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**\*\* FILED \*\***  
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UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 HAWTHORNE STREET  
SAN FRANCISCO, CALIFORNIA 94105

_____ )	Docket No. CAA-09-2016-0001
In the Matter of: )	
)	
Halliburton Energy Services, Inc., )	CONSENT AGREEMENT AND
)	FINAL ORDER PURSUANT TO
Respondent )	40 C.F.R. §§ 22.13 and 22.18
_____ )	

**I. CONSENT AGREEMENT**

**A. PRELIMINARY STATEMENT**

1. This is a civil administrative penalty assessment proceeding brought under section 113(d) of the Clean Air Act (the “Act”), 42 U.S.C. § 7413(d), and sections 22.13 and 22.18 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (“Consolidated Rules”), as codified at 40 C.F.R. Part 22. In accordance

with 40 C.F.R. §§ 22.13 and 22.18, entry of this Consent Agreement and Final Order (“CAFO”) simultaneously initiates and concludes this matter.

2. Complainant is the Director of the Enforcement Division, United States Environmental Protection Agency, Region IX (the “EPA”), who has been duly delegated the authority to initiate and settle civil administrative penalty proceedings under section 113(d) of the Act.
3. Respondent is Halliburton Energy Services, Inc. (“Halliburton” or “Respondent”), a corporation that develops and provides oil and gas exploration, development, and production products and services. It is a motor carrier that owns and operates diesel-fueled vehicles driven in California.
4. Complainant and Respondent, having agreed that settlement of this action is in the public interest, consent to the entry of this CAFO without adjudication of any issues of law or fact herein, and Respondent agrees to comply with the terms of this CAFO.

#### B. JURISDICTION

5. Pursuant to section 113(d)(1) of the Act, 42 U.S.C. § 7413(d)(1), EPA and the United States Department of Justice jointly determined that this matter, which involves alleged violations that occurred more than one year before the initiation of this proceeding, is appropriate for an administrative penalty assessment.
6. In satisfaction of the notice requirements of section 113(a) of the Act, 42 U.S.C. § 7413(a), on May 12, 2015, EPA issued to Respondent a notice of violation (“NOV”) and provided a copy of the NOV to the California Air Resources Board, providing notice to both that EPA found that Respondent

committed the alleged violations described in Section D of this CAFO and providing Respondent an opportunity to confer with the EPA. On June 11, 2015, representatives of Respondent and EPA discussed the NOV.

### C. GOVERNING LAW

#### Clean Air Act

7. Pursuant to section 107(d) of the Act, 42 U.S.C. § 7407(d), the Administrator promulgated lists of attainment status designations for each air quality control region (“AQCR”) in every state. These lists identify the attainment status of each AQCR for each of the criteria pollutants. The attainment status designations for California AQCRs are listed at 40 C.F.R. § 81.305.
8. There are seven AQCRs designated as nonattainment for fine particulate matter (i.e., PM<sub>2.5</sub>) in California, including all of the San Joaquin Valley and the Los Angeles-South Coast Air Basin. *See* 40 C.F.R. § 81.305.
9. Section 110(a) of the Act requires that all states adopt SIPs that provide for the implementation, maintenance and enforcement of primary and secondary air quality standards. 42 U.S.C. § 7410(a).
10. A person’s failure to comply with any approved regulatory provision of a SIP renders the person in violation of an applicable implementation plan and subject to enforcement under section 113(a)(1) of the Act. 42 U.S.C. § 7413(a)(1).

#### Title 13, Section 2025 of California Code of Regulations: On-Road Heavy-Duty Diesel Vehicles

11. On December 14, 2011, California Air Resources Board (“ARB”) amended its “Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants From In-Use Heavy-Duty Diesel-Fueled

Vehicles,” codified at title 13, section 2025 of the California Code of Regulations (the “Truck and Bus Regulation”).

12. The Truck and Bus Regulation was incorporated into the federal SIP on May 4, 2012. *See* 77 Fed. Reg. 20308 (April 4, 2012).
13. Under section 2025(d)(17) of the Truck and Bus Regulation, “Diesel Particulate Filter” means “an emission control technology that reduces diesel particulate matter emissions by directing the exhaust through a filter that physically captures particulates but permits gases to flow through. . . .”
14. Under section 2025(d)(18) of the Truck and Bus Regulation, “Diesel Particulate Matter (PM)” means “the particles found in the exhaust of diesel fueled compression ignition engines. . . .”
15. Under section 2025(d)(28) of the Truck and Bus Regulation, “Fleet” means “one or more vehicles, owned by a person, business, or government agency, traveling in California and subject to this regulation.”
16. Under section 2025(d)(29) of the Truck and Bus Regulation, “Fleet Owner” means, with certain exceptions, “either the person registered as the owner or lessee of a vehicle by the California Department of Motor Vehicles (DMV), or its equivalent in another state, province, or country, as evidenced on the vehicle registration document carried in the vehicle.”
17. Under section 2025(d)(47) of the Truck and Bus Regulation, “Person” means “an individual, corporation, business trust, estate, trust, partnership, Limited Liability Company, association, joint venture, government, governmental subdivision,

agency, or instrumentality, public corporation, or any other legal or commercial entity.”

18. Under section 2025(d)(48) of the Truck and Bus Regulation, “PM BACT” means “the technology employed on the highest level VDECS for PM or an engine that is equipped with an original equipment manufacturer (OEM) diesel particulate filter and certified to meet 0.01 g/bhp-hr [british horsepower per hour] certification standard.”
19. Under section 2025(d)(60) of the Truck and Bus Regulation, “Verified Diesel Emission Control Strategy (VDECS)” means “an emissions control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the Verification Procedures. VDECS can be verified to achieve Level 1 diesel PM reductions (25 percent), Level 2 diesel PM reductions (50 percent), or Level 3 diesel PM reductions (85 percent). VDECS may also be verified to achieve NOx reductions. . . .”
20. The Truck and Bus Regulation applies to diesel-fueled trucks and buses that are privately or federally owned, and to publicly and privately owned school buses, that have a manufacturer's gross vehicle weight rating (“GVWR”) greater than 14,000 pounds. The ARB Rule requires, in part, Fleet Owners to upgrade their vehicles to meet specific performance standards for oxides of nitrogen (“NOx”) and particulate matter (“PM”).
21. Under section 2025(d)(3) of the Truck and Bus Regulation, “2010 Model Year Emissions Equivalent Engine” means “emissions from: (A) An engine certified to the 2004 through 2006 model year heavy-duty diesel engine emissions standard

that is equipped with the highest VDECS and reduces NOx emissions by at least 85 percent; or (B) An engine that was built to the 2004 engine emission standard and was not used in any manufacturer's averaging, banking, or trading program that is equipped with the highest VDECS and reduces NOx exhaust emissions by at least 85 percent; or (C) An engine certified to the 2007 model year heavy-duty diesel engine emissions standard that meets PM BACT and reduces NOx exhaust emissions by more than 70 percent; or (D) An engine certified to the 2010 model year or newer heavy-duty diesel engine emissions standard that meets PM BACT; or (E) A heavy-duty engine certified to 0.2 g/bhp-hr or less NOx emissions level and 0.01 g/bhp-hr or less PM emissions level, or (D) An off-road engine certified to the Tier 4 Final engine emissions standard."

22. Section 2025(g) of the Truck and Bus Regulation requires subject vehicles with GVWR of over 26,000 pounds to meet the PM BACT requirements and upgrade to a 2010 Model Year Emissions Equivalent Engine starting January 1, 2012 according to the compliance schedule set forth in Table 2:
- a. By January 1, 2012, all subject vehicles with an engine model year of 1996 through 1999 must install a PM Filter.
  - b. By January 1, 2013, all subject vehicles with an engine model year of 2000 through 2004 must install a PM Filter.
  - c. By January 1, 2014, all subject vehicles with an engine model year of 2005 through 2006 must install a PM Filter.
  - d. Between January 1, 2015 through January 1, 2023, all subject vehicles must upgrade to a 2010 Model Year Emissions Equivalent Engine depending on their engine model year.

23. Section 2025(x)(1) of the Truck and Bus Regulation provides that “[t]he vehicle owner shall comply with all applicable requirements and compliance schedules set forth in this regulation.”
24. Section 2025(x)(2) of the Truck and Bus Regulation provides that “[a]ny in-state or out-of-state motor carrier, California broker, or any California resident who operates or directs the operation of any vehicle subject to this regulation shall verify that each hired or dispatched vehicle is in compliance with the regulation and comply with the record keeping requirements of Section 2025(s)(4).”
25. Under section 2025(s)(4) of the Truck and Bus Regulation, motor carriers or brokers must maintain bills of lading and other documentation identifying the motor carrier or broker who hired or dispatched the vehicle and the vehicle dispatched.

#### D. ALLEGED VIOLATIONS OF LAW

26. Respondent is a “Person” as that term is defined under section 302(e) of the Act, 42 U.S.C. § 7602(e), and section 2025(d)(47) of the Truck and Bus Regulation.
27. Respondent has a “Fleet” of vehicles as that term is defined under section 2025(d)(28) of the Truck and Bus Regulation, and is a “Fleet Owner” as that term is defined under section 2025(d)(29) of the Truck and Bus Regulation.
28. Respondent owned and operated 61 diesel-fueled vehicles without diesel particulate filters (“DPFs”) during 2012-2014.
29. Respondent violated section 2025(g) of the Truck and Bus Regulation by failing to timely install DPFs on these 61 diesel-fueled vehicles that it owned and operated in California, from or about May 4, 2012 through December 31, 2014.

30. Respondent hired 13 motor carriers between May 4, 2012 and June 16, 2014 but failed to verify the compliance of these companies with the Truck and Bus Regulation. This included four motor carriers hired from May 4, 2012 to December 31, 2012, six motor carriers hired from January 1, 2013 to December 31, 2013, and three motor carriers from January 1, 2014 to December 31, 2014.
31. Respondent violated section 2025(x)(2) of the Truck and Bus Regulation by failing to verify that each of the 13 motor carriers it hired between May 4, 2012 and June 16, 2014 was in compliance with the Truck and Bus Regulation.
32. Respondent violated section 2025(x)(1) of the Truck and Bus Regulation by failing to comply with all applicable requirements and compliance schedules set forth in the Truck and Bus Regulation.

E. TERMS OF CONSENT AGREEMENT

33. For the purpose of this proceeding, as required by 40 C.F.R. § 22.18(b)(2), Respondent:
  - a. admits that EPA has jurisdiction over the subject matter alleged in this CAFO and over Respondent;
  - b. neither admits nor denies the specific factual allegations contained in Section I.D of this CAFO;
  - c. consents to the assessment of a civil penalty under this Section, as stated below;
  - d. consents to the conditions specified in this CAFO, including performance of Supplemental Environmental Projects set forth in Section I.E of this CAFO;



- e. waives any right to contest the allegations set forth in Section I.D of this CAFO; and
- f. waives its rights to appeal the proposed Order contained in this CAFO.

Civil Penalty

34. Respondent agrees to:
- a. pay the civil penalty of ONE HUNDRED FIFTY-FOUR THOUSAND AND FOUR HUNDRED DOLLARS (\$154,400) (“EPA Penalty”) within 30 calendar days of the Effective Date of this CAFO;  
and
  - b. pay the EPA Penalty using any method, or combination of methods, provided on the website <http://www2.epa.gov/financial/additional-instructions-making-payments-epa>, and identifying each and every payment with “Docket No. CAA-09-2016-0001.” Within 24 hours of payment of the EPA Penalty, send proof of payment to Janice Chan at:

Mail Code (ENF-2-1)  
Enforcement Division  
U.S. Environmental Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

and at [chan.janice@epa.gov](mailto:chan.janice@epa.gov) (“proof of payment” means, as applicable, a copy of the check, confirmation of credit card or debit card payment, confirmation of wire or automated clearinghouse transfer, and any other information required to demonstrate that payment has been made according to the EPA requirements, in the amount due, and identified with “Docket No. CAA-09-2016”).

35. If Respondent fails to pay the civil administrative penalty specified in Paragraph 34(a) of this CAFO within 30 calendar days after the effective date of this CAFO, then Respondent shall pay to EPA a stipulated penalty in the amount of ONE THOUSAND DOLLARS (\$1,000.00) for each day the default continues, upon written demand by EPA.
36. If Respondent fails to timely pay any portion of the penalty assessed under this CAFO, EPA may:
- a. request the Attorney General to bring a civil action in an appropriate district court to recover: the amount assessed; interest at rates established pursuant to 26 U.S.C. § 6621(a)(2); the United States' enforcement expenses; and a 10 percent quarterly nonpayment penalty, 42 U.S.C. § 7413(d)(5);
  - b. refer the debt to a credit reporting agency or a collection agency, 42 U.S.C. § 7413(d)(5), 40 C.F.R. §§ 13.13, 13.14, and 13.33;
  - c. collect the debt by administrative offset (i.e., the withholding of money payable by the United States to, or held by the United States for, a person to satisfy the debt the person owes the Government), which includes, but is not limited to, referral to the Internal Revenue Service for offset against income tax refunds, 40 C.F.R. Part 13, Subparts C and H; and
  - d. suspend or revoke Respondent's licenses or other privileges, or (ii) suspend or disqualify Respondent from doing business with EPA or engaging in programs EPA sponsors or funds, 40 C.F.R. § 13.17.

Conditions - Supplemental Environmental Projects

37. As a condition of settlement, Respondent agrees to complete the following Supplemental Environmental Projects (“SEPs”) which are further described in Appendices A and B which are hereby incorporated by reference:
- a. School Air Filtration System (“AFS”) SEP
    - i. Respondent has selected the South Coast Air Quality Management District (“SCAQMD”) as the SEP Implementer for the installation of at least one AFS to reduce harmful air pollutants in classrooms in schools in the South Coast Air Basin.
    - ii. Respondent shall provide ONE HUNDRED EIGHTY THOUSAND AND SIX HUNDRED DOLLARS (\$180,600) to the SEP Implementer within 60 calendar days of the effective date of this CAFO to be utilized in the AFS SEP.
    - iii. The AFS SEP shall be implemented as set forth in Appendix A and Paragraphs 37 through 39 of this CAFO in compliance with the schedule and the other terms of this CAFO.
    - iv. The AFS SEP shall be for the purpose of reducing environmental harm allegedly caused by Respondent, as set forth in Section I.D of this CAFO. The funding shall be utilized to: 1) install high performance filtration systems in classrooms and common areas, 2) post installation reports and test results to verify the performance of the systems, 3) train school staff on the maintenance of these AFSs to ensure proper and efficient operation, 4) provide a three year supply of replacement filters, 5) prepare reports to document the status of the SEP

and 6) provide for reasonable administrative costs charged by the AFS SEP Implementer for implementing the AFS SEP.

v. Respondent acknowledges that the AFS SEP is completed only if Respondent demonstrates that the AFS SEP funds have been spent by the AFS SEP Implementer, and that the expenditure of AFS SEP funds meet all requirements of Paragraphs 37 through 39 and Appendix A of this CAFO. Respondent may place reasonable reliance on the accuracy of reports or other information provided by the AFS SEP Implementer to satisfy the obligation of performing and completing the AFS SEP.

b. Healthy Air Living Schools (“HALS”) SEP

i. Respondent has selected the San Joaquin Valley Air Pollution Control District (“SJVAPCD”) as the HALS SEP implementer to provide schools with hourly real time data and other tools, outreach, and information to protect students from exposure to unhealthy outdoor air. The HALS SEP is targeted at school parents (including those that have children with asthma); school and district personnel; and school board members.

ii. Respondent shall provide SEVENTY-FIVE THOUSAND DOLLARS (\$75,000) to the HALS SEP Implementer within 60 calendar days of the effective date of this CAFO to be utilized in the HALS SEP.

iii. The HALS SEP shall be implemented as set forth in Appendix B and Paragraphs 37 through 39 of this CAFO in compliance with the schedule and the other terms of this CAFO.

iv. The HALS SEP shall be for the purpose of reducing environmental harm allegedly caused by Respondent, as set forth in Section I.D of this CAFO. The funding shall be utilized for: 1) multi-lingual outreach materials not currently available through the existing HALS Program; 2) outreach to school parents (including those that have children with asthma), school and district personnel, school board members and non-profit members; 3) enrolling new schools into HALS; 4) additional training for new schools and schools that have previously enrolled in HALS; 5) anti-idling signs; 6) preparing reports to document the status of the SEP; and 7) reasonable administrative costs charged by the HALS SEP Implementer for implementing the HALS SEP.

v. Respondent acknowledges that the HALS SEP is completed only if Respondent demonstrates that the HALS SEP funds have been spent by the HALS SEP Implementer, and that the expenditure of funds for the HALS SEP meet all requirements of Paragraphs 37 through 39 and Appendix A of this CAFO. Respondent may place reasonable reliance on the accuracy of reports or other information provided by the HALS SEP Implementer to satisfy the obligation of performing and completing the HALS SEP.

38. Respondent shall maintain, and present to EPA upon request, all documents to substantiate the funds expended and work completed to implement the SEPs described in Paragraphs 37 through 39 and Appendices A and B of this CAFO, and shall provide these documents to EPA within thirty (30) calendar days of any request for the documents. Respondent may place reasonable reliance on the

accuracy of reports or other information provided by the SEP Implementers to satisfy this obligation.

39. Respondent certifies the truth and accuracy of each of the following:
- a. That, as of the date of executing this CAFO, Respondent is not required to perform or develop the SEPs by any federal, state, or local law or regulation and is not required to perform or develop the SEPs by agreement, grant, or as injunctive relief awarded in any other action in any forum;
  - b. That the SEPs are not a project that Respondent was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this CAFO;
  - c. That Respondent had not received and will not receive credit for the SEPs in any other enforcement action;
  - d. That Respondent will not receive reimbursement for any portion of the SEPs from another person or entity;
  - e. That for federal income tax purposes, Respondent agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEPs;
  - f. That it is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEPs described in this CAFO; and
  - g. That it has inquired of the SEP Implementers as to whether either is a party to an open federal financial assistance transaction that is funding or

could fund the same activity as the SEPs and has been informed by the SEP Implementers that they are not a parties to such a transaction.

40. In the event that Respondent fails to comply with one or more requirements of the SEPs set forth in Paragraphs 37 through 39 and Appendices A and B of this CAFO, the following provisions for stipulated penalties shall apply:
- Respondent agrees to pay Complainant a stipulated penalty in the following amounts for each day the default continues, up to but not to exceed FOUR HUNDRED AND FIFTY THOUSAND DOLLARS (\$450,000):

<b>VIOLATION</b>	<b>STIPULATED PENALTY</b>
a. Failure to pay \$180,600 to SCAQMD or \$75,000 to SJVAPCD, as SEP Implementers, within 60 calendar days from the effective date of this CAFO	\$1,000 per calendar day after 60 days from the effective date for this CAFO
b. Failure to timely submit a complete and adequate SEP Completion Report	\$250 per day for the first thirty (30) calendar days that report is late, then \$500 per day thereafter

- a. All penalties shall begin to accrue on the date that performance is due or a violation of this CAFO occurs and shall continue to accrue through the final day of correction of the noncompliance. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations.
- b. All penalties owed to EPA under this Section shall be due within thirty (30) calendar days of Respondent's receipt of a notification of noncompliance and request for payment from EPA. Such notification shall describe the noncompliance and shall indicate the amount of penalties due. Interest at the current rate published by the United States Treasury, as described at 40 C.F.R. § 13.111, shall begin to accrue on the unpaid balance at the end of the thirty-day period.

- c. Payment of stipulated penalties shall be made in accordance with the procedure set forth for payment of the penalty in Section E of this CAFO.
  - d. All payments shall indicate Respondent's name and address, and the EPA docket number assigned to this action.
  - e. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this CAFO.
  - f. Where all elements of a SEP have been satisfactorily completed, but the Respondent has expended less than the agreed-upon amount of the SEP, EPA may, in its discretion, choose to reduce or waive stipulated penalties otherwise due under the settlement agreement.
  - g. The payment of stipulated penalties specified in this Section shall not be deducted by Respondent or any other person or entity for federal, state or local taxation purposes.
41. Any public statement, oral or written, in print, film, or other media, made by Respondent making reference to the SEP under this CAFO, from the date of its execution of this CAFO, shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, In the Matter of Halliburton Energy Services, Inc., (Docket No. CAA-09-2016-0001), taken by the U.S. Environmental Protection Agency to enforce federal laws."
42. The provisions of this CAFO shall apply to and be binding upon Respondent and its officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns. Respondent must give written notice and a copy of this CAFO to any successors in interest prior to any transfer of



ownership or control of any portion of or interest in Respondent. Simultaneously with such notice, Respondent shall provide written notice of such transfer, assignment, or delegation to EPA. In the event of any such transfer, assignment, or delegation, Respondent shall not be released from the obligations or liabilities of this CAFO unless EPA has provided written approval of the release of said obligations or liabilities.

43. By signing this CAFO, Respondent acknowledges that this CAFO will be available to the public and agrees that this CAFO does not contain any confidential business information or personally identifiable information.
44. By signing this CAFO, the undersigned representative of Complainant and the undersigned representative of Respondent each certify that he or she is fully authorized to execute and enter into the terms and conditions of this CAFO and has the legal capacity to bind the party he or she represents to this CAFO.
45. By signing this CAFO, Respondent certifies that the information it has supplied concerning this matter was at the time of submission true, accurate, and complete for each such submission, response, and statement. Respondent acknowledges that there are significant penalties for submitting false or misleading information, including the possibility of fines and imprisonment for knowing submission of such information, under 18 U.S.C. § 1001.
46. Each party shall bear its own attorney's fees, costs, and disbursements incurred in this proceeding.

F. EFFECT OF CONSENT AGREEMENT AND ATTACHED FINAL ORDER

47. In accordance with 40 C.F.R. § 22.18(c), completion of the terms of this CAFO resolves only Respondent's liability for federal civil penalties for the violations and facts specifically alleged above.
48. Penalties paid pursuant to this CAFO shall not be deductible for purposes of federal taxes.
49. This CAFO constitutes the entire agreement and understanding of the parties and supersedes any prior agreements or understandings, whether written or oral, among the parties with respect to the subject matter hereof.
50. Any violation of this Order may result in a civil judicial action for an injunction or civil penalties of up to \$37,500 per day per violation, or both, as provided in section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), as well as criminal sanctions as provided in section 113(c) of the Act, 42 U.S.C. § 7413(c). EPA may use any information submitted under this Order in an administrative, civil judicial, or criminal action.
51. Nothing in this CAFO shall relieve Respondent of the duty to comply with all applicable provisions of the Act and other federal, state, or local laws or statutes, nor shall it restrict EPA's authority to seek compliance with any applicable laws or regulations, nor shall it be construed to be a ruling on, or determination of, any issue related to any federal, state, or local permit.
52. Nothing herein shall be construed to limit the power of EPA to undertake any action against Respondent or any person in response to conditions that may present an imminent and substantial endangerment to the public health, welfare, or the environment.

53. EPA reserves the right to revoke this CAFO and settlement penalty if and to the extent that EPA finds, after signing this CAFO, that any information provided by Respondent was materially false or inaccurate at the time such information was provided to EPA, and EPA reserves the right to assess and collect any and all civil penalties for any violation described herein. EPA shall give Respondent notice of its intent to revoke, which shall not be effective until received by Respondent in writing.

G. EFFECTIVE DATE

54. Respondent and Complainant agree to issuance of the attached Final Order. Upon filing, EPA will transmit a copy of the filed CAFO to the Respondent. This CAFO shall become effective after execution of the Final Order by the Regional Judicial Officer on the date of filing with the Regional Hearing Clerk.

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The foregoing Consent Agreement In the Matter of Halliburton Energy Services, Inc., and appendices thereto, Docket No. CAA-09-2016-0001, is hereby stipulated, agreed, and approved for entry.

FOR RESPONDENT:


  
Signature \_\_\_\_\_

8-30-16  
Date \_\_\_\_\_

Printed Name: James Ferguson

Title: Senior VP and Deputy General Counsel

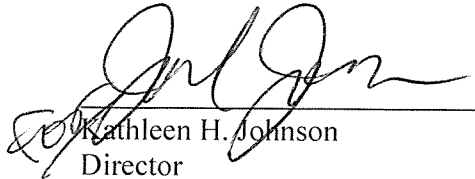
Address: 3000 N. Sam Houston Pkwy, Houston Texas 77032

Respondent's Federal Tax Identification Number: 

The foregoing Consent Agreement In the Matter of Halliburton Energy Services, Inc., and appendices thereto, Docket No. CAA-09-2016-0001, is hereby stipulated, agreed, and approved for entry.

FOR COMPLAINANT:

9/23/16  
DATE

  
\_\_\_\_\_  
Kathleen H. Johnson  
Director  
Enforcement Division  
United States Environmental  
Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

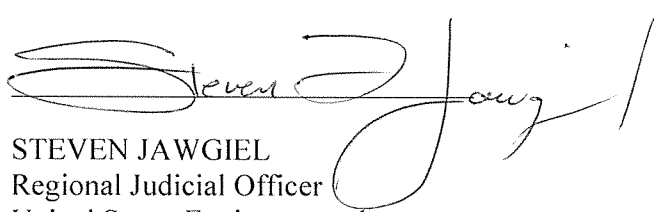
II. FINAL ORDER

EPA Region IX and Halliburton Energy Services, Inc., having entered into the foregoing Consent Agreement,

IT IS HEREBY ORDERED that this CAFO (Docket No. CAA-09-2016-0001) be entered, and Respondent shall pay a civil administrative penalty in the amount of ONE HUNDRED FIFTY-FOUR THOUSAND AND FOUR HUNDRED DOLLARS (\$154,400) and otherwise comply with the terms set forth in the CAFO.

09/29/16

DATE

  
STEVEN JAWGIEL  
Regional Judicial Officer  
United States Environmental  
Protection Agency, Region IX

**APPENDIX A**  
**AIR FILTRATION SYSTEM SUPPLEMENTAL ENVIRONMENTAL PROJECT**  
**("AFS SEP")**

**A. SEP Purpose**

The AFS SEP shall be for the purpose of installing AFSs on school sites to reduce exposures to Ultrafine Particles<sup>1</sup> ("UFP"), Black Carbon ("BC"), and Fine Particulate Matter ("PM<sub>2.5</sub>") emitted from trucks operating on highways near the school sites.

**B. SEP Implementation**

1. Halliburton Energy Services, Inc. ("Halliburton"), has selected the South Coast Air Quality Management District ("SCAQMD") as the SEP Implementer to implement the AFS SEP.
2. Halliburton shall provide \$180,600 to the SEP Implementer within sixty (60) days of the effective date of this CAFO for the purpose of accomplishing the AFS SEP in accordance with Paragraphs 37 through 39 and Appendix A of this CAFO.
3. The SEP funds shall be expended in accordance with Paragraphs 37 through 39 and Appendix A of this CAFO to: 1) install high performance filtration systems in classrooms and common areas, 2) post installation reports and test results to verify the performance of the systems, 3) train school staff on the maintenance of these AFSs to ensure proper and efficient operation, 4) provide a three year supply of replacement filters, 5) prepare reports to document the status of the SEP and 5) provide for reasonable administrative costs charged by the SEP Implementer for implementing the SEP.
4. Halliburton shall purchase at least one AFS for at least one entire school. For purposes of Appendix A of this CAFO, "entire school" shall mean all classrooms and common areas in a school for which the installation of an air filtration unit is reasonably practicable and must include a substantial percentage of total classrooms and common areas in the school. If there are remaining funds, Halliburton shall purchase an additional AFS for another entire school(s). If there are insufficient funds to purchase an additional AFSs for an entire school, Halliburton can direct the remaining balance to pay for the cost of additional replacement filters, future maintenance costs, AFS for a classroom or common area within a school (but not the entire school), and other associated costs for the AFS(s) purchased.
5. The SEP Implementer will evaluate potential school sites in terms of proximity to major roadways and the type of the current heating, ventilation and air conditioning ("HVAC") units. School boundaries will be located within approximately 500 feet of major roadways. Site visits shall be conducted as necessary to verify the existing HVAC

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<sup>1</sup> UFP are particles roughly defined by an aerodynamic diameter less than 0.1 µm, estimated by measuring the total number concentration of all airborne particles down to at least 10 nm in diameter.

system/specifications. The SEP Implementer will determine the type of AFS to install in accordance with the Performance Specifications identified below. Consideration will be given to whether the AFS has been installed in schools/classrooms located in close proximity to major sources of particulate matter and whether the AFS vendor or contractor have different approaches to an AFS for different classroom conditions. The SEP Implementer shall consult, as appropriate, other air pollution control agencies that have programs installing AFSs.

6. The SEP Implementer shall present a detailed schedule for the installation of the AFSs. Installation and other implementation issues shall be coordinated with the appropriate school and school district.
7. The SEP Implementer shall ensure that there is a maintenance program established to provide training for the selected school(s) maintenance staff for ongoing maintenance of the AFSs following installation of the AFSs at the school. An operation and maintenance manual shall be provided to the school/school districts, and shall include, but not be limited to, the required frequency for cleaning and replacement of the filters and other maintenance procedures.
8. Within 60 days after completion of the AFS SEP, Halliburton shall submit an AFS SEP Completion Report to EPA at the address specified in Paragraph E herein. Halliburton shall include the following information in the AFS SEP Completion Report: 1) the type(s) of AFSs installed, 2) the number of schools/classrooms/common areas where AFSs are installed, 3) the expenditures associated with the project, 4) the operation and maintenance manual, and 5) a written certification of project completion. For purposes of the AFS SEP Completion Report, Halliburton may place reasonable reliance on the accuracy of reports or other information provided to it by the SEP Implementer. The AFS SEP Completion Report should be certified by an appropriate corporate official.

If EPA concludes, based on the AFS SEP Completion Report, that the SEP has been performed and completed in accordance with the CAFO, EPA will approve completion of the SEP for purposes of the CAFO.

### **C. Environmental Benefit**

Exposure to traffic-related air pollution has been linked to a variety of short-term and long-term health effects, including asthma, reduced lung function, impaired lung development in children, and cardiovascular effects in adults. Children's exposure to traffic-related air pollution while at school is a concern because many schools across the country are located near heavily traveled roadways and children are particularly vulnerable to air traffic pollution.

[http://www.epa.gov/sites/production/files/2015-10/documents/ochp\\_2015\\_near\\_road\\_pollution\\_booklet\\_v16\\_508.pdf](http://www.epa.gov/sites/production/files/2015-10/documents/ochp_2015_near_road_pollution_booklet_v16_508.pdf). Page 2. Certain filtration systems have been independently tested and proven to remove up to 87 to 96% of ultra-fine particulates and black carbon from classrooms.



## **D. Performance Specifications**

In order to ensure that the environmental benefit will be achieved and that the AFS will function effectively within the classroom setting, the following performance specifications are hereby incorporated, as required, by the AFS SEP:

### 1. Definitions.

- a. Baseline Conditions – Percentage reduction in the indoor concentration of a particular air pollutant relative to its current outdoor level before installation of any air filtration device.
- b. Minimum Average Removal Efficiency – Minimum percentage reduction in the indoor air concentration of a particular pollutant relative to its concurrent outdoor level after installation of one or more air filtration devices, averaged over all time periods and installations.
- c. Potential Average Removal Efficiency – Potential percentage reduction in the indoor concentration of a particular pollutant relative to its concurrent outdoor level after installation of one or more air filtration devices, demonstrated for several time periods and installations.

### 2. Removal Efficiency Standard

The AFS must demonstrate, from Baseline Conditions, Minimum Average Removal Efficiencies of 50% for UFC, BC and PM<sub>2.5</sub> and should have demonstrated Potential Average Removal Efficiencies of at least 90% for the same pollutants.

### 3. Minimal Impact on Air Flow

The AFS shall lower the indoor concentrations of pollutants identified in D(2) above, but shall not significantly reduce the existing air flow rates through the HVAC system and shall not require higher power consumption to achieve similar flow rates.

### 4. Low Noise

The AFS shall meet a 45 decibels noise threshold for any new in-classroom equipment, a standard required by many school districts.

### 5. Filter Lifetime

To minimize labor costs associated with filter replacement, the demonstrated lifetime of the installed high-performance filters should be at least three months.

**E. Schedule**

Halliburton shall submit the funds for the AFS SEP within 60 days of the effective date of this CAFO to the SEP Implementer.

The AFS SEP shall be completed no later than two years after the effective date of this CAFO.

Within 60 days of completion of the AFS SEP, Halliburton shall submit the AFS SEP Completion Report to:

Janice Chan  
Mail Code (ENF-2-1)  
Enforcement Division  
U.S. Environmental Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

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**APPENDIX B**  
**HEALTHY AIR LIVING SCHOOLS SUPPLEMENTAL ENVIRONMENTAL PROJECT**  
**("HALS SEP")**

**A. SEP Overview**

The HALS SEP shall be for the purpose of providing schools in San Joaquin Valley Air Pollution Control District ("SJVAPCD") with hourly real time data and other tools, outreach, and information to protect students from exposure to unhealthy outdoor air. The HALS SEP is targeted at school parents (including those that have children with asthma); school and district personnel; school board members; and non-profit members, such as the asthma coalition.

As part of its settlement with the Environmental Protection Agency, Halliburton Energy Services, Inc. ("Halliburton"), with the assistance of the SJVAPCD ("the SEP Implementer"), will complete a SEP that will fund an expanded HALS outreach program, which will be implemented by the SJVAPCD and its contractor, the Central California Asthma Collaborative ("CCAC") in schools within the Kern County/City of Bakersfield area.

**B. SEP Implementation**

1. Halliburton shall provide \$75,000 to the SEP Implementer within sixty (60) days of the effective date of this CAFO for the purpose of accomplishing the HALS SEP in accordance with Paragraphs 37 through 39 and Appendix B of this CAFO.
2. The SEP funds shall be expended in accordance with Paragraphs 37 through 39 and Appendix B of this CAFO for: 1) multi-lingual outreach materials not currently available through the existing HALS Program; 2) outreach to school parents (including those that have children with asthma), school and district personnel, and school board members; 3) enrolling new schools into HALS; 4) additional training for new schools and schools that have previously enrolled in HALS; 5) anti-idling signs; 6) reports to document the status of the SEP; and 7) reasonable administrative costs for implementing the SEP.
3. Within 60 days after completion of the SEP, Halliburton shall submit an AFS SEP Completion Report to EPA at the address specified in Paragraph E herein. Halliburton shall include the following information in the AFS SEP Completion Report: 1) number of new schools enrolled in HALS, 2) number of training sessions conducted for HALS, the nature of the training provided, 3) number and nature of outreach meetings conducted, 4) a copy of the materials produced for HALS, 5) number of anti-idling signs, and 6) a written certification of project completion. For purposes of the AFS SEP Completion Report, Halliburton may place reasonable reliance on the accuracy of reports or other information provided to it by the SEP Implementer. The AFS SEP Completion Report should be certified by an appropriate corporate official.

If EPA concludes, based on the AFS SEP Completion Report, that the SEP has been performed and completed in accordance with the CAFO, EPA will approve completion of the SEP for purposes of the CAFO.

### **C. Environmental Benefit**

The HALS SEP will address two major components of its program by developing public education tools designed to provide outreach in schools to reduce air pollution exposure at schools. One component of the program enables teachers, coaches, and school officials to reduce children's exposure to the harmful air pollutants during this important window of vulnerability by adjusting physical activities such as recess, sporting events, and PE classes, when necessary. During intense exercise, children's ventilation rates are increased, more mouth breathing occurs, bypassing nasal filtration and air is forced deeper into the lungs. These factors increase children's exposure to harmful air pollutants such as ozone and PM<sup>2.5</sup> and increase the risk of asthma. [http://www.epa.gov/sites/production/files/2015-10/documents/ochp\\_2015\\_near\\_road\\_pollution\\_booklet\\_v16\\_508.pdf](http://www.epa.gov/sites/production/files/2015-10/documents/ochp_2015_near_road_pollution_booklet_v16_508.pdf). Page 2.

The second component of the program provides outreach and updated information to teachers and parents to help raise awareness around the public health issue of idling of buses and automobiles near schools to reduce the emission of harmful mobile air source toxics at schools and improve children's health. Idling vehicles contribute to air pollution and emit air toxics, which are pollutants known or suspected to cause cancer or other serious health effects. Monitoring at schools has shown elevated levels of benzene, formaldehyde, acetaldehyde and other air toxics during the afternoon hour coinciding with parents picking up their children. <https://www.epa.gov/region8/idle-free-schools>.

### **D. Schedule**

Halliburton shall submit the funds for the SEP within 60 days of the effective date of this CAFO to the SEP Implementer.

The SEP shall be completed no later than two years after the effective date of this CAFO.

Within 60 days of completion of the SEP, Halliburton shall submit the HALS SEP Completion Report to:

Janice Chan  
Mail Code (ENF-2-1)  
Enforcement Division  
U.S. Environmental Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

CERTIFICATE OF SERVICE

I certify that the original of the fully executed Consent Agreement and Final Order in the matter of Halliburton Energy Services, Inc. (**Docket #s: CAA-09-2016-0001**) was filed with the Regional Hearing Clerk, U.S. EPA, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, and that a true and correct copy of the same was sent to the following parties:

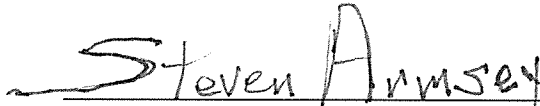
A copy was mailed via CERTIFIED MAIL to:

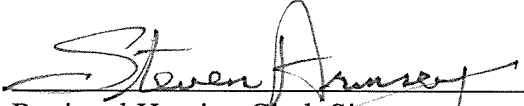
James Ferguson  
Senior VP and Deputy General Counsel  
Halliburton Energy Services, Inc.  
3000 N. Sam Houston Parkway  
Houston, TX 77032

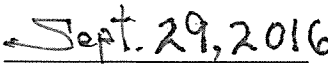
**CERTIFIED MAIL NUMBER: 7015 0640 0001 1121 7536**

An additional copy was hand-delivered to the following U.S. EPA case attorney:

Daniel Reich  
Assistant Regional Counsel (ORC-2)  
U.S. EPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

  
Regional Hearing Clerk (Printed)  
U.S. EPA, Region IX

  
Regional Hearing Clerk Signature

  
Date