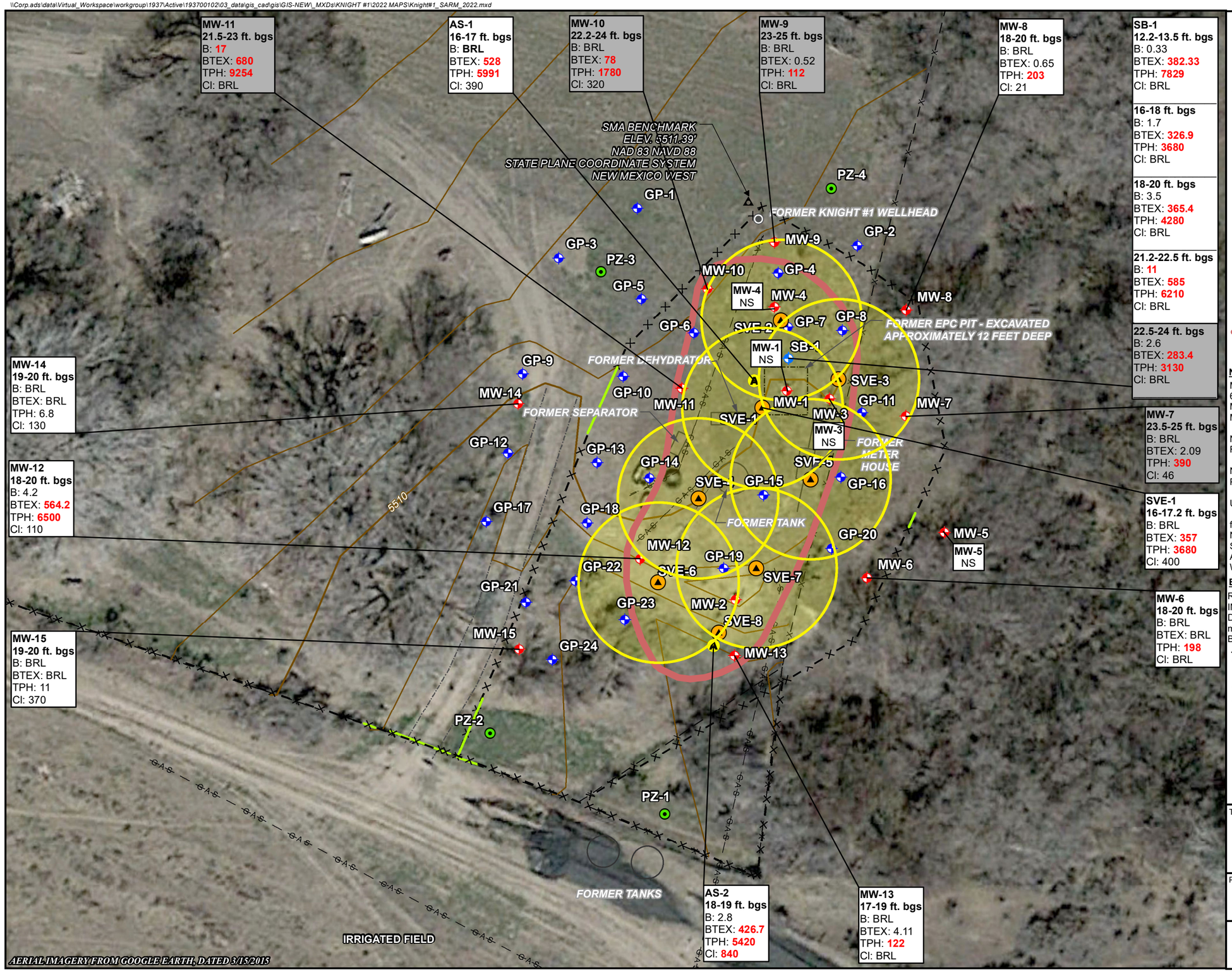

LEGEND:

- 5509 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FENCE
- GAS LINE
- FORMER WELLHEAD
- MONITORING WELL
- SOIL BORING
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- SMA BENCHMARK
- FORMER PIEZOMETER
- APPROX. 500 mg/kg TPH CONTOUR
- FORMER PIEZOMETER

NOTES:

MW-13 SOIL SAMPLES COLLECTED 6/23/15; MW-7 AND MW-8 6/24/15; MW-6 AND MW-10 6/25/15; MW-9 AND MW-11 6/26/15; MW-12 AND SB-1 6/27/15; SVE-1 3/22/18; AS-1 AND AS-2 3/23/18; MW-14 AND MW-15 3/26/18.

NO SOIL SAMPLES FROM THE 2016 GP BORINGS WERE RETAINED FOR LABORATORY ANALYSIS.

NO SOIL SAMPLES WERE COLLECTED FROM THE PIEZOMETER LOCATIONS.

UTILITY LOCATIONS ARE APPROXIMATE.

ft. bgs = FEET BELOW GROUND SURFACE
NS = NOT SAMPLED
SHADED RESULTS INDICATE SOIL SAMPLE INTERVAL APPEARS TO BE SUBMERGED BASED ON AVAILABLE STATIC WATER LEVEL GAUGING DATA.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE**/RED TYPE INDICATE CONCENTRATION IN EXCESS OF APPLICABLE NEW MEXICO OIL CONSERVATION DIVISION SOIL CRITERIA FOR THAT ANALYTE.
mg/kg = MILLIGRAM/KILOGRAM
BRL = BELOW REPORTING LIMITS

ANALYTE	NMOCD STANDARDS
B = Benzene	10 mg/kg
BTEX = Benzene, toluene, ethylbenzene, xylenes	50 mg/kg
TPH = Total Petroleum Hydrocarbons	100 mg/kg
Cl = Chloride	600 mg/kg

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	2022-04-11	SLG	SLG	SRV

TITLE:

SOIL CONCENTRATIONS AND SVE LAYOUT

PROJECT:

KNIGHT #1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **3**

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SMA BENCHMARK
ELEV. 5511.39'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

FORMER KNIGHT #1 WELLHEAD

MW-10
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-9
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-8
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-11
B: 18
T: <1.0
E: 10
X: 22

MW-4
NS

MW-1
B: 100
T: <1.0
E: 31
X: 11

DUP-01
B: 110
T: <1.0
E: 39
X: 14

FORMER EPC PIT - EXCAVATED APPROXIMATELY 12 FEET DEEP

FORMER DEHYDRATOR

MW-14
B: <1.0
T: <1.0
E: <1.0
X: <10

FORMER SEPARATOR

MW-3
B: 120
T: <1.0
E: 38
X: <10

MW-7
B: <1.0
T: <1.0
E: <1.0
X: <10

FORMER METER HOUSE

FORMER TANK

MW-5
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-12
NS

MW-6
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-2
B: 28
T: <1.0
E: 2.4
X: 20

MW-15
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-13
B: <1.0
T: <1.0
E: <1.0
X: <10

FORMER TANKS

IRRIGATED FIELD

AERIAL IMAGERY FROM GOOGLE EARTH, DATED 4/6/2019

LEGEND:

- APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FENCE
- GAS LINE
- FORMER WELLHEAD
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- AIR SPARGE WELL
- SOIL VAPOR EXTRACTION WELL
- SMA BENCHMARK
- APPROXIMATE 10µg/L BENZENE CONTOUR
- 20-FOOT RADIUS OF INFLUENCE

NOTES:

DUP = FIELD DUPLICATE SAMPLE
NO SAMPLING WAS COMPLETED FROM THE SVE OR AIR SPARGE WELLS
LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE/RED** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
NS = NOT SAMPLED
µg/L = MICROGRAMS PER LITER
<1 = BELOW REPORTING LIMIT

ANALYTE	NMWQCC STANDARDS
B = Benzene	10 µg/L
T = Toluene	750 µg/L
E = Ethylbenzene	750 µg/L
X = Total Xylenes	620 µg/L

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	2022-03-21	SAH	SAH	SRV

TITLE:

November 2021 Groundwater Concentrations and AS Well Layout

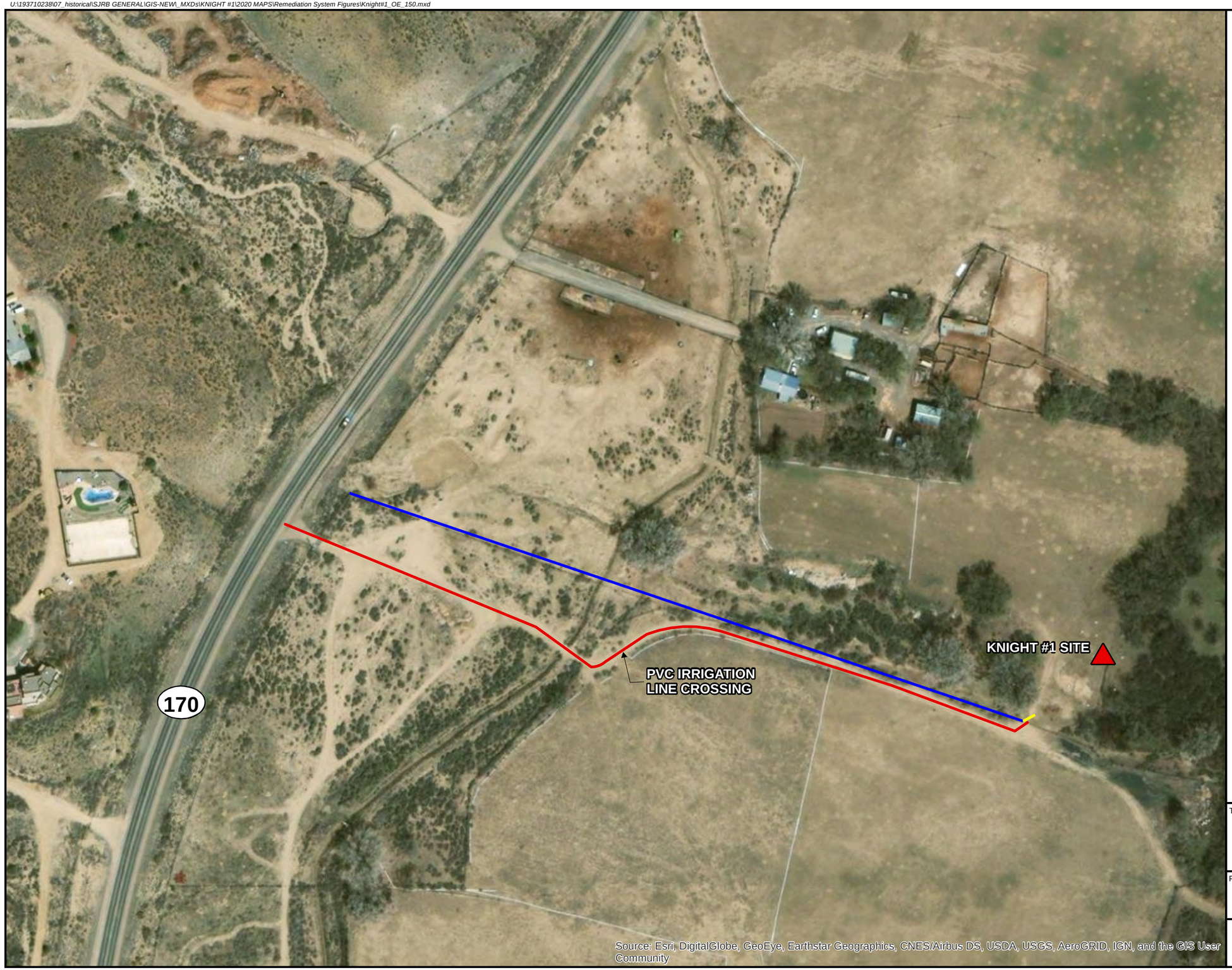
PROJECT:

KNIGHT #1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **4**

U:\19371023801\07_historical\SJRB GENERAL\GIS-NEW_MXDs\KNIGHT #1\2020 MAPS\Remediation System Figures\Knight#1_OE_150.mxd



LEGEND

- SITE ACCESS
- PLANNED UTILITY EXTENSION PATH
- ELECTRIC UTILITY DROP

N

SCALE IN FEET

0 100 200

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	9/15/2020	SLG	SLG	SRV

TITLE:

Electrical Service and Site Access Route

PROJECT:

KNIGHT #1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.:

5

APPENDIX A
AIR EMISSIONS EVALUATION

Note to File:

Knight Air Emissions

Applicable New Mexico Administrative Code:
TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 73 NOTICE OF INTENT AND EMISSIONS INVENTORY REQUIREMENTS

In preparation for remedial activities at the Knight Site, Stantec reviewed the potential air emissions and regulatory requirements.

According to the New Mexico code, NMAC 20.2.73.200 A(1), the criteria for submitting a notice of intent to the State of New Mexico is a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead. Regulated air pollutants include the six criteria pollutants [particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), ozone (O_3), lead (Pb)] and hazardous air pollutants (HAPs). Under the EPA Title V emissions permitting, permitting is required for sources with total potential HAP emissions of 25 tpy or potential emissions of any single HAP of 10 tpy.

The potential emissions from the remedial system at the site are calculated using the SVE test results from May 5th, 2018 and SVE system design parameters. A vapor sample was collected during the SVE test and analyzed for TPH, benzene, toluene, ethylbenzene, and xylene. Benzene, toluene, ethylbenzene, and xylene are all HAPS. The term TPH is given to a large family of several hundred compounds, including some that are considered HAPs.

To identify the portion of the TPH mass that is potentially made up of HAPs, the EPA's repository of speciation profiles of air pollution sources was reviewed (SPECIATE version 5.1). Although the residual contamination on site may not directly correlate, using the EPA SPECIATE database, an estimate of percent HAPs by weight was made for gasoline range organics (GRO). The TPH results, shown in Attachment A, are the maximum potential total HAP emissions for the remedial system, 21.3 tpy. The xylene emissions are the maximum individual HAP emissions, 5.5 tpy.

Based on the potential to emit HAPs (Attachment 1), neither Title V permitting, nor a New Mexico notice of intent is required for this system.

The complete NMAC 20.2.73 text is included as Attachment 2 for reference.

ATTACHMENT 1

Knight Air Emissions

Potential Mass Removal Emission Rates

Assumptions:

SVE system includes 8 wells operating at 20 scfm each.

Operation assumed to be 12 hours/day for 365 days/year.

Emission rates shown are based on the SVE step test conducted at SVE well SVE-1 on May 5th, 2018. This test was targeting the most contaminated area of the site.

The percent HAP for GRO is based on the percent by weight for the HAP compounds identified in the speciation of gasoline as found in the EPA SPECIATE profile for gasoline. MTBE will not be found at this Knight site, however, it is conservatively included because it is a known HAP and other HAPs that are not accounted for may be present.

The TPH HAP emissions are equal to the total HAP emissions; the maximum individual HAP expected is xylene, based on site data.

* TPH calculation uses the GRO vapor data form the site, but assumes the speciation of GRO is the same as gasoline.

Flow Rate	Emission Rate	Mass Removal				HAP Emissions	
(scfm)	(mg/m^3)	(lbs/hr)	(lbs/day)	(tons/yr)	% HAP	(tons/yr)	Comments
160	55000	33.0	396	72.2	29.5	21.3	TPH as GRO (includes BTEX)*
160	26	0.016	0.187	0.0341	100	0.03	Benzene
160	10	0.00599	0.0719	0.0131	100	0.01	Toluene
160	450	0.270	3.24	0.591	100	0.59	Ethylbenzene
160	4200	2.52	30.2	5.51	100	5.51	Xylene

Notes:

GRO = Gasoline range organics

lbs/day = Pounds per day

lbs/hr = Pounds per hour

mg/m^3 = Milligrams per cubic meter

scfm = Standard cubic feet per minute

tons/yr = Tons per year

TPH = Total petroleum hydrocarbons

wt % = Percent by weight

HAPs in Gasoline at >0.1%	wt %
2,2,4-trimethylpentane	3.46
benzene	0.753
toluene	5.95
ethylbenzene	1.28
m- & p-xylene	5.05
o-xylene	1.97
naphthalene	0.104
MTBE	10.9
Total	29.5

ATTACHMENT 2

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 73 NOTICE OF INTENT AND EMISSIONS INVENTORY REQUIREMENTS

20.2.73.1 ISSUING AGENCY: Environmental Improvement Board.
[11/30/95; 20.2.73.1 NMAC - Rn, 20 NMAC 2.73.100 02/18/02]

20.2.73.2 SCOPE: All persons who own or operate a source or who intend to construct or modify a source.
[11/30/95; 20.2.73.2 NMAC - Rn, 20 NMAC 2.73.101 02/18/02]

20.2.73.3 STATUTORY AUTHORITY: Environmental Improvement Act, NMSA 1978, Section 74-1-8(A)(4), and Air Quality Control Act, NMSA 1978, Sections 74-2-1 et seq., including specifically, Section 74-2-7(A)(1) and (B).
[11/30/95; 20.2.73.3 NMAC - Rn, 20 NMAC 2.73.102 02/18/02]

20.2.73.4 DURATION: Permanent.
[11/30/95; 20.2.73.4 NMAC - Rn, 20 NMAC 2.73.103 02/18/02]

20.2.73.5 EFFECTIVE DATE: November 30, 1995 except where a later date is cited at the end of a section or paragraph.
[11/30/95, 10/01/97; 20.2.73.5 NMAC - Rn, 20 NMAC 2.73.104 02/18/02]
[The latest effective date of any section in this Part is July 6, 2011.]

20.2.73.6 OBJECTIVE: The objective of this part is to establish requirements for the submission of certain relevant information to ensure that the regulations and standards under the Air Quality Control Act and the federal act will not be violated, and to facilitate the quantification of greenhouse gas emissions in New Mexico.
[11/30/95; 20.2.73.6 NMAC - Rn, 20 NMAC 2.73.105 02/18/02; A, 01/01/08]

20.2.73.7 DEFINITIONS: In addition to the terms defined in 20.2.2 NMAC (Definitions), as used in this part, the following apply.

A. "Air pollution control equipment" means any device, equipment, process or combination thereof the operation of which would limit, capture, reduce, confine, or otherwise control air contaminants or convert for the purposes of control any air contaminant to another form, another chemical or another physical state.

B. "California climate action registry" means the voluntary registry for greenhouse gas emissions established pursuant to California Health & Safety Code D. 26, Pt. 4, Ch. 6 (West 2007).

C. "Commencement" means that an owner or operator has undertaken a continuous program of construction or modification.

D. "Construction" means fabrication, erection, installation or relocation of a stationary source, including but not limited to temporary installations and portable stationary sources.

E. "Emission report or inventory" means a listing, by source, of the amount of air pollutants discharged into the atmosphere of a community.

F. "Fuel carbon content" means the mass of carbon per unit of heat content of a fuel.

G. "Fugitive emissions" are those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

H. "Greenhouse gas emissions reporting year" means the calendar year in which greenhouse gas emissions required to be reported under this part occurred.

I. "Modification" means any physical change in, or change in the method of operation of, a stationary source which results in an increase in the potential emission rate of any regulated air contaminant emitted by the source or which results in the emission of any regulated air contaminant not previously emitted, but does not include:

(1) a change in ownership of the source;

(2) routine maintenance, repair or replacement;

(3) installation of air pollution control equipment, and all related process equipment and materials necessary for its operation, undertaken for the purpose of complying with regulations adopted by the board or pursuant to the federal Clean Air Act; or

(4) unless previously limited by enforceable permit conditions:

(a) an increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) an increase in the hours of operation; or

(c) use of an alternative fuel or raw material if, prior to January 6, 1975, the source was capable of accommodating such fuel or raw material, or if use of an alternate fuel or raw material is caused by any natural gas curtailment or emergency allocation or any other lack of supply of natural gas.

J. "Nonattainment area" means, for any air pollutant, an area which has been designated as a nonattainment area under Section 107 of the federal act.

K. "Operator" means the person or persons responsible for the overall operation of a facility.

L. "Owner" means the person or persons who own a facility or part of a facility.

M. "Part" means an air quality control regulation under Title 20, Chapter 2 of the New Mexico administrative code, unless otherwise noted; as adopted or amended by the board.

N. "Portable stationary source" means a source which can be relocated to another operating site with limited dismantling and reassembly, including for example but not limited to moveable sand and gravel processing operations and asphalt plants.

O. "Potential emission rate" means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal act.

P. "Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design; any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is federally enforceable; the potential to emit for nitrogen dioxide shall be based on total oxides of nitrogen.

Q. "Regulated air contaminant" means any air contaminant, the emission or ambient concentration of which is regulated pursuant to the New Mexico Air Quality Control Act or the federal act.

R. "Shutdown" means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

S. "Stationary source" or "source" means any building, structure, equipment, facility, installation (including temporary installations), operation or portable stationary source which emits or may emit any air contaminant; any research facility may group its sources for the purpose of this part at the discretion of the secretary of the department.

T. "The climate registry" means the nonprofit corporation by that name incorporated under the District of Columbia Nonprofit Corporation Act with a purpose of creating and operating a multi-state greenhouse gas emissions registry.

U. "WEB source" means a stationary source that meets the applicability requirements of 20.2.81.101 NMAC.

V. "Western backstop sulfur dioxide trading program" means 20.2.81 NMAC, triggered as a backstop in accordance with the provisions in the sulfur dioxide milestones and backstop trading program implementation plan, if necessary, to ensure that regional sulfur dioxide emissions are reduced.

[11/30/95, 10/01/97; 20.2.73.7 NMAC - Rn, 20 NMAC 2.73.107 & A, 02/18/02; A, 12/31/03; A, 01/01/08]

20.2.73.8 to 20.2.73.105 [RESERVED]

20.2.73.106 AMENDMENT AND SUPERSESSION OF PRIOR REGULATIONS: This part amends and supersedes Air Quality Control Regulation ("AQCR") 703.1 - Notice of Intent and Emissions Inventory Requirements last filed May 29, 1990, as amended ("AQCR 703.1").

A. All references to AQCR 703.1 in any other rule shall be construed as a reference to this part.

B. The amendment and supersession of AQCR 703.1 shall not affect any administrative or judicial enforcement action pending on the effective date of such amendment nor the validity of any permit issued pursuant to AQCR 703.1.

[11/30/95; 20.2.73.106 NMAC - Rn, 20 NMAC 2.73.106 02/18/02]

20.2.73.107 to 20.2.73.199 [RESERVED]

20.2.73.200 NOTICE OF INTENT:

A. Applicability:

(1) Any owner or operator intending to construct a new stationary source which has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a notice of intent with the department.

(2) Any owner or operator intending to modify a stationary source which either prior to or following the modification has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a notice of intent with the department.

(3) The requirements of 20.2.73.200 NMAC do not apply to stationary sources or modifications located in Bernalillo county.

(4) The notice of intent shall be filed prior to the commencement of construction. Construction shall not begin prior to issuance of a written determination by the department that a permit is not required, or if a permit is required, prior to the issuance of the permit under 20.2.72 NMAC, 20.2.74 NMAC or 20.2.79 NMAC.

B. Contents of Notice: Notices of intent shall be filed on forms furnished by the department, which shall be identical to the extent practicable, as those used for 20.2.72 NMAC (Construction Permits) and shall include:

(1) The applicant's name and address, the person to contact regarding the application, and the name and address of the new source or modification.

(2) The date of the application.

(3) A description of the new facility or modification including all operations affecting air emissions.

(4) The anticipated operating schedule.

(5) A map such as a 7.5 minute United States geological survey topographic quadrangle showing the location of the stationary source.

(6) The nature and quantities of any regulated air contaminants the new source or modification will emit, including all calculations utilized to estimate emissions.

(7) A description of any air pollution control device or method to be utilized, including the basis for the estimated control efficiency.

(8) The stack and exhaust gas parameters for all emission points.

(9) Any other relevant information as the department may reasonably require.

(10) Be signed under oath or affirmation by the operator, the owner, or an authorized representative, certifying to the best of his or her knowledge the truth of all information submitted.

C. Review of Notice: Within thirty days from the date a notice is received, the department shall review its content and by certified letter indicate to the applicant:

(1) the notice is incomplete and indicate specific additional material or clarification required; or

(2) a permit is not required and construction may commence; or

(3) a permit is required before construction may commence. For this case, the department will indicate whether the application is complete with respect to the requirements of each applicable permit regulation and specify additional material or clarification required if it is not complete.

D. Verification: In verifying information submitted in response to the requirements of this part, the department may:

(1) Enter at all reasonable times in or upon any private or public property, except private residences, which the department has reasonable cause to believe is or will become a source of air contaminants contributing to air pollution; and

(2) Require the production of information relating to emissions which cause or contribute to air pollution, including the sampling of emissions in accordance with methods and at locations and intervals as may be prescribed by the department.

E. Notification Requirements:

(1) The owner or operator of a portable stationary source shall notify the department in writing of the date and site of any relocation at least fifteen days prior to its occurrence.

(2) Any owner or operator of a stationary source which will be shut down for a period of one year or more shall notify the department in writing of the actual date of shut down within thirty days after the shut down occurs.

(3) Any new owner or operator of a stationary source shall notify the department within thirty days of assuming ownership of his or her name and address.

[11/30/95; 20.20.73.200 NMAC - Rn, 20 NMAC 2.73.200-204 02/18/02]

20.2.73.201 to 20.2.73.299 [RESERVED]

20.2.73.300 EMISSION INVENTORY REQUIREMENTS:

A. Applicability. The requirements of 20.2.73.300 NMAC apply to the owner or operator of any stationary source located outside of Bernalillo county which:

(1) has been issued a permit under 20.2.72 NMAC (Construction Permits) during any period of time, except for toxic air pollutant permits issued under Sections 401 to 499 of 20.2.72 NMAC;

(2) is required to file a notice of intent under 20.2.73.200 NMAC; or

(3) emits in excess of 1 ton of lead or 10 tons of total suspended particulate, PM10, PM2.5, sulfur dioxide, nitrogen oxides, carbon monoxide, or volatile organic compounds in any calendar year including and subsequent to 1990.

B. Reporting requirements.

(1) Any source which emits, or has the potential to emit, 5 tons per year or more of lead or lead compounds, or 100 tons per year or more of PM10, PM2.5, sulfur oxides, nitrogen oxides, carbon monoxide, or volatile organic compounds shall submit an emissions report annually.

(2) Any source defined as a major source of hazardous air pollutants under 20.2.70 NMAC (Operating Permits) shall submit an emissions report annually.

(3) Any source which is located in an ozone nonattainment area and which emits, or has the potential to emit, 25 tons per year or more of nitrogen oxides or volatile organic compounds shall submit an emissions report annually.

(4) Any source which is not required by Paragraph (1), (2), or (3) of Subsection B of this section (20.2.73.300 NMAC) to submit an emission report shall submit an emissions report under this part upon request by the department, but no more frequently than annually.

(5) Except as provided in Paragraph (8) of Subsection B of this section (20.2.73.300 NMAC), the department shall provide to the owner or operator required by this section (20.2.73.300 NMAC) to submit an emissions report a complete copy of the most current emissions report for their stationary source which is on file with the department. The department shall provide this copy to the owner or operator at least 90 days prior to the date when the source is required to submit an emissions report.

(6) The owner or operator shall submit to the department a complete, correct and current emissions report in the format specified by the department which reflects emissions during the previous calendar year.

(7) Except as provided in Paragraph (8) of Subsection B of this section (20.2.73.300 NMAC) the owner or operator shall submit the emission report by April 1 of each year in which the source is required to submit an emission report.

(8) Sources for which a date for submitting an annual emission report is specified in a current operating permit issued under 20.2.70 NMAC (Operating Permits) shall submit such report on that date. The department shall provide a copy of the previous emissions report upon request by the owner or operator of such source.

(9) Any source that is requested by the department to submit a report of greenhouse gas emissions shall:

(a) submit such report on the schedule and according to the greenhouse gas emissions reporting procedures established by the department, but not more often than annually; or

(b) report greenhouse gas emissions from the source under 20.2.87 NMAC for the greenhouse gas emissions reporting year and the two years following that year; or

(c) provide the department access to the requested information for the greenhouse gas emissions reporting year registered in either the climate registry or the California climate action registry; and

(d) keep records in support of the report for a minimum of five years.

(10) In determining the schedule of greenhouse gas emissions reports and reporting procedures, the department, subject to Paragraph (11) below, shall provide an opportunity for public comment, and shall consider:

(a) public comments regarding the schedule of such reports and greenhouse gas emissions reporting procedures;

(b) emissions quantification standards and best practices approved or recommended by federal and state agencies, by greenhouse gas emissions registries, and by non-governmental bodies having expertise in greenhouse gas emissions quantification;

(c) whether greenhouse gases emissions from a particular source or source type, considering the amount and chemical composition of the emissions, are expected to be minimal relative to emissions from other sources or source types, and

(d) whether emissions of a particular greenhouse gas from a source or source type, considering the amount and chemical composition of the emissions, are expected to be minimal relative to the total greenhouse gas emissions from that source or source type.

(11) The schedule for greenhouse gas emissions reports and reporting procedures pursuant to Paragraphs (9) and (10) of Subsection B of 20.2.73.300 NMAC, shall:

(a) subject to the department's selection of best available quantification methodologies, include a requirement that sources within North American industry classification system codes 211111, 211112, 213111, 213112, 486210, 221210, 486110, and 486910 subject to this part and permit requirements pursuant to 20.2.70 NMAC (Operating Permits) report at a minimum emissions of carbon dioxide and methane beginning no later than reporting year 2009 and for subsequent reporting years; and

(b) subject to the department's selection of best available quantification methodologies, include a requirement that sources within North American industry classification system codes 211111, 211112, 213111, 213112, 486210, 221210, 486110, and 486910 subject to this part pursuant to Paragraphs (1) and (2) of Subsection A of 20.2.73.300 NMAC, and not otherwise covered by Subparagraph (a), above, report at a minimum emissions of carbon dioxide and methane no later than reporting year 2010 and for subsequent reporting years as requested by the department.

C. Content of emissions reports. Emissions report contents for reports made under Paragraphs (1) through (8) of Subsection B of 20.2.73.300 NMAC shall include:

(1) the name, address, if any, and physical location of the stationary source;

(2) the name and telephone number of the person to contact regarding the emissions report;

(3) a certification signed by the owner, or operator, or a responsible official as defined in 20.2.70 NMAC attesting that the statements and information contained in the emissions report are true and accurate to the best knowledge and belief of the certifying official, and including the full name, title, signature, date of signature, and telephone number of the certifying official; for sources subject to 20.2.70 NMAC, the certification shall be made as required under that part;

(4) smelters shall submit an annual report of sulfur input, in tons/year;

(5) for each emission point, as required by the department:

(a) stack and exhaust gas parameters and location information;

(b) type of control equipment and estimated control efficiency;

(c) schedule of operation;

(d) estimated actual emissions, including fugitive emissions and emissions occurring during maintenance, start-ups, shutdowns, upsets, and downtime of total suspended particulate, PM10, PM2.5, ammonia, sulfur oxides, nitrogen oxides, carbon monoxide, volatile organic compounds, and lead, and, if requested by the department, speciated hazardous air pollutants, in tons per year and a description of the methods utilized to make such estimates, including calculations;

(e) the annual process or fuel combustion rates; and

(f) the fuel heat, sulfur, and ash content; and

(6) all information required under the federal act.

D. Additional content for emissions reports from sources in ozone nonattainment areas. Emissions reports from sources located in ozone nonattainment areas shall include, in addition to the contents specified by Subsection C of this section (20.2.73.300 NMAC), the following information:

(1) typical daily process rate during the peak ozone season, where the peak ozone season is specified by the department; and

(2) estimated actual emissions of nitrogen oxides and volatile organic compounds, which shall be reported:

(a) for each emissions point;

(b) for each process and fuel type contributing to emissions from each point;

(c) in units of tons per year for annual emissions; and

(d) in units of pounds per day for a typical day during the peak ozone season.

E. Waiver of reporting requirements for insignificant emissions. The department may waive the requirements of Paragraph (5) of Subsection C of this section (20.2.73.300 NMAC) for emissions which the department determines to be insignificant under 20.2.70 NMAC, except that:

(1) for sources in nonattainment areas, reporting of emissions of pollutants for which the area is nonattainment shall not be waived; and

(2) reporting of emissions for which reporting is required under the federal act shall not be waived.

F. Emission tracking requirements for sulfur dioxide emission inventories. All stationary sources with actual emissions of one hundred (100) tons per year or more of sulfur dioxide in the year 2000, or in any subsequent year, shall submit an annual inventory of sulfur dioxide emissions, beginning with the 2003 emission inventory. A source that meets these criteria that then emits less than 100 tons per year in a later year shall submit a sulfur dioxide inventory for tracking compliance with the regional sulfur dioxide milestones until the western backstop sulfur dioxide trading program has been fully implemented and emission tracking has occurred under 20.2.81.106 NMAC.

(1) All WEB sources will be subject to the following federally enforceable provisions:

(a) submit an annual inventory of sulfur dioxide emissions;

(b) document the emissions monitoring/estimation methodology used, and demonstrate that the selected methodology is acceptable under the inventory program;

(c) include emissions from start up, shut down, and upset conditions in the annual total inventory;

(d) use 40 CFR Part 75 methodology for reporting emissions for all sources subject to the federal acid rain program;

(e) maintain all records used in the calculation of the emissions, including but not limited to the following:

(i) amount of fuel consumed;

(ii) percent sulfur content of fuel and how the content was determined;

(iii) quantity of product monitoring data;

(iv) emissions monitoring data;

(v) operating data; and

(vi) how the emissions are calculated;

(f) maintain records of any physical changes to facility operations or equipment, or any other changes that may affect the emissions projections; and

(g) retain records for a minimum of ten years from the date of establishment, or if the record was the basis for an adjustment to the milestone, five years after the date of an implementation plan revision, whichever is longer.

(2) Changes in emission measurement techniques. Each source subject to this subsection that uses a different emission monitoring or calculation method than was used to report sulfur dioxide emissions in 2006 under this part or 40 CFR Part 75 shall adjust their reported emissions to be comparable to the emission monitoring or calculation method that was used in 2006. The calculations that are used to make this adjustment shall be included with the annual emission report.

(3) The department shall retain emission inventory records for non-utilities for 2006 until the year 2018 to ensure that changes in emissions monitoring techniques can be tracked.

G. Content of greenhouse gas emissions reports. Greenhouse gas emissions reports shall contain the following information, as set out in the greenhouse gas emissions reporting procedures established under Subparagraph (a) of Paragraph (9) of Subsection B of 20.2.73.300 NMAC:

(1) the name, location, and permit or notice of intent number of the stationary source;

(2) the name and telephone number of the person to contact regarding the greenhouse gas emissions report;

(3) a certification signed by the owner or operator attesting that the statements and information contained in the emissions report are true and accurate to the best knowledge and belief of the certifying official, and including the full name, title, signature, date of signature, and telephone number of the certifying official;

(4) for each emission point as required by the department under the greenhouse gas emissions reporting procedures, the estimated actual emissions of greenhouse gases, including fugitive emissions and emissions occurring during maintenance, start-ups, shutdowns, upsets and downtime; and

(5) if requested by the department, the fuel type, fuel heat content, and fuel carbon content.

[11/30/95, 10/01/97; 2.20.73.300 NMAC - Rn, 20 NMAC 2.73.300 - 304 02/18/02; A, 12/31/03; A, 12/31/04; A, 01/01/08; A, 07/06/11]

HISTORY OF 20.2.73 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the commission of public records - state records center and archives.

EIB/AQCR 703.1, Air Quality Control Regulation 703.1 - Notice of Intent and Emissions Inventory Requirements, 5/29/90.

History of Repealed Material: [RESERVED]

Other History:

EIB/AQCR 703.1, Air Quality Control Regulation 703.1 - Notice of Intent and Emissions Inventory Requirements, filed 5/29/90, was **renumbered** into first version of the New Mexico Administrative Code as 20 NMAC 2.73, Notice of Intent and Emissions Inventory Requirements, filed 10/30/95.

20 NMAC 2.73, Notice of Intent and Emissions Inventory Requirements, filed 10/30/95, was **renumbered, reformatted, amended and replaced** by 20.2.73 NMAC, Notice of Intent and Emissions Inventory Requirements, effective 02/18/02.

APPENDIX B
UIC PERMIT REQUIREMENTS CORRESPONDENCE

CONVERSATION LOG

DATE: 04/04/2022

INITIATED CALL (x)	**RECEIVED CALL ( )**	**RETURNED CALL ( )**
OCCURRING IN OFFICE (x)	**SALES ( )**	**TRADE SHOW ( )**

CONTACT:

Name: Mr. Nelson Valez (NMOCD)
Address: Santa Fe, NM

Project Name: Knight #1
Project #: 193710328
Phone #: (505) 469-6146

Project Personnel: Steve Varsa

CONVERSATION SUMMARY:

Called Nelson to confirm/clarify previous my May 26, 2017, correspondence with Randy Bayliss (previous NMOCD contact) regarding the need for Underground Injection Control (UIC) permitting for air sparge (AS) groundwater remediation systems. At the time, Randy had told me UIC permitting was not required for AS pilot testing, and we had also discussed a non-EPCGP site where an AS system had been operating for approximately 2 years without need of a UIC permit. Nelson said he agrees that UIC permitting is not required for air sparge remediation but would get back to me if he heard otherwise from his supervisor.

RESPONSE:

None. Include copy of this correspondence in the Knight #1 RAP.

COPY TO:

Joseph Wiley (EPCGP), Project File

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID: 7046
	Action Number: 97802
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of Remedial Work Plan: Content satisfactory 1. Proposed remedial action per Section 3.0 of this report is approved. 2. Provide or complete the following; a. pre-start up sampling per Section 4.6 b. date of AS & SVE system start up per Section 4.7 c. documentation of O & M activities per Section 5.0 and 5.1 d. sampling schedule per Section 5.2 e. date of any waste generated and disposed of off-site per Section 5.4 f. reporting schedule per Section 6.1 g. notifications to OCD per Section 7.0 3. Submit to the OCD the required information noted above within the next Annual Groundwater Report due no later than March 31, 2023.	4/27/2022