



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
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MAR 02 2018

Ref: 8ENF-L

CERTIFIED MAIL NO. 7009 3410 0000 2599 5422
RETURN RECEIPT REQUESTED

Mr. Kevin P. Kauffman
President/CEO
K.P. Kauffman Company, Inc.
1675 Broadway, Suite 2800
Denver, CO 80202

Re: Notice of Violation Pursuant to 42 U.S.C. § 7413(a) to K.P. Kauffman Company, Inc.

Dear Mr. Kauffman:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to K.P. Kauffman Company, Inc. (KPK) for alleged violations arising under the Colorado State Implementation Plan including Subpart G, which codifies Colorado Regulation 7 (Reg. 7), "Emissions of Volatile Organic Compounds," and "Volatile Organic Compound Emissions from Oil and Gas Operations" (Section XII) at 44 tank batteries, which are part of KPK's oil and gas exploration and production operations in the 8-hour Ozone Control Area.

Section 113(a) of the Clean Air Act provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of an applicable implementation plan, the Administrator may issue an administrative compliance order, issue an administrative penalty order, or bring a civil judicial action.

This case is currently referred to the U.S. Department of Justice. The U.S. and the State of Colorado have been involved in negotiations with KPK since 2016, and received an email on February 22, 2018, from KPK's counsel that KPK would no longer be participating in scheduled settlement meetings.

If KPK seeks to re-initiate negotiations, you may contact Lauren Hammond, Enforcement Attorney, at (303) 312-7081. This meeting should occur no later than 30 days from the issuance of this Notice.

Sincerely,

A handwritten signature in blue ink, appearing to read "Suzanne J. Bohan", with a long horizontal line extending to the right.

Suzanne J. Bohan
Assistant Regional Administrator
Office of Enforcement, Compliance
and Environmental Justice

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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IN THE MATTER OF:)
)
K.P. KAUFFMAN COMPANY, INC.)
1675 Broadway, Suite 2800)
Denver, CO 80202)
_____)

NOTICE OF VIOLATION
Docket No. CAA-08-2018-0003
Proceedings Pursuant to Section
113(a)(1) of the Clean Air Act,
42 U.S.C. § 7413(a)(1)

FILED
EPA REGION VIII
HEARING CLERK

The United States Environmental Protection Agency (EPA) is issuing this Notice Of Violation (NOV) pursuant to Section 113(a)(1) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(1), to notify K.P. Kauffman Company, Inc. (KPK) and the State of Colorado (the State) that KPK has violated and is in violation of the Act and the Colorado State Implementation Plan (SIP), including Subpart G, which codifies Colorado Regulation 7 (Reg. 7), “Emissions of Volatile Organic Compounds,” and “Volatile Organic Compound Emissions from Oil and Gas Operations” (Section XII) at 44 tank batteries, which are part of KPK’s oil and gas exploration and production operations in the 8-hour Ozone Control Area.

STATUTORY AND REGULATORY BACKGROUND

1. As set forth in Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1), the purpose of the Clean Air Act is to protect and enhance the quality of the nation’s air, so as to promote the public health and welfare and the productive capacity of its population.

A. National Ambient Air Quality Standards (NAAQS) for Ozone

2. Section 108 of the Act, 42 U.S.C. § 7408, directs EPA to identify air pollutants that “may reasonably be anticipated to endanger public health or welfare” and to issue air quality criteria for those pollutants based on “the latest scientific knowledge” about their effects on public health and the environment. These pollutants are known as “criteria pollutants.”

3. Section 109 of the Act, 42 U.S.C. § 7409, requires EPA to establish both primary and secondary NAAQS for criteria pollutants. The primary standard must be set at the level “requisite to protect the public health” with an adequate margin of safety, and the secondary standard is intended to protect “the public welfare.” According to Section 302(h) of the Act, 42 U.S.C. § 7602(h), public welfare effects are “effects on soils, water, crops, vegetation” and other environmental impacts including, but not limited to, effects on animals, wildlife, property, and “effects on economic values.”

4. Ground-level ozone, commonly known as “smog,” is one of six criteria pollutants for which EPA has promulgated NAAQS, due to its adverse effects on human health and the environment. Short-term exposures (1 to 3 hours) to ground-level ozone can cause acute health effects observed even at low concentrations, including temporary pulmonary inflammation. Long-term exposure (months to years) may cause permanent damage to lung tissue. Children and adults who are active outdoors are particularly susceptible to the adverse effects of exposure to ozone. *See* 73 Fed. Reg. 16,436 (Mar. 27, 2008).

5. Ozone is not emitted directly from sources of air pollution. Ozone is a photochemical oxidant, formed when certain chemicals react with oxygen in the presence of sunlight. These chemicals – volatile organic compounds (“VOCs”) and nitrogen oxides (“NO_x”) – are called “ozone precursors.” Sources that emit ozone precursors are regulated to reduce ground-level ozone. *See* 62 Fed. Reg. 38,856 (July 18, 1997).

6. In 2008, EPA established an ozone NAAQS of 0.075 ppm (measured as an 8-hour average). *See* 73 Fed. Reg. 16,436 (Mar. 27, 2008).

B. Colorado SIP

7. Pursuant to Section 107(a) of the Act, 42 U.S.C. § 7407(a), states are primarily

responsible for ensuring attainment and maintenance of the NAAQS. States implement the NAAQS on a region-by-region basis, within air quality control regions (or “areas”) throughout the state. An area with ambient air concentrations that meets the NAAQS for a particular pollutant is an “attainment” area. An area with ambient air concentrations that exceed the NAAQS is a “nonattainment” area. And, an area that cannot be classified due to insufficient data is “unclassifiable.”

8. EPA has designated the “Denver-Boulder-Greeley-Ft. Collins-Loveland Area” (the “8-hour Ozone Control Area”) as being in nonattainment with the ozone NAAQS. *See* 77 Fed. Reg. 30,088 (May 21, 2012).

9. In June 2016, EPA reclassified the 8-hour Ozone Control Area from “marginal” to the more severe nonattainment status of “moderate” for the ozone NAAQS. 81 Fed. Reg. 26,697 (May 4, 2016).

10. Pursuant to Section 110(a) of the Act, 42 U.S.C. § 7410(a), each state must adopt and submit to EPA for approval a plan that provides for the implementation, maintenance, and enforcement of the NAAQS for each criteria pollutant in each air quality control region within the state. This plan is known as a state implementation plan or “SIP.” Section 110(a)(2)(A) of the Act, 42 U.S.C. § 7410(a)(2)(A), requires that each SIP include enforceable emissions limitations and other “control measures, means, or techniques” to ensure attainment of the NAAQS.

11. After enforceable state emission limitations are approved by EPA, these SIP provisions are federally enforceable under Sections 113(a) and (b) of the Act, 42 U.S.C. §§ 7413(a) and (b).

12. As required by Section 110(a) of the Act, 42 U.S.C. § 7410(a), the State has periodically adopted regulations to provide for the implementation, maintenance, and

enforcement of the ozone NAAQS.

13. Initially adopted by Colorado's Air Quality Control Commission ("AQCC") in the 1970s, Reg. 7, as subsequently amended, includes control measures to reduce VOC emissions from condensate¹ collection, storage, handling, and processing operations. *See* Colo. Code Regs. 1001-9. The State relies, in part, on Reg. 7 to attain the NAAQS for ozone.² *See* 40 C.F.R. § 52.320.

14. Among other things, Reg. 7, Sec. XII requires each owner or operator to select which of its condensate tanks to control in order to achieve a required, system-wide percentage VOC emissions reduction.

15. At all times relevant to this action, most of KPK's oil and natural gas production system in the D-J Basin, including all of the tank batteries that are specifically at issue in this action, have been located within the 8-hour Ozone Control Area. *See* 72 Fed. Reg. 53,952 (Sept. 21, 2007) and 77 Fed. Reg. 28,424 (May 14, 2012).

C. Applicable Provisions of the Colorado SIP

16. Reg. 7, Sec. XII applies to all oil and gas exploration and production operations "that collect, store, or handle condensate in the 8-hour Ozone Control Area," located upstream of a natural gas plant, and for which "the owner or operator filed, or was required to file, an APEN [Air Pollutant Emission Notice] pursuant to Regulation 3." *See* Reg. 7, Sec. XII.A.1.

17. Pursuant to Reg. 7, the term "8-Hour Ozone Control Area" means Adams,

¹ Condensate is hydrocarbon liquid which is separated from natural gas near the well-head in the separator.

² Not all of Reg. 7 has been submitted to EPA for incorporation into the SIP. The SIP provisions in Reg. 7 have also been periodically revised. The latest version of the SIP was approved by EPA on February 13, 2008, with an effective date of April 14, 2008. *See* 73 Fed. Reg. 8,194 (Feb. 13, 2008). Since then, Colorado has revised the SIP provisions of Reg. 7 several times. Not all of Colorado's revisions have been approved into the SIP by EPA. As a result, the State-Approved SIP has different citations than the EPA-approved SIP. For clarity to this NOV, the citations reference only to the EPA-approved SIP provisions.

Arapahoe, Boulder, Douglas, and Jefferson Counties; the Cities of Denver and Broomfield; and portions of Larimer and Weld Counties.

18. Reg. 7 sets deadlines and requirements for system-wide VOC emission reduction requirements for oil and gas operations. In meeting these requirements, emission reductions “shall not be required for each and every unit, but instead shall be based on overall reductions in uncontrolled actual emissions from all the atmospheric storage tanks associated with the affected operations for which the owner or operator filed, or was required to file, an APEN pursuant to Regulation 3.” Reg. 7, Sec. XII.A.2.

19. As set forth in Reg. 7, Sec. XII.A.2.c, for the months of May 1 through September 30 of each year from 2007 through 2011, “such emissions shall be reduced by 75% from uncontrolled actual emissions on a weekly basis.” For the ozone season of each year beginning with 2012, “such emissions shall be reduced by 78% from uncontrolled actual emissions on a weekly basis.” *Id.* at Sec. XII.A.2.d.

20. Reg. 7, Sec. XII.A.2.h provides, beginning with the year 2008, and for each year thereafter, emissions during the non-ozone season (January 1 through April 30 and October 1 through December 31) “shall be reduced by 70% from uncontrolled actual emissions, calculated as an average of the emission reduction achieved during the seven months covered by the two periods.”³

21. Each operator must designate which condensate storage tanks it has chosen to control in order to meet the system-wide emission reduction requirements. *See* Reg. 7, Secs.

³ The State has amended these provisions requiring greater system-wide emission reductions. This amendment has not yet been approved by EPA so as to become part of the Colorado SIP and, therefore, is not federally enforceable. The current version of Reg. 7, including those portions not included in the SIP, codified at 5 Colo. Code Regs. § 1001-9, is available at https://www.colorado.gov/pacific/sites/default/files/5-CCR-1001-9_1.pdf. For the summer ozone season, from May 1 through September 30, VOC emissions must now be reduced by 90% on a system-wide basis.

XII.A.4. & XII.A.5.

22. Reg.7, Sec. XII contains the following general requirements for affected operations:

- a. “All air pollution control equipment required by this section XII shall be operated and maintained consistent with manufacturer specifications and good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications on file.” Reg. 7, Sec. XII.D.2.a.
- b. “[A]ll such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Section XII and to handle reasonably foreseeable fluctuations in emissions of volatile organic compounds. Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable.” *Id.*
- c. “All condensate collection, storage, processing and handling operations, regardless of size, shall be designed, operated and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the maximum extent practicable.” Reg. 7, Sec. XII.D.2.b.

These provisions became federally enforceable on April 14, 2008, when EPA’s rule approving the provisions as part of the Colorado SIP took effect. *See* 73 Fed. Reg. 8,194 (Feb. 13, 2008).

FACTUAL BACKGROUND

A. KPK’s Oil and Natural Gas Operations

23. KPK is a privately held company engaged in domestic oil and natural gas production and exploration. KPK’s business model is to acquire oil and natural gas wells that the previous owner would otherwise have chosen to plug and abandon because of the wells’ decline

in productivity. KPK is incorporated in California and maintains its principal executive offices in Denver, Colorado.

24. KPK is a “person” as defined by Section 302(e) of the Act, 42 U.S.C. § 7602(e).

25. KPK operates hundreds of oil and natural gas exploration and production facilities in the Denver Julesberg (D-J) Basin, in Weld County, Colorado. In 2016, KPK’s D-J Basin exploration and production operations produced approximately 672,643 barrels of oil and over 1.9 billion cubic feet of natural gas.

26. As of February 2018, KPK owns and operates 123 tank batteries subject to the system-wide control requirements of Reg. 7 in the 8-hour Ozone Control Area and 305 total tank batteries in the State.

27. These exploration and production facilities produce a mixture of oil (both condensate and crude oil), natural gas, and water. This mixture flows up the well under pressure to the well-head at the surface and then to a device called a separator.

28. The purpose of a separator is to separate the effluent from the well into its constituent parts: oil, natural gas, and water (also known as “produced water”).

29. The oil and produced water, once separated from the natural gas, are temporarily held under pressure in the separator until the liquids reach a set level, at which point valves open and the liquids flow into storage tanks kept at or near atmospheric pressure. This is commonly referred to as a “dump.” During a dump, the oil flows to an oil tank, and the water flows to a produced water tank.

30. When pressurized oil is transferred from a separator to an atmospheric storage tank, the pressure of the oil drops. KPK’s separator pressure is between 40 and 100 pounds per square inch gauge (psig) and the storage tanks are at atmosphere, no greater than 1 psig. This

pressure drop causes some of the hydrocarbons in the oil, including VOC, to vaporize in a phenomenon known as “flashing.” After flashing occurs, the oil continues to emit vapors due to liquid level changes and temperature fluctuations. These are known as “working” and “breathing” (also known as “standing”) losses.

31. The tops of the storage tanks have openings called “thief hatches.” Thief hatches are equipped with gaskets that are supposed to seal tight when the thief hatch is closed.

32. Thief hatches serve two primary purposes. First, they provide access to the contents of the tank for taking samples and measuring the level of the tank (known as “gauging”). Second, they provide a means of (a) relieving pressure from the tank to prevent over-pressurization and (b) eliminating excessive vacuum to prevent tank collapse.

33. To prevent over-pressurization, thief hatches are designed to open (or vent) when the pressure inside the tank exceeds the pressure setting of the thief hatch. Thief hatches should not vent emissions during normal operations, with the exception of active, ongoing maintenance and gauging activities.

34. Thief hatches may also emit vapors to the atmosphere if thief hatch gaskets are worn or otherwise not properly maintained or if the thief hatch does not properly seal.

35. In addition to thief hatches, the storage tanks may also be equipped with separate pressure relief valves (“PRVs”), which are also designed to vent at set pressures to prevent over-pressurization. Like thief hatches, PRVs should not vent emissions during normal operations.

36. The storage tanks, vent lines from storage tanks to a combustor, and all connections, fittings, relief valves (including PRVs and thief hatches), combustors and any other appurtenance used to contain and collect vapors, and to transport or convey the vapors to the combustor, are referred to herein as a “Vapor Control System.” KPK may use a single Vapor

Control System to transmit vapors from one or more tanks to one or more combust

37. The specific tank batteries that are the subject of the violations alleged in this NOV are set forth in Appendix A, incorporated herein by reference.

38. At all times relevant to this NOV, KPK conducted oil and natural gas production operations in the 8-hour Ozone Control Area that are located upstream of a natural gas plant and for which KPK was required to file, and did file, Air Pollution Emission Notices (“APENs”) pursuant to AQCC Regulation No. 3, 5 Code Colo. Regs. § 1001-5 for 123 tank batteries.

39. KPK filed APENs with the Colorado Department of Public Health (“CDPHE”) Air Pollution Control Division (“APCD”) for 44 tank batteries that are the subject of this NOV (*See Appendix A*). The APENs provide specific identification numbers to the facilities.

40. KPK has also filed APENs with CDPHE for 80 additional tank batteries that are not specifically listed in Appendix A, but that are also subject to the system-wide control requirements of Reg. 7.

B. Inspections and Follow-Up Investigation

41. Between October 2013 and April 2015, inspectors from APCD conducted inspections at KPK’s tank batteries in the 8-hour Ozone Control Area. The inspectors observed emissions at 19 tank batteries (all of which are included in the 44 tank batteries listed on Appendix A) using an optical imaging infrared camera (IR camera). At three of the tank systems, inspectors observed emissions on more than one day.

42. On December 9, 2015, APCD issued a Compliance Advisory to KPK, Case No. 2015-106 (the “2015 Compliance Advisory”). The 2015 Compliance Advisory identifies violations of Reg. 7 at the 19 KPK tank batteries.

43. Following the issuance of the 2015 Compliance Advisory, APCD inspectors

continued to conduct additional inspections of KPK tank batteries in the 8-hour Ozone Control Area.

44. On June 21st and 30th and July 22nd, 2016, EPA and APCD inspectors conducted joint inspections of KPK tank batteries in the 8-hour Ozone Control Area. Using an IR camera, APCD and EPA inspectors observed VOC emissions from 12 out of 19 inspected tank batteries (all of which are included in the 44 tank batteries listed on Appendix A).

45. In total, between September 13, 2013, and February 22, 2018, APCD and EPA inspectors have conducted IR camera inspections at 145 of KPK's tank batteries and observed 53 independent events of VOC emissions at 44 unique KPK tank batteries, in addition to other violations of Reg. 7.

46. Pursuant to Section 114(a) of the Act, 42 U.S.C. § 7414(a), in August 2015, EPA requested certain information from KPK about the Vapor Control Systems at a subset of KPK's 123 tank batteries. Based on KPK's response, and subsequent supplemental EPA requests and KPK responses, EPA concludes that:

- a. KPK failed to conduct an engineering design analysis to ensure that its Vapor Control Systems were adequately sized to route all vapors to an emissions control device;
- b. Many of the Vapor Control Systems did not have sufficient capacity to route all vapors from the storage tanks to an emissions control device, causing vapors to be emitted directly to the atmosphere from PRVs, thief hatches or other tank openings; and
- c. KPK's operations and maintenance practices were inadequate to ensure that all storage tank vapors were routed to and incinerated by an emissions control

device.

47. The 44 tank batteries identified in Appendix A include:
 - a. Tank batteries which, based on analysis of information provided by KPK, were not adequately designed to route all vapors to a control device; and/or
 - b. Tank batteries where APCD and EPA inspectors observed VOC emissions using an IR camera, including those tank batteries identified in the 2015 Compliance Advisory and all subsequent inspections discussed above.

48. At all times relevant to this NOV, KPK has designated that VOC emissions from each of the 44 tank batteries were being controlled as part of KPK's 8-hour Ozone Control Area system-wide control strategy to achieve the emission reductions required by Reg. 7, Sec. XII.A.2.

49. Each of the 44 tank batteries are subject to the general requirements of Reg. 7 set forth at Reg. 7, Secs. XII.A.2 & A.7 and XII.D.2.a, b, & c.

FINDINGS OF VIOLATION

50. KPK failed to conduct an engineering design analysis to determine if Vapor Control Systems at no less than 10 tank batteries (all of which are included in the 44 tank batteries listed on Appendix A) have the capacity to route all condensate tank emissions from the peak flow of flash, working and standing losses to an emissions control device. Further, despite issuance of an information request letter, pursuant to Section 114 of the Act, to KPK in August of 2015, and more than two years of ongoing negotiations with EPA and the State, KPK has still failed to conduct an engineering design analysis at its 123 tank batteries in the 8-hour Ozone Control Area.

51. The Vapor Control Systems at some or all 44 tank batteries do not have sufficient capacity to convey all of the condensate tank vapors to the combustors.

52. The capacity of the Vapor Control Systems can be reduced by, among other things, liquids condensing and accumulating in vent lines as vapors cool, clogged flame arrestors or burner trays on combustion devices, or other poor operation and management practices.

53. KPK failed to determine whether, when, or how often the Vapor Control Systems at some or all of the 44 tank batteries become obstructed.

54. When the capacity of a Vapor Control System is exceeded, condensate vapors, including VOC, are emitted directly to the atmosphere through PRVs, thief hatches, or open or partially open vent lines.

55. KPK's operation and maintenance of Vapor Control Systems at some or all of the 44 tank batteries failed to minimize emissions to the maximum extent practicable due, among other things, to one or more of the following reasons:

- a. Not promptly responding to emissions observations and taking appropriate corrective action to minimize the duration and quantity of emissions;
- b. Not taking measures to minimize the occurrence or recurrence of preventable emissions from Vapor Control Systems;
- c. Not promptly cleaning oil stains on condensate storage tanks caused by vapors emanating from PRVs and thief hatches which is indicative of tank vapor emissions so that frequency and timing of emissions could be assessed;
- d. Not keeping and regularly reviewing maintenance records to track recurrent or systemic issues in order to implement proactive measures to replace or upgrade system components to prevent emissions from occurring; and

- e. Not ensuring that all vent lines on Vapor Control Systems have an adequate slope to drain all liquids to adequately sized “drip pots,” not evaluating the frequency of liquids buildup impairing the vapor carrying capacity of the vent lines and not establishing a site-specific line blow-out maintenance schedule, and/or installing line pressure gauges to monitor obstructions in the vent lines and promptly clearing the lines when obstructed.

56. At the 44 Tank Batteries, KPK has violated, and is violating the requirements of Reg. 7, Sec. XII.D.2. that:

- a. “All air pollution control equipment ... shall be operated and maintained consistent with manufacturer specifications and good engineering and maintenance practices . . . In addition, all such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Section XII and to handle reasonably foreseeable fluctuations of volatile organic compounds. Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable;”
- b. “All condensate collection, storage, processing and handling operations, regardless of size, shall be designed, operated, and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the maximum extent practicable.”
- c. “If a flare or other combustion device is used to control emissions of volatile organic compounds to comply with section XII, it shall be enclosed, have no visible emissions, and be designed so that an observer can, by means of visual

observation from the outside of the enclosed flare or combustion device, or by other convenient means . . . determine whether it is operating properly.”

57. At the Boxelder 13-28 tank battery (which is included in the 44 tank batteries listed on Appendix A), KPK violated Reg. 7, Sec. XII.D.2.c due to its failure to properly operate and maintain air pollution control equipment where the combustor (air pollution control equipment) pilot light was observed unlit and not accounted for as downtime.

ENFORCEMENT

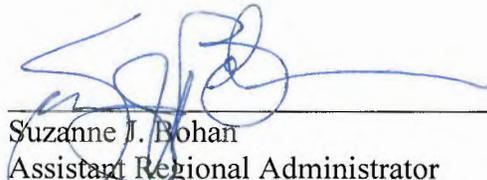
58. Pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), KPK is liable for injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring between January 13, 2009 and November 2, 2015, and up to \$97,229 per day for each violation occurring on or after November 3, 2015, and assessed on or after January 15, 2018. *See* 40 C.F.R. § 19.4; 83 Fed. Reg. 1190, 1193 (Jan. 10, 2018).

EFFECTIVE DATE

59. This NOV is effective immediately upon issuance.

Date Issued:

March 2, 2018



Suzanne J. Bohan
Assistant Regional Administrator
Office of Enforcement, Compliance
and Environmental Justice

APPENDIX A

List of unique sites	AIRs ID county	AIRS ID facility
Genesis #3 - Genesis 9-2 Battery	123	8110
JORDAN 34-2	123	N/A
Rosenfield No. 6-5	005	1536
North Quebec #1, #12, 16-8	001	1623
Becky # 1, 5-6	123	1643
UPRR 23 Pan Am D2 Battery	001	1676
Boxelder 13-28	001	1770
UPRR 23 PAN AM M#3	001	2072
Mahoney-Perrin No.1 & 2	123	2483
KP KAUFFMAN - Grant Tank Battery	123	4186
Teets-Perrin 1,2,3,4 & 5 Battery	123	4275
Lanson Lease Battery	123	4314
Shaw 15-20, 16-20	123	4319
Lansdown Unit D1 and Legg 14-22 Battery	123	4321
Facility #4	123	4328
Facility #3	123	4331
Facility 8 Tank Battery and Wells	123	4332
Spindle Fac 1	123	4334
Bernhardt #7-14	123	6035
Camenisch 32-9/32-10/32-16 Tank Battery	123	6036
Richard R. Findlay Battery	123	6037
Firecracker Tank	123	6038
Frisbee Lease Battery	123	6039
Charter Schneider	123	6041
ANDERSON SPRAGUE	123	6042

Carl Miller Battery & Wells	123	6045
Roy Dutcher C #1, Unit B#1, Unit B32 Bat	123	6049
Ed Kam No. 1-21	123	6050
Marvin E. Schutt Unit Treating Facili...	123	6061
Owen Battery	123	6066
UPRR Pan Am Unit "I" Battery	123	6078
Andreson #1 Battery	123	6302
Salinas 11-24A	123	6498
Camenisch #2 Battery & Wells	123	6553
Hill No. 3-10	123	8129
Rollie J Vincent #3/Battery #1	123	8133
Ed Kam 2-23 Tank Battery	123	8139
Challenger 1-32	123	8153
Tang #1	123	8475
600FSL' & 717' FSL/Camenish #1	123	9182
Koester 18-33 Battery	123	9387
Koester 3-33-29 Tank Battery	123	9529
Spindle Facility #7	123	9A75
#S4WA	123	6073