



UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION
BEAUFORT, SOUTH CAROLINA 29904-5001

IN REPLY REFER TO:
ASO 5090.1A
NREAO

SEP 24 2020

AIR STATION ORDER 5090.1A

From: Commanding Officer
To: Distribution List

Subj: AIR QUALITY COMPLIANCE

Ref: (a) 40 CFR 51.166
(b) 40 CFR 60
(c) MCO 5090.2
(d) 40 CFR 61
(e) 40 CFR 63
(f) 40 CFR 68
(g) SC DHEC Regulation 61-62
(h) SC DHEC Permit Number TV-0360-0004
(i) 40 CFR 82
(j) MCO 5090.1
(k) DoD Directive 6050.9
(l) SECNAVINST 5090.5
(m) MCO 5090.3
(n) Air Quality Compliance Manual
(o) Letter MAG-31 Env/108, Aircraft Painting, 20 October 2016
(p) MCAS Beaufort Painting Operations ESOP
(q) MCAS Beaufort Paint Booth Operations ESOP
(r) NAVAIR 00-25-100

1. Situation. This Order implements policy and procedures, assigns responsibility, and provides for the management of an air quality compliance program for Marine Corps Air Station (MCAS) Beaufort designed to ensure continuous compliance with the requirements of the Air Station's federal operating permit, issued by the South Carolina (SC) Department of Health Environmental Control (DHEC) and provides for the management of Ozone Depleting Substances (ODS) at MCAS Beaufort.

2. Cancellation. ASO 5090.1.

3. Mission

a. This Order mandates the requirements under MCAS Beaufort's operating permit to ensure compliance with all provisions of that permit. Those requirements are provided in reference (h).

b. This Order addresses additional requirements to ensure MCAS Beaufort's ability to demonstrate its status and compliance as a minor source of hazardous air pollutants.

c. This Order mandates the requirements of Department of Defense (DoD), Department of the Navy (DON), and Marine Corps Orders, directives, and instructions to comply with the requirements of 40 CFR 82 to minimize the release of ODS. It applies to all non-tactical stationary equipment owned, maintained, or operated by the Air Station, including, but not limited to, transportation equipment, industrial cooling equipment, commercial cooling

Distribution Statement A: Approved for public release; distribution is unlimited.

SEP 24 2020

equipment, comfort cooling equipment, and refrigeration equipment associated with food service units. This Order also applies to contractors and outside vendors who operate, maintain, modify, or service ODS-containing equipment owned by MCAS Beaufort.

d. Selected air compliance issues, such as the management of lead, lead compounds, and asbestos, are not addressed in this Order.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent

(a) MCAS Beaufort shall fully support and implement the requirements of all references provided.

(b) MCAS Beaufort policy is to manage all air emission units to maintain compliance with permit limits and monitoring, record keeping, reporting requirements, and to assist personnel in procedures for effective management of the emission units governed by the air quality management program.

(c) MCAS Beaufort policy is to manage all ODS containing equipment to minimize releases to the atmosphere and to maintain records of all maintenance of non-tactical ODS containing equipment and ODS losses to demonstrate compliance with all applicable provisions of 40 CFC 82.

(2) Concept of Operations. The policies and responsibilities established in this instruction shall be fully implemented by all personnel responsible for the operation and maintenance of affected equipment.

b. Subordinate Element Missions

(1) The Natural Resources and Environmental Affairs Officer (NREAO) is responsible for managing MCAS Beaufort within all air quality regulations listed under the references, including compliance with regulations governing management of ODS.

(a) Ambient Air Quality Standards. Ensure that all records (fuel use, material use, hours of operation, calculated emission rates, control device inspection reports, and visual emission (VE) assessments) are available to demonstrate compliance. Notify the DHEC of any excesses of the permitted emission limits as soon as that excess is determined. Also, notify the DHEC if changes are made to permitted units or exhaust parameters that could result in changes to emission rates or dispersion characteristics, as required per reference (h).

(b) Monitoring Requirements

1. Perform and document semiannual VE assessments of the exhausts of the permitted emission units. The VE assessment is a subjective evaluation of the quality of the exhaust plume and requires documentation of: date and time of observation; color, duration, and density (light/dark) of the plume (if visible); direction of the observation with respect to the sun and source (that is, relative position of source, sun, and observer); and appearance of the surrounding sky (for example clear, blue, or overcast).

SEP 24 2020

2. Ensure that records of material use at surface coating operations at the corrosion control facility (building 1256) and C-3 maintenance operation (building 1051) are collected monthly and that emissions of Hazardous Air Pollutants (HAP) are estimated to demonstrate the Air Station's status as a minor source of HAP.

3. Ensure that inspections of fabric filters at the paint booths (buildings 594, 3032, 1051, 1253, and 1256) are conducted as required and that all filter changes are recorded in a bound notebook.

4. Ensure that inspections of fabric filters at the plastic media blast booths (buildings 3032 and 1051) are conducted quarterly.

(c) Record Keeping Requirements. Collect and maintain records to demonstrate compliance with permit conditions and/or applicable regulations or to facilitate accurate estimates of emissions. Use the following forms from the air quality compliance manual as an aid in collecting needed information; a checklist for records needed to demonstrate compliance provided to Marine Aircraft Group 31 (MAG-31), in place record keeping and reporting to NREAO procedures to account for emissions from some of these sources. Records of operation and/or material use are maintained to estimate emissions from the following sources: hours of operation for all emergency generators; fuel throughput at boilers, fuel tanks, tanks at Station Fuels, and tanks at the Marine Mart; solvent use in parts cleaners; sawdust collected from the carpentry operations; listing of MAG-31 owned portable, tactical emergency generators aboard MCAS Beaufort.

(d) Reporting Requirements. Most of the records required or recommended will be used to estimate emissions or to demonstrate compliance with a permit condition if requested by DHEC or other authorized agency and will not be submitted to DHEC in their original state. Routine reporting for which NREAO is responsible includes the following: semiannual report of required monitoring, annual certification of compliance with applicable regulatory requirements and permit conditions, and submittal to DHEC of the point source data reports (emission inventory).

(e) Semiannual Monitoring Report. SC Regulation 61-62.70.6(a) (3) (iii) (A) requires the submittal of reports of any required monitoring at least every six months. The report must clearly identify any instances of deviations from permit requirements. A responsible official must certify the report. This report should be submitted within 30 days after the six-month period.

(f) Annual Certification of Compliance. In accordance with SC Regulation No. 62.70.6(c) (5) (iii), MCAS Beaufort's operating permit at Part 3 Section R requires an annual certification of compliance. The certification of compliance must be submitted within 45 days after the end of each reporting period. Per reference (h), a responsible officer must sign the certification. For all permit conditions, MCAS Beaufort shall demonstrate compliance using records. The records will not be submitted to DHEC, unless specifically requested, but must be retained on site for five years and available for review by an inspector.

(g) Point Source Data Reports. Prepare the emission material use report for the DHEC, including all equipment, operation, and emission information for sources that emit more than one ton/year of a regulated pollutant, by 31 March for the previous calendar year, each year. A

SEP 24 2020

responsible official, as defined in reference (h), must sign the certification.

1. The use of new materials and implementation of new processes involving flammable and toxic substances shall be reviewed for potential applicability of risk management planning requirements.

2. The Air Quality Compliance Manual shall be reviewed and updated at least annually.

3. The NREAO shall conduct periodic reviews of the records demonstrating compliance with regulations and orders governing the management of ODS. The NREAO shall review records from Public Works (PW) maintenance quarterly to assess the efficacy of the record keeping systems and annually to assess changes and potential breakdowns in the record keeping systems. The NREAO shall assist PW personnel with periodic refresher training about regulations governing management of ODS for internal maintenance personnel and outside vendors for stationary equipment.

4. To minimize air emissions, procedures for painting application shall follow those requirements that are provided in references (o), (p), (q), and (r). Per reference (r), the only approved methods for aircraft painting outside the Centum Cubic Feet (CCF) are minor touch ups less than four ounces in quantity, when applied by a semper applicator, pen applicators, small polyurethane touch up (PTU) kits, or touch up brush/roller painting on areas no larger than one square foot.

(2) PW. As operators responsible for maintenance of the emission units listed in reference (h) associated with the infrastructure of the Air Station, PW must ensure that the operation of the equipment is within specific emission limits, monitor specific parameters, and maintain records of the required monitoring. To demonstrate compliance with the requirements of the permit, PW is to provide copies of all records listed below for all equipment to NREAO by the 15th day of each month for the previous month.

(a) Boilers. Operate boilers, especially those at the central heating plant (Building 426) and Bachelors Officers Quarters (BOQ) (Building 431), within the emission limits in reference (h), as detailed below: Particulate Matter (PM) emissions may not exceed 0.6 lb/MMBtu; SO2 emissions from each may not exceed 3.5 lb/MMBtu; fuel is restricted to natural gas and No. 2 fuel oil for the BOQ boiler and to natural gas (or liquefied petroleum gas, or LPG) for other comfort heat units; and VE may not exceed 20 percent opacity.

1. Monitoring Requirements. Monitor monthly fuel consumption for each boiler.

2. Record Keeping Requirements. Maintain records to demonstrate compliance with the requirements of reference (h) as follows: records of start-ups and shutdowns, total fuel use, sulfur content of the fuel oil (recorded from fuel oil supplier's delivery tickets).

3. Reporting Requirements. Provide copies of records to NREAO for fuel consumption for each boiler and the total amount of fuel oil delivered to each fuel storage tank each month.

(b) Natural Gas-Fired Engine

1. Emission Limits. Operate the cogeneration engine (Building 426) within the emission limits in reference (h) as following:

a. Nitrogen oxide emissions may not exceed 1.0 g/hP-hr or 2.0 g/hP-hr (160 ppmvd at 15 percent O₂).

b. Carbon monoxide emissions may not exceed 4.0 g/hP-hr (540 ppmvd at 15 percent O₂).

c. Volatile Organic Compound emissions may not exceed 1.0 g/hP-hr (86 ppmvd at 15 percent O₂).

d. Fuel is restricted to natural gas or liquefied petroleum gas. VE may not exceed 20 percent opacity.

2. Monitoring Requirements. Monitor monthly fuel consumption for the engine and conduct a VE assessment semiannually.

3. Record Keeping Requirements. Maintain records to demonstrate compliance with reference (h) as follows: records of start-ups and shutdowns; total fuel use; performance test results retained on file; copies of VE assessments conducted; and maintenance records (meeting New Source Performance Standards and Maximum Achievable Control Technology requirements).

4. Reporting Requirements. Provide copies of records to the NREAO for fuel consumption for the engine.

(c) Emergency Power Generators

1. Operate emergency power generators within the limits of reference (h) as follows:

a. Operate only for preventative maintenance and for emergency power generation (not for load shifting).

b. VE may not exceed 20 percent opacity.

c. PM emissions may not exceed 0.6 lb/MMBtu.

d. SO₂ emission may not exceed 3.5 lb/MMBtu.

e. Fuel is restricted to natural gas, propane, or diesel fuel oil (including JP-5).

2. Monitoring Requirements. Hours of operation, both for preventive maintenance and for emergency power generation.

3. Record Keeping Requirements. Maintain records to demonstrate compliance with reference (h).

4. Reporting Requirements. Provide copies of records to the NREAO.

(d) Maintenance Facility. Provide records to NREAO monthly on the amount of sawdust disposed annually to demonstrate compliance with reference (h).

(e) Routine Replacement of Insignificant Activities. Review existing emission source replacement, relocation, and new operations with NREAO to ensure that the permitting and registration of the sources are properly addressed under air quality regulations.

(f) Ozone Depleting Substances. Maintain the stationary equipment containing ODS at MCAS Beaufort, either with PW personnel or with contracted vendors. PW is to keep records required by the regulations to demonstrate compliance with the regulations for three years. Provide records to NREAO quarterly of maintenance and use of ODS in non-tactical stationary and mobile units at the Air Station.

1. Service Records. Records demonstrating compliance with the work practices and equipment specifications must be maintained. For non-tactical appliances containing 50 or more pounds of refrigerant, service records must be kept with the date and type of service and the quantity of refrigerant added. Records must also include identification of the facility, leak rate, method used to determine the leak rate at full charge, date that a leak rate greater than the allowable annual leak rate was discovered, location of leak(s) to the extent determined to date, any repair work completed and date of those repairs, the dates and types of initial and follow-up verification tests (the data is to be maintained on site and reported to the Environmental Protection Agency (EPA) within 30 days of the tests (if required by §156(i) of the regulation), and when transferring equipment for disposal, certification that refrigerant has been removed.

2. Reporting Requirements. Compliance with the equipment and work practice requirements of the regulation can be demonstrated through records. There are several reporting requirements for services of ODS containing equipment if identified as leaking. Such reports should be coordinated through the NREAO air quality manager. If repairs to a qualified leak of larger refrigeration equipment were not affected within 30 days, report to the EPA and NREAO the reasons why more time is required for repairs and the projected time repairs will be complete. If a change to the plan for repairs is required, documentation (and the updated plan) and the rationale for the updated plan must be submitted to the EPA and NREAO within 30 days of identifying the need for the change to the plan. If seeking to prove that the annual leak rate is less than the allowable leak rate, a plan must be submitted to the EPA and NREAO that addresses the repairs of outstanding leaks for which planned repair has not been completed.

3. Certifications of Technicians. Certified technicians must keep a copy of their certificate at their shop and provide a copy to the NREAO. If a new technician is added to the personnel maintaining the ODS-containing equipment or the certification of a technician changes, a copy of the certification must be provided to the NREAO contact for air quality compliance. Technicians who maintain, service, or repair small appliances must be certified Type I. Technicians who maintain, service, or repair high or very high-pressure appliances (except small appliances and MVAC systems) must be certified Type II. Technicians who maintain, service, or repair low-

SEP 24 2020

pressure appliances must be certified Type III. Technicians who maintain, service, or repair low and high-pressure appliances must be certified Universal. Technicians who maintain, service, or repair MVAC-like appliances must be certified Type II.

4. Requirements for Recovery and Recycling Equipment.

Recovery and recycling equipment must meet the specifications in reference (g). In addition to the equipment specification, certain work practices must be followed and documented to certify to the EPA that the equipment meets specifications (only required for an initial certification); maintain equipment in accordance with manufacturer's operating manual; check the equipment for leaks and repair as needed; and change the filter when required based on measurements (frequency and documentation).

5. Motor Transportation (Motor T).

For any maintenance of MVAC conducted aboard the Air Station, the following records must be kept and retained for three years: a copy of the equipment certification form; records demonstrating that all persons authorized to operate the equipment are currently certified (i.e., copies of technician certifications); the name and address of any facility to which refrigerant is sent and the quantity of refrigerant sent; and a service form for each vehicle for which MVAC servicing is completed documenting the recovery unit used, services performed, and quantity of refrigerant added or removed, using the log provided by the NREAO.

(3) Marine Aircraft Group 31 (MAG-31). Maintain records of fuel received into storage tanks; such records will be made available to the NREAO or their designee for use in demonstrating the status of the tanks as insignificant activities. Provide copies of records listed below by emission source to NREAO by the fifth day of each month for the previous month.

(a) Engine Test Facilities. Operate engine test facilities within the emission limits in the reference (h).

1. Monitoring Requirements. Monitor hours of operation at each test stand or cell.

2. Record Keeping Requirements. Maintain records to demonstrate compliance with reference (h) as follows: records of engine testing hours by location and total fuel delivered to each storage tank.

3. Reporting Requirements. Provide copies of records of the hours of operation for each engine type at each testing location, and the fuel delivered to each storage tank.

(b) Corrosion Control Facility (CCF) Building 1256. Provide records to NREAO monthly to demonstrate compliance with requirements of reference (h) on consumption of paints and solvents in paint booths, log of daily inspections of filters in each paint booth, and retention of log of filter changes for each paint booth in a hard bound logbook. Per reference (r), the only approved methods for aircraft painting outside the CCF are minor touch ups less than four ounces in quantity with the following application methods: SEM pens, small PU kits (< four ounces), and touch up brush/roller painting on areas no larger than one square foot.

SEP 24 2020

(c) Painting Operations - Buildings 3032, 1051, 1253, and 594.

Provide records to the NREAO monthly of the following information to demonstrate compliance with the requirements of reference (h): consumption of paints and solvents in paint booths; log of daily inspections of filters in each paint booth, and retention of log filter changes for each paint booth in a hard bound log book.

(d) Plastic Media Blast Booths. Inspect fabric filters (external and internal) servicing each plastic media blast booth (Buildings 3032 and 1051) at least quarterly. Provide documentation of each inspection to the NREAO within five days of the end of the month after completing the inspection. Ensure any discrepancy is resolved before the next month and note the resolution on the inspection log sheet (provided in the Air Quality Compliance Manual, reference (o)).

(e) Emergency Power Generators. Operate emergency power generators within the limits of reference (h), as detailed below: Operate only for preventive maintenance and for emergency power generation (not for load shifting). Fuel is restricted to natural gas, propane, or ultra-low-sulfur diesel (USLD) oil (with JP-5 also allowed).

1. Monitoring Requirements. Record hours of operation (both for preventive maintenance and for emergency power generation) and maintenance activities.

2. Record Keeping Requirements. Maintain records to demonstrate compliance with the requirements of reference (h) as follows: records of hours of operation by generator; records of maintenance on emergency generators; documentation that the units fire only ULS-containing fuel; and listing of all tactical generators aboard MCAS Beaufort.

3. Reporting Requirements. Provide copies of records of monthly operating hours to the NREAO. Provide an annual listing of tactical generators aboard the Air Station.

(4) Marine Corps Community Services: Marine Mart. Maintain records of fuel received into storage tanks; such records will be made available to the NREAO or its designee for use in demonstrating the status of the tanks as insignificant activities.

(5) Station Fuels. Provide to the NREAO monthly data on fuel received at the Station Fuels installation.

c. Coordinating Instructions

(1) Contracted Services: Outside maintenance and repair vendors. For any maintenance of stationary refrigeration appliances owned or operated by the Air Station the following records must be kept and retained for three years by the vendor:

(a) Documentation of certification of the technicians performing the maintenance on ODS-containing equipment. Such information must be provided to the PW point of contact before starting work on equipment owned by the Air Station.

(b) Detailed description of the maintenance completed including the amount(s) of ODS removed from equipment, returned to equipment, and added

SEP 24 2020

to equipment. Such information must be provided to the PW point of contact before leaving the Air Station. Checklists and data reporting forms will be provided by the PW point of contact for this purpose when the contractor reports to the PW point of contact upon entry to the Air Station.

(2) Contracted Services: Outside vendor for MVAC repairs. For any maintenance of MVAC conducted for vehicles owned or operated by the Air Station, the following records must be kept and retained for three years by the vendor:

(a) A copy of the equipment certification form.

(b) Records demonstrating that all persons authorized to operate the equipment are currently certified (i.e., copies of technician certifications).

(c) The name and address of any facility to which refrigerant is sent and the quantity of refrigerant sent.

(d) A service form for each vehicle for which MVAC servicing is completed must document the recovery unit used, services performed, and quantity of refrigerant added or removed.

(e) These records are the responsibility of the vendor to comply with the federal regulations.

(3) Procurement of ODS. All procurement of Class I ODS must be approved by a senior procurement official, in accordance with reference (j).

(4) Shipment of ODS to DoD Depository. All Class I ODS that are no longer used at the Air Station and properly recovered are to be returned to the DoD ODS Depository in Richmond, Virginia, in accordance with established DoD procedures.

5. Administration and Logistics. In accordance with the requirements and guidance contained in this plan, the Natural Resources and Environmental Affairs Officer is responsible for managing the air quality compliance program within all applicable state and federal regulations listed under the references.

6. Command and Signal

a. Command. This Order is applicable to MCAS Beaufort and all tenant Commands.

b. Signal. This Order is effective the date signed.



K. R. ARBOGAST

DISTRIBUTION: A