August 14, 2013
Cardno ERI 081006C.R10

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Mr. Tom Rejzek
Santa Barbara County Environmental Health Services
LUFT Program
2125 South Centerpointe Parkway, Suite 333
Santa Maria, California 93455

SUBJECT **Revised Soil Management Plan**
Former ExxonMobil Station 18KFK
100 South La Cumbre Road
Santa Barbara, California
LUFT Site No. 51622

Mr. Rejzek:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation (ExxonMobil), Cardno ERI has prepared this *Revised Soil Management Plan* for the above-referenced site. The purpose of the plan is to update Cardno ERI's previously-submitted *Soil Management Plan* (Plan) dated December 6, 2007, which was approved by the Santa Barbara County Fire Department, Fire Prevention Division (FPD) in a letter dated July 24, 2008 (Appendix A). Approval of the Plan by FPD was valid until July 24, 2009, and since then, there have been modifications to the redevelopment plan, including the location of the proposed building. Cardno ERI was recently contacted by the property owner, who stated that the permitting process for redevelopment is currently underway.

Based upon information provided by the property owner, the subject site is to be redeveloped with a commercial building and parking lot. The redevelopment is anticipated to require excavation of soil from beneath the footprint of the proposed building. The proposed building location is shown on Plate 1. Prior to commencing

grading operations, the property owner or its designated representative will obtain a soil excavation permit or soil excavation permit exemption from the County of Santa Barbara Air Pollution Control District (SBAPCD).

The majority of the area beneath the proposed building footprint has already been excavated and backfilled with clean soil during the removal of the gasoline USTs in 2004, and the excavation of the former dispenser islands in 2005 (HFA, 2005 and 2006). The locations of the former USTs and former dispenser islands are shown on Plate 1. During the excavation process, monitoring will be conducted as required by the SBAPCD, and soil that indicates the presence of hydrocarbons based upon screening using a PID will be segregated and stockpiled separately from soil that does not indicate the presence of hydrocarbons.

As outlined in FPD's July 24, 2008 approval letter, soil samples will be collected from the bottom and sidewalls of excavated areas, and will be submitted to a California state-certified laboratory for analysis. The sample rate and locations will be determined in the field in consultation with agency personnel. The samples will be analyzed for TPHg by EPA Method 8015B Modified, and for VOCs including the following: BTEX, MTBE, TAME, ETBE, DIPE, TBA, n-butylbenzene, sec-butylbenzene, tert-butylbenzene, naphthalene, isopropylbenzene, isopropyltoluene, n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8260B.

Any soil indicating hydrocarbon concentrations in excess of FPD investigation levels will be transported off site for recycling. Soil indicating hydrocarbon concentrations less than FPD investigation levels or at non-detect levels may be used by the property owner to backfill the excavated area.

As stated in Cardno ERI's *Feasibility Test Report and Remedial Action Plan* (RAP) dated March 21, 2013, destruction of well MW02 and installation of a replacement well will be necessary due to the location of the well beneath the footprint of the planned building. Additionally, well MW25 will be lowered prior to site redevelopment and will be plumbed to the remediation system underground. The details of the well destruction, lowering and replacement well installation are included in the RAP.

After completion of the field activities, a report summarizing the field procedures and laboratory analytical results will be submitted to ExxonMobil and Santa Barbara County Environmental Health Services. The report will be signed by a State of California professional geologist.

For any questions concerning this document, please contact Mr. Andy Nelson at 805 644 4157, ext. 181809.

Sincerely,

Andy Nelson
Senior Geologist
P.G. 8360
for Cardno ERI
Direct Line 805 644 4157, ext. 181809
Email: andy.nelson@cardno.com

cc: Mr. Nick Puig, EMES
Mr. Timothy M. Ison, The Horowitz Group

Enclosures:

Acronym List
References

Plate 1 Generalized Site Plan

Appendix A Correspondence

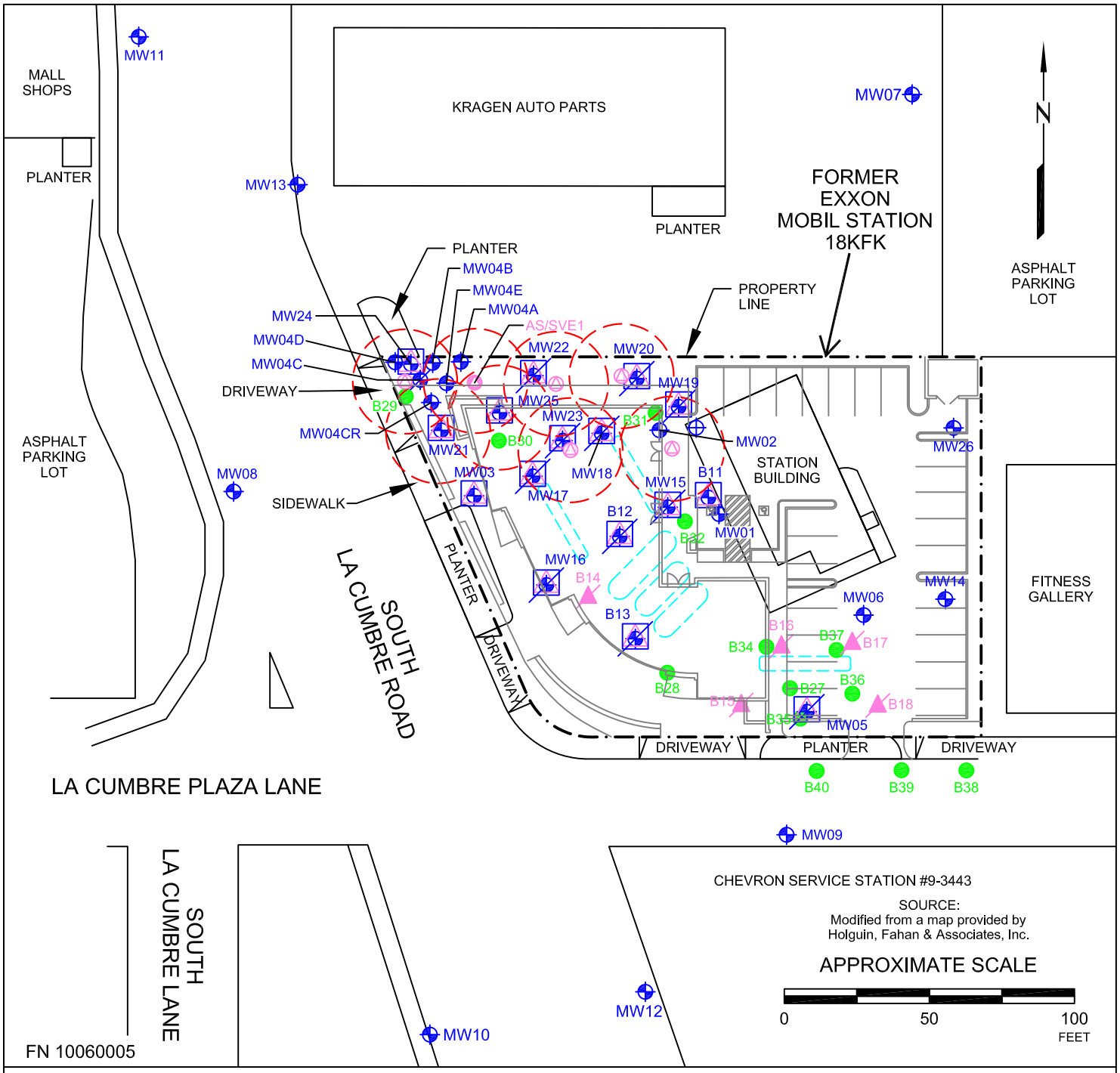
ACRONYM LIST

µg/L	Micrograms per liter
µs	Microsiemens
1,2-DCA	1,2-dichloroethane
acfm	Actual cubic feet per minute
AS	Air sparge
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CEQA	California Environmental Quality Act
cfm	Cubic feet per minute
COC	Chain of Custody
CPT	Cone Penetration (Penetrometer) Test
DIPE	Di-isopropyl ether
DO	Dissolved oxygen
DOT	Department of Transportation
DPE	Dual-phase extraction
DTW	Depth to water
EDB	1,2-dibromoethane
EPA	Environmental Protection Agency
ESL	Environmental screening level
ETBE	Ethyl tertiary butyl ether
FID	Flame-ionization detector
fpm	Feet per minute
GAC	Granular activated carbon
gpd	Gallons per day
gpm	Gallons per minute
GWPTS	Groundwater pump and treat system
HVOC	Halogenated volatile organic compound
J	Estimated value between MDL and PQL (RL)
LEL	Lower explosive limit
LPC	Liquid-phase carbon
LRP	Liquid-ring pump
LUFT	Leaking underground fuel tank
LUST	Leaking underground storage tank
MCL	Maximum contaminant level
MDL	Method detection limit
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
mg/m^3	Milligrams per cubic meter
MPE	Multi-phase extraction
MRL	Method reporting limit
msl	Mean sea level
MTBE	Methyl tertiary butyl ether
MTCA	Model Toxics Control Act
NAI	Natural attenuation indicators
NAPL	Non-aqueous phase liquid
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
ORP	Oxidation-reduction potential
OSHA	Occupational Safety and Health Administration
OVA	Organic vapor analyzer
P&ID	Process & Instrumentation Diagram
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene or perchloroethylene
PID	Photo-ionization detector
PLC	Programmable logic control
POTW	Publicly owned treatment works
ppmv	Parts per million by volume
PQL	Practical quantitation limit
psi	Pounds per square inch
PVC	Polyvinyl chloride
QA/QC	Quality assurance/quality control
RBSL	Risk-based screening levels
RCRA	Resource Conservation and Recovery Act
RL	Reporting limit
scfm	Standard cubic feet per minute
SSTL	Site-specific target level
STLC	Soluble threshold limit concentration
SVE	Soil vapor extraction
SVOC	Semivolatile organic compound
TAME	Tertiary amyl methyl ether
TBA	Tertiary butyl alcohol
TCE	Trichloroethene
TOC	Top of well casing elevation; datum is msl
TOG	Total oil and grease
TPHd	Total petroleum hydrocarbons as diesel
TPHg	Total petroleum hydrocarbons as gasoline
TPHmo	Total petroleum hydrocarbons as motor oil
TPHs	Total petroleum hydrocarbons as stoddard solvent
TRPH	Total recoverable petroleum hydrocarbons
UCL	Upper confidence level
USCS	Unified Soil Classification System
USGS	United States Geologic Survey
UST	Underground storage tank
VCP	Voluntary Cleanup Program
VOC	Volatile organic compound
VPC	Vapor-phase carbon

REFERENCES

Holguin, Fahan & Associates, Inc. (HFA). August 29, 2005. *Soils Report for Tank Excavation Assessment*, ExxonMobil Oil Corporation Former Service Station #18-KFK.

Holguin, Fahan & Associates, Inc. (HFA). February 8, 2006. *Excavation Report*, ExxonMobil Oil Corporation Former Service Station #18-KFK.



EXPLANATION

- MW26 — Groundwater monitoring well
- MW25 — Dual-phase extraction well
- B40 — Soil boring
- AS/SVE1 — Air sparge/soil vapor extraction well
- MW04C — Abandoned groundwater monitoring well
- MW23 — Destroyed dual-phase extraction well
- B18 — Destroyed soil vapor extraction well
- Former dispenser island
- Former underground storage tank
- Vapor extraction radius of influence (18 ft)
- Proposed air sparge/soil vapor extraction well
- Proposed groundwater monitoring well
- Redevelopment site

Cardno ERI
Shaping the Future

GENERALIZED SITE PLAN

FORMER EXXONMOBIL STATION 18KFK
100 South La Cumbre Road
Santa Barbara, California

PROJECT NO. 1006

PLATE 1

DATE: 08/12/13

APPENDIX A

CORRESPONDENCE

Fire Department

"Serving the community since 1926"

4410 Cathedral Oaks Road
Santa Barbara, CA 93110-1042
(805) 681-5500 FAX (805) 681-5563

John M. Scherrei
Fire Chief
County Fire Warden

July 24, 2008

Lee Hanley
ExxonMobil Business Resources Corporation
1464 Madera Road, Suite N, #265
Simi Valley, CA 93065

Avenue 26 Holdings, LLC
Horowitz Family Trust
Larry & Laura Worchell Family Trust
4221 Wilshire Blvd, #430
Los Angeles, CA 90010

Dear Mr. Hanley:

Subject: ExxonMobil Station #18-KFK
100 S. La Cumbre Road, Santa Barbara, California
LUFT Site #51622

The Santa Barbara County Fire Department, Fire Prevention Division (FPD) LUFT Program has reviewed the documents prepared by your consultant, Environmental Resolutions, Inc. (ERI), titled *Residual Hydrocarbon Volume and Mass Calculation, (Mass Calculation Report)* dated October 1, 2007, *Soil Management Plan (Management Plan),* dated December 6, 2007, *Work Plan for Well Destruction (Work Plan),* dated May 27, 2008, *Proposed Vapor Barrier Deed Restriction (Deed Restriction),* dated July 7, 2008. The *Mass Calculation Report* suggests that residual Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene in soil was present along the southern portion of the property in a limited mass and volume. The *Management Plan* describes methods of handling potentially contaminated soil during the anticipated redevelopment of the site. The *Work Plan* proposes abandoning two groundwater monitoring wells to facilitate property redevelopment. The *Deed Restriction* proposes requiring a vapor barrier under any new building built on the site. After careful review, FPD has the following comments and directives:

- The *Mass Calculation Report* presents volume and mass estimate of residual TPH and benzene at the southern end of the site. Residual TPHg is estimated to consist of 10.9 kilograms with 58 cubic meters of soil. Residual benzene is estimated to consist of 0.10 kilogram with 166 cubic meters of soil. FPD generally concurs with these estimates. However, FPD is in the process of revising Investigation Levels to include the San Francisco Regional Water Quality Control Board's Environmental Screening Levels. Based upon these values, ethylbenzene and xylenes are also above the FPD Investigation Levels in sample locations B-35 and/or S36-6. Please submit an addendum to FPD by **August 22, 2008** estimating the mass and volume concentrations of these two constituents. Upon review of these calculations, FPD will make a determination on whether the impacted soil represents a de minimus volume.

- The *Management Plan* proposes methods to handle, characterize and dispose of potentially contaminated soil during site construction. It is anticipated that grading will be required to excavate and recompact site soils prior to constructing the proposed building. After careful review, FPD approves the *Management Plan* with the following conditions:

    - FPD shall be notified immediately if contaminated soil is encountered.

    - In addition to the proposed analytes, the soil samples shall be analyzed for the following recalcitrant compounds via EPA Method 8260B: n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Naphthalene, Isopropylbenzene, Isopropyltoluene, n-propylbenzene, 1,2,4-Trimethylbenzene, and 1,3,5-Trimethylbenzene.

    - Any soil contamination found shall be remediated by excavation and disposal to the fullest extent possible. Likely areas of contamination are the sewer lateral under the current building and the unexcavated "wedge" of soil between the two former excavations near the southwest former of the current building.

    - Sidewall and bottom samples shall be collected and analyzed from areas of excavated contaminated soil. The sample rate and sample locations shall be determined in the field in consultation with FPD personnel.

    - A report documenting the completion of remedial excavation, if any, shall be submitted to FPD within 60 days of completion of fieldwork.

- The *Work Plan* proposes to abandon groundwater wells B-11 and MW-01, as these wells will conflict with either the new building or hardscape. These wells will be abandoned by overdrilling the wells and backfilling the boreholes with a bentonite cement grout. FPD approves the *Work Plan* with the following conditions:

    - As it is imperative to monitor these wells as long a possible, well permits shall be obtained from FPD after the City has issued building permits and a firm date for construction has been established. The wells shall be destroyed no sooner than within one month of the start of construction.

    - Because B-11 and MW-01 have elevated contaminant concentrations, FPD will require at least one well to be reinstalled after the completion of the new building. Please submit a workplan for the installation of the(se) well(s) to FPD by **August 29, 2008**.

- Due to the potential at the site for vapor intrusion into the new building, FPD requires that a vapor barrier be incorporated into the site construction. The *Deed Restriction* proposes to require the installation of an impervious liner under any new construction. After careful review, FPD approves the *Deed Restriction* with the following condition:

    - The phrase "Santa Barbara County Fire Department" shall be amended to "Santa

Barbara County Fire Department, or its successor agency"

- All approvals in this letter are valid until **July 24, 2009**.

If you have any questions regarding the aforementioned, please do not hesitate to call me at (805) 686-8176. Written correspondence regarding this matter should be sent to FPD at 195 West Highway 246, Buellton, CA 93427, or via facsimile to (805) 686-8183.

Sincerely,

Thomas M. Rejzek
Professional Geologist #6461
Certified Hydrogeologist #601
SMU/LUFT Program

pc: Mark Matranga, UST Cleanup Fund
James Anderson, Environmental Resolutions, Inc.
Santa Barbara City Planning

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