

NPDES Compliance Inspection Manual

Appendix AF



EPA Publication Number: 305-K-17-001
Interim Revised Version, January 2017



Appendix AF –
Standard Operating Procedure (SOP): Biosecurity
Procedures for Visits to Livestock and Poultry
Facilities

OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE STANDARD OPERATING PROCEDURE (SOP)

Biosecurity Procedures for Visits to Livestock and Poultry Facilities

General

SUMMARY OF PROCEDURE/PURPOSE

This procedure minimizes the risk of EPA personnel and those acting on their behalf (e.g., contractors, grantees, and senior environmental employment staff), here after called “EPA personnel,” transmitting animal diseases from livestock or poultry facilities, to livestock or poultry at another location. Livestock and poultry facilities include ranches, farms, dairies, feed yards, sale yards, swine premises, slaughterhouses, zoos, veterinarians, laboratories and other facilities where there are animals or unprocessed animal tissues, secretions or excretions, here after called “livestock and poultry facilities”.

SCOPE AND APPLICABILITY

These procedures apply to EPA personnel whose job responsibilities require them to make visits to livestock or poultry facilities. These visits may be conducted as part of an inspection, to conduct environmental monitoring, as part of a response action or for other purposes.

OECA has developed this SOP for EPA employees and it is intended solely for internal management purposes. It does not create any rights, substantive or procedural, enforceable at law. OECA may periodically revise this SOP to make improvements and/or to reflect changes in EPA policy. OECA reserves the right to act at variance with this procedure.

If, on a case by case basis, an EPA employee believes a variance is needed from a provision of this SOP, the situation should be discussed with the appropriate safety officer who can provide site- specific guidance. Any such variance must be explained and documented. Varying from this procedure does not disqualify information obtained for any purpose.

DEFINITIONS

Definitions for certain terms included in this SOP are provided in OECA’s Standard Operating Procedure Definitions document available on the [OECA Document Control SharePoint site](#).

EXTENSIVE ANIMAL CONTACT

- Extensive animal contact activities involve prolonged, direct contact with livestock or poultry or unprocessed animal tissues, secretions or excretions.

FOREIGN ANIMAL DISEASES

- Foreign animal diseases in the U.S. include highly pathogenic avian influenza, exotic Newcastle Disease, foot-and-mouth disease, classical swine fever, and African swine fever.

FIELD ACTIVITIES

- See OECA’s Standard Operating Procedure Definitions document.

HIGH RISK LOCATIONS

- High risk locations are those with existing emergency animal disease events.

LIVESTOCK AND POULTRY FACILITIES

- Include ranches, farms, dairies, feed yards, sale yards, swine premises, slaughterhouses, zoos, veterinarians, laboratories, and other facilities where there are animals or unprocessed animal tissues, secretions or excretions.

LEVEL 1 VISIT

- Visit to a farm/ranch that entails only an office or home visit that is not in a high risk location, and where no extensive contact is anticipated.

LEVEL 2 VISIT

- Visit to a farm/ranch where EPA personnel expect to walk around buildings, but not enter any confinement areas and expect to have minimal contact with livestock or poultry. The visit is not in a high risk location, and no extensive contact is anticipated.

LEVEL 3 VISIT

- Visit to a farm/ranch where there will be close contact, or a reasonable expectation of close contact, with livestock or poultry (walking through narrowly confined pens/lots where animals are within reach). The visit is not in a high risk location, and no extensive contact is anticipated.

PERSONNEL QUALIFICATIONS/RESPONSIBILITIES FOR HEALTH AND SAFETY

EPA personnel must comply with all applicable basic health and safety training requirements under Order 1440.2 *Health and Safety Requirements for Employees Engaged in Field Activities*. Supervisors must ensure that these requirements are met. EPA personnel should monitor for any revised or additional health and safety orders, policies and guidance that may affect them. Prior to the inspection/field investigation, a Health and Safety Plan (HASP) must be prepared to determine any health and safety hazards associated with the visit, and placed in the project file. Additionally, a Job Hazard Analysis (JHA) must be prepared for each field personnel's position.

If the EPA personnel's field activities include compliance monitoring or field investigations, the individuals must ensure they have completed all relevant inspector training as required under EPA Orders 3500.1 and 3510.

REFERENCES/OTHER ASSOCIATED PROCEDURES

- USDA/NRCS General Manual, Title 130, Part 403, Subpart H.
- EPA Order 1440.2, Health and Safety Requirements for Employees Engaged in Field Activities
- SHEM Guideline 51, Mandatory Health and Safety Training

- EPA Order 3500.1 Training Requirements for EPA Personnel Who Are Authorized to Conduct Civil Compliance Inspections/Field Investigations and EPA Inspector Supervisors, September 30, 2014
- EPA Order 3510 Training Requirements for Federal Credentials for Inspections and Enforcement of Federal Environmental Statutes and other Compliance Responsibilities, updated October 31, 2012
- [*Livestock and Poultry Operation Inspections Under EPA's National Pollutant Discharge Elimination System Program*](#), fact sheet, Sept. 2014, EPA 305-F-14-001
- SHEM Guideline 29, Permit Required Confined Space

PROCEDURE

EQUIPMENT REQUIREMENTS

EPA personnel should be aware of personal health and safety issues when visiting livestock and poultry facilities and consult Health and Safety staff with questions about proper procedures and equipment needed. Livestock and poultry facilities may include areas defined by Occupational Safety and Health Administration (OSHA) as “confined spaces” (e.g., manure pits, grain silos, manure digesters, holding tanks/vaults/sumps/hoppers), which may have a potentially hazardous atmosphere and impair the ability to self-rescue. EPA personnel should not enter such areas.²⁶ In addition, extreme cold or hot conditions may necessitate adaptation of these procedures; personnel may want to consult with Health and Safety staff regarding any needed modifications to this SOP.

The following clothing and supplies should be considered for visits to livestock and poultry facilities.

CLOTHING/PERSONAL PROTECTIVE EQUIPMENT

- Plastic coveralls (disposable outerwear) or cloth coveralls
- Standard steel-toed safety boots with disposable boot covers
- Disposable gloves (e.g., nitrile, or vinyl)
- Hair nets
- Filtering face piece (respiratory protection beyond this is not anticipated but if necessary, would require additional supplies and procedures)
- Safety glasses with impact protection
- Hardhats

²⁶ If EPA personnel need to enter permit required confined spaces, OSHA requires that your employer develop written procedures, an entry permit system, and training for confined space entry. All appropriate safety precautions, which may include the use of appropriate air monitoring devices and personal protective equipment (PPE), must be followed. Refer to [SHEM Guideline 29, Permit-Required Confined Space](#) (internal EPA link)

SUPPLIES (SUPPLIES MUST BE APPROPRIATE TO PLANNED ACTIVITIES, SEE SECTION 2.3 FOR DECONTAMINATION PROCEDURES)

- Water container(s) for potable water
- EPA-approved disinfectant and relevant safety data sheets (SDS)
- Spray bottle for disinfecting small items
- Pump sprayer for disinfecting large items
- Long-handled brush
- Trash bags and zip-lock bags
- Paper towels
- EPA-approved soap or antibacterial wipes or products
- Bucket
- Duct tape to secure plastic boot covers, coveralls, etc.
- Waste containers for storing disinfectant rinsate, other liquid waste
- Plastic tub for storing “dirty” equipment and PPE in the vehicle
- Insect repellent
- First aid kit, including tick removal tool

FACILITY-PROVIDED TRANSPORTATION

EPA personnel may accept offers of facility-provided transportation within a facility if the total value of the transportation is \$20 or less. Consult with your ethics counselor if any of the following conditions apply:

- The total value of the transportation exceeds \$20, or
- You will be transported in non-ground vehicle (e.g., aircraft or helicopter) or
- You will likely be transported across more than one facility.

With prior approval, the Office of General Counsel may be able to accept the gift of travel pursuant to 31 USC 1353 through use of the ethics travel form. To use the ethics travel form, you must: be on travel status (more than 50 miles from the duty station); have a facility representative accompany you; *and* be on travel **in connection with a meeting or educational tour (not an inspection)**.

DECONTAMINATION PROCEDURES

The following procedures should be used to clean equipment, PPE, vehicle tires, and other items that become contaminated.

- Select an EPA registered disinfectant that will be active across a wide spectrum of germs under the conditions in which it will usually be used.
- The state veterinarian, APHIS or the state agriculture department may be able to assist EPA personnel with selecting an appropriate disinfectant.

- When on-site, consult the owner or operator to select a location for later decontamination. Where possible, use an existing decontamination area on-site.
- If there is no designated decontamination area already on-site, select an area on-site, but in an area that will minimize recontamination when leaving the site. The area should allow for proper management of the rinsate (e.g., rinsate will not runoff the property).
- Place clean clothing to change into, as appropriate, in a closed bag at the decontamination site.
- Place all needed decontamination supplies including sufficient water or access to running water at the decontamination site.
- Mix the disinfectant (if not ready-to-use) according to label directions and use appropriate PPE e.g., gloves, eye protection.
- Brush or rinse the contaminated item to remove all visible manure and other debris.
- Apply disinfectant to the item or place item in a container of disinfectant, according to label directions being careful to allow the disinfectant to remain in contact with the item for the required length of time if listed on the label.
- Rinse with water if and as directed on the disinfectant label.
- Place the decontaminated item in a clean location or in a clean bag or another container.
- Manage or contain rinsate if needed, and as appropriate.
- Dispose of used disinfectant according to label directions.

PROCEDURES FOR VISITING LIVESTOCK AND POULTRY FACILITIES

When planning visits to livestock and poultry facilities, EPA personnel should contact APHIS and/or the state veterinarian to identify any high risk areas with existing emergency animal disease events where travel should be avoided. Whenever EPA personnel are directed by the state veterinarian or APHIS not to enter an area, EPA personnel should refer to section 2.4.2 Procedures for Visits to High Risk Locations and Visits with Extensive Animal Contact. In addition, this information should be provided to the OECA Office of Compliance's Concentrated Animal Feeding Operation (CAFO) Coordinator and/or entered in the OECA Biosecurity SharePoint site.

PROCEDURES AFTER CONTACT WITH ANIMALS IN FOREIGN COUNTRIES

If EPA personnel have visited a foreign country where they were exposed to or had contact with animals (with or without a known contagious disease) they should inform their supervisor and should not make on-site visits to livestock or poultry facilities for at least 5 calendar days after their return. Clothing and equipment (including shoes) worn or used when exposed to or contacting animals must be cleaned (i.e., laundered, or rinsed to remove debris and washed with disinfectant according to label directions) before they are used at U.S. facilities. If cleaning is not possible, alternative clothing or equipment should be used.

PROCEDURES FOR VISITS TO HIGH RISK LOCATIONS AND VISITS WITH EXTENSIVE ANIMAL CONTACT

Whenever EPA personnel are directed by the state veterinarian or APHIS not to enter an area, EPA personnel should provide this information to the OECA Office of Compliance's Concentrated Animal Feeding Operation (CAFO) Coordinator and/or enter it in the OECA Biosecurity SharePoint site and follow the procedures in this section.

As a general rule, EPA will **not** conduct inspections on livestock or poultry facilities in areas with ongoing emergency foreign animal disease response activities (e.g., vaccination program, depopulation, disposal, or virus elimination). EPA will consult with the state veterinarian or APHIS office to determine when quarantines have ended and it is safe to resume inspections in the area. In special situations where there is information that demonstrates a substantial risk to human health or the environment, for example, as a result of a discharge from a poultry or livestock operation, EPA should consult with the state veterinarian or APHIS office to identify when it is safe to visit individual operations. Information on these types of situations also should be provided to the OECA Office of Compliance's CAFO Coordinator and/or entered in the OECA Biosecurity SharePoint site.

If EPA personnel anticipate they will have extensive contact with animals or unprocessed animal tissues, secretions or excretions during a visit to a livestock or poultry facility, they should consult with the state veterinarian or APHIS office and their health and safety staff to identify appropriate biosecurity procedures.

PROCEDURES FOR VISITS AT NON-HIGH RISK LOCATIONS, AND NO EXTENSIVE CONTACT

The procedures below provide basic biosecurity practices EPA personnel should follow when visiting farms, ranches, slaughterhouses and other facilities with **no known livestock or poultry diseases and where extensive contact is not planned**.

The biosecurity practices below are based on U.S. Department of Agriculture APHIS and Natural Resources Conservation Service²⁷ (NRCS) procedures. Facility operators may have adopted more stringent biosecurity measures (e.g., showering and changing clothes to come on to or leave the premises).

EPA PERSONNEL SHOULD DISCUSS APPROPRIATE BIOSECURITY MEASURES WITH THE OWNER/OPERATOR AND ARE ENCOURAGED TO ADOPT MORE STRINGENT MEASURES, AS APPROPRIATE, INTO THE PROCEDURES FOR THAT SPECIFIC FACILITY.

PRIOR TO THE VISIT

- Avoid wearing or using any apparel or equipment that cannot be easily cleaned and disinfected. Consider bringing bags to keep sensitive equipment such as phones, and cameras clean.

²⁷ NRCS General Manual, Title 130, Part 403, Subpart H.

- When visiting a facility with various age groups of one species in one day, visit the youngest animal group first. Poultry is an exception. Poultry breeding stock should be visited before other commercial birds.
- Designate a part of the vehicle to carry “dirty” items, preferably separate from the “clean” part of the vehicle where clean supplies are placed, e.g. the dirty area could be inside the trunk of a car.
- In consultation with Health and Safety staff, identify an appropriate location such as an EPA or state laboratory, or office, for disposal of soiled disposable items in case the owner/operator will not allow the waste to remain on-site.
- While it is highly unlikely that any medical or hazardous wastes would be created, if you suspect they may be created due to the type of facility or type of inspection (e.g., involving sampling of wastes), EPA personnel should consult with the appropriate EPA staff to determine the best handling and disposal methods.

BEGINNING THE VISIT

- Close vehicle windows.
- Park vehicle on paved or gravel areas away from pens, pastures, or areas where animals may be held to avoid contact with dirt, urine, blood, litter, wastewater or manure.
- Wash hands with soap and potable water or use antibacterial wipes or gel before entering the site.
- The facility staff may request that the EPA personnel’s vehicle tires be disinfected prior to entering the facility.
- On entering a facility, inform a responsible facility representative of any and all other livestock and poultry facilities visited within the previous 48 hours and whether you entered any animal confinement or waste storage areas.
- Discuss appropriate biosecurity measures with the owner/operator. Facility operators may have adopted more stringent biosecurity measures (e.g., showering and changing clothes to come on to or leave the premises). **EPA personnel are encouraged to adopt more stringent measures, as appropriate, into the procedures for that specific facility.**
- Do not enter pens or buildings where animals are housed or confined.
- EPA personnel should only enter animal confinement areas if it is essential to complete the goals of the visit, and should be accompanied by or authorized to do so by the facility operator.
- Avoid contact to the extent possible with livestock, poultry or other animals (wild or domestic) on any facility.

EPA personnel should follow the appropriate level of biosecurity procedures outlined below depending on the type and circumstances of the planned visit.

ACTIVITIES APPROPRIATE BY RISK LEVEL

Level 1 Visits: Visits to Farms/Ranches That Entail Only Office or Home Visits

In addition to the requirements for visits described in sections 2.4.3.1 and 2.4.3.2, for Level 1 visits:

- Wear clean, steel-toed shoes or boots that can be rinsed and washed with disinfectant (e.g., avoid wearing suede).
- After the visit, inspect shoes prior to entering the vehicle. Clean shoes or boots if they became contaminated with urine, blood, wastewater, or manure, according to decontamination procedures.

After the visit, follow the procedures in sections 2.5 and 2.6 as appropriate.

Level 2 Visits: Visits To Farms/Ranches With Minimal Contact With Livestock

In addition to the requirements for visits under sections 2.4.3.1 and 2.4.3.2, for Level 2 visits:

- Upon arrival and exiting the vehicle, put on new plastic or disinfected rubber boots or other footwear that has been cleaned and disinfected or wear new disposable boot covers. The operator may supply boots, boot covers, or other PPE for you to wear.
- EPA personnel are encouraged to wear disposable coveralls to prevent contamination of clothing. This decision should be made on a case-by-case basis.

After the visit, follow procedures in sections 2.5 and 2.6 as appropriate.

Level 3 Visits: Visits To Facilities With Close Contact

In addition to the requirements for visits under sections 2.4.3.1 and 2.4.3.2, for Level 3 visits:

- Upon arrival and exiting the vehicle, put on new plastic or disinfected rubber boots or other footwear that has been cleaned and disinfected or wear new disposable boot covers. The operator may supply boots, boot covers, or other PPE for you to wear.
- Put on a pair of new disposable or clean coveralls for each visit if personnel will have, or there is a reasonable expectation of, close contact with livestock/poultry (walking through narrowly confined pens/lots where animals are within reach).
- When entering areas where animals will be within reach, personnel should consider wearing disposable gloves and hair nets.
- After visiting areas in which animals are in close proximity, EPA personnel may remove disposable items and resume the inspection in apparel appropriate for the remainder of the visit.

After the visit, follow procedures in sections 2.5 and 2.6 as appropriate.

PROCEDURES AT THE COMPLETION OF THE VISIT

- If not discussed earlier, at the end of the visit, inform the operator of the areas of the site that were visited, and the biosecurity procedures followed.
- Non-disposable items
- At the end of the visit, remove any non-disposable boots/coveralls and, where appropriate, clean and disinfect on-site using decontamination procedures (2.4).
- If non-disposable items are not cleaned and disinfected on-site, place them in the “dirty” area of the vehicle in a manner that minimizes contamination of the vehicle to be cleaned and disinfected later. For example, place “dirty” items together in a covered plastic tub.
- Disposable items
- Place all soiled disposable items in plastic garbage bags and close securely.
- If the outside of the garbage bag became contaminated, wash it off and decontaminate the outside of the bag according to decontamination procedures (2.4).
- If acceptable to the owner/operator, leave the plastic bag with soiled disposable items on-site for disposal.
- If it is not possible to leave the bag on-site, ensure the bag is closed securely, double bag it, and place it in the “dirty” area of the vehicle.
- If the vehicle or tires became contaminated with dirt, urine, blood, wastewater, or manure, wash and disinfect vehicle tires and wheel wells at a location on-site designated by the owner/operator if possible.
- If it is not possible to wash and disinfect the vehicle or tires completely on-site, take the vehicle to a car wash before taking the vehicle to another facility. Record when and where the car was washed in the vehicle logbook.
- Wash your hands with soap and potable water or use antibacterial wipes or gel before leaving the site.

PROCEDURES FOR THE END OF THE DAY

EPA personnel should follow the procedures below after all visits to livestock or poultry facilities have been completed for the day.

- If it was not possible to leave used, disposable items at the facility where they were used, return the double bagged garbage bag to the pre-selected location for disposal (i.e., EPA or state agency facility) or other location identified through consultation with appropriate Health and Safety staff.
- While it is highly unlikely that any medical or hazardous wastes would be created, if these types of wastes were created, EPA personnel should follow prearranged procedures for handling, storage and disposal (see section 2.4.3.1).
- Clean/laundry all reusable clothing in hot water with a disinfectant soap.

- Clean and disinfect equipment according to decontamination procedures.
- Take a shower.
- Check and replenish supplies as necessary to ensure all needed supplies are ready for the next visit.