



## Iowa Department of Natural Resources Concentrated Animal Feeding Operation NPDES On-Site Inspection Standard Operating Procedure

### Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish uniform procedures for conducting and reporting results of Clean Water Act compliance on-site inspections and compliance with the laws of the State of Iowa at large and medium concentrated animal feeding operations (CAFOs) that are operating **with** a National Pollutant Discharge Elimination System (NPDES) permit.

### Pre-inspection Planning

#### A. File Review

1. Complete review of Nutrient Management Plan (NMP) using Nutrient Management Plan Review Checklist (Iowa DNR Form #542-0139) and portions of Nutrient Management Plan Compliance Review (Iowa DNR Form #542-2022) – *See Appendix A and B for details.*
2. Review previous inspection report(s) – Note any operational or structural deficiencies.
3. Review quarterly and annual self-monitoring reports – Iowa DNR Form #542-1551 and Iowa DNR Form #542-1552 – *See Appendix C and D for details.*
4. Review other file information including correspondence, Notices of Violation (NOVs), compliance schedules, site maps, complaints, spills, groundwater/tile monitoring and any other pertinent information.
5. Review facility NPDES permit, noting expiration date, compliance schedules, required monitoring, discharge receiving stream, manure control system in place, and any special conditions.
6. Note facility capacity, pen numbers, animals in confinement (if any) utilizing files and the Animal Feeding Operation (AFO) database.
7. Identify potential discharge flow paths, conduits, conveyances, tile intakes and outlets and other features of interest.
8. Identify nearest water of the U.S.
9. Note any reported discharges.
10. Review Field Office Database (FOCD) for that facility.

## **B. Set Inspection Date**

1. Contact facility owner/manager one (1) to three (3) working days prior to the inspection.
2. Request that the owner/manager have facility records available for inspection and a current copy of the NMP.
3. Ask if there are any facility bio-security protocols (if not, explain you will follow Iowa DNR bio-security protocol).
4. State purpose and time needed for the inspection.
5. Record contact information (date, time, person contacted).
6. Enter inspection date and time on inspector's Outlook calendar.

## **Inspection Procedures**

### **A. Materials/supplies needed**

1. Files, including NMP and quarterly/annual reports.
2. Site map/aerial and engineering drawing/plans if available.
3. Pre-inspection notes and Iowa DNR Forms 542-0139 and 542-2022.
4. Sample bottles/cooler with ice packs, test kits (oxygen, pH, ammonia).
5. Notebook, camera, GPS device, copy of IAC rules, pens/pencils, boots/plastic booties.

### **B. Facility Drive-by**

1. Document (observations, photographs, etc.) site topography, drainage, neighboring property, and/or any special areas of interest identified during pre-inspection planning.
2. Locate/identify closest water of the U.S. in the drainage area of potential feedlot runoff.
3. Document any potential points of discharge of manure, litter or process wastewater.

### **C. Pre-inspection meeting**

1. Present credentials (business card, state employee ID).
2. Introductions of all persons present during the inspection (include in record).
3. State purpose/scope of the inspection (facility record review, tour of facility, etc.).
4. Ask about facility capacity, maximum number of head confined at one time over the last 12 months, number of pens (make sure all head on-site and within 1250 feet are counted, including confinement animals, and all other animal types).
5. Make sure site address and contact information (mailing address, phone numbers) are correct (include in record).

#### **D. Facility Inspection (record review may precede facility inspection)**

1. Tour of facility including number of pens, manure control and storage structures, clean water diversions, any application equipment including pumps and irrigation units.
2. Inspect manure control structures for integrity of berms, areas of erosion concern and freeboard (are structures being maintained, dewatered, and functioning as designed?).
3. Determine if runoff from process wastewater, including feed storage areas and stockpiles are contained.
4. View areas downhill of operation to ascertain if there are any uncontrolled discharges to the surface of the ground, wells, sinkholes, or waters of the state.
5. Basin should have a properly marked liquid staff level measuring gauge.
6. Ask owner/manager about removal of settable solids, pen scraping, stockpiles, and dewatering schedule (match with manure control system specified in NPDES permit).
7. Observe any on-site or off-site stockpiles of manure to determine if runoff discharges to a water of the U.S.
8. View chemical storage area.
9. Inspect feed storage and mortality handling areas.
10. Record and document conditions and facilities with photographs.
11. If discharges are observed document in detail, including photographs, and sample as appropriate.
12. If samples are taken from monitoring wells or groundwater lowering devices describe in detail.
13. Take GPS coordinates at driveway, if needed.

#### **E. Record and Nutrient Management Plan Review**

1. Note NMP preparer.
2. Review NPDES permit with owner/manager (expiration date, monitoring and recordkeeping and reporting requirements).
3. Use Nutrient Management Plan Compliance Review Form (*see Appendix B, Iowa DNR Form #542-2022*).
4. Review previously noted deficiencies in operations/structures/records and determine if they have been corrected.
5. Review required records per NPDES permit.
6. Review quarterly and annual operation reports, making sure liquid levels match manure control system type.
7. Review land application records – 5 years required, making sure there is an accurate method to ensure effluent and solid application rates.
8. Determine if application equipment inspections have been completed.

9. Review NMP.

#### **F. Exit Interview**

1. Review preliminary findings of inspection and provide a copy of inspection notes.
2. Cover any violations or potential violations discovered during inspection or pre-inspection.
3. Ask for any additional information not available but related to and needed for the inspection.
4. Go over any requirements and recommendations based on the inspection.
5. Explain the timeline for receiving a written report and copies of any samples taken.
6. Ask owner/operator/manager if they have any questions.

#### **G. Samples and other inspection information**

1. Fill out chain of custody form.
2. Mail or hand deliver samples taken (if any).
3. Print and label all photos that were taken.
4. Database update – Compare head numbers, animal types and housing type to database and update.
5. Note and update facility name, addresses, contact information, etc., in AFO database.

### **Post-Inspection**

#### **A. Written Report**

1. Complete inspection report within two weeks of inspection or receipt of sample results using standard NPDES Compliance Inspection Report – *see Appendix E*.
2. Fill out facility information on the report including NPDES permit number, facility ID#, name and address of the facility, person interviewed, inspection date and time, manure control system type, size and type of facility.
3. Check satisfactory or unsatisfactory in Permit Compliance Summary on the report. Note reasons for unsatisfactory rating in comments section of the report.
4. Summary should include major points outlined from the pre-inspection, inspection, record review and exit interview.
5. General Facility Description should include a brief description of facility, including capacity, number of pens, manure control structures, and methods of land application. Also include manure control system type, its storage capacity, and legal description including number of acres included in the runoff control system.
6. Self-Monitoring should include comments about self-monitoring, operation reports and

records.

7. Facility Evaluation should include comments about other supportive portions of the facility including stockpiles, feed storage and mortality areas, and chemicals storage.
8. Requirements and Recommendations – Requirements are items that are violations or potential violations or areas of non-compliance. These may be violations of the Code of Iowa, Iowa Administrative Code or NPDES permit requirements. Each violation must be noted by the appropriate citation. Included in requirements are facility structure maintenance items. Requirements would normally include specific timeframes for correction of violations. Recommendations are suggested items noted or observed that are not necessarily violations but may be suggestions to improve record-keeping and/or operational aspects to improve environmental performance of the facility.
9. Print and label all photos that were taken and note at appropriate location in the report.

#### **B. Report Submittal to Facility**

1. Transmit letter and NPDES Compliance Inspection Report, including appropriate appendixes, photos, sample results and maps/diagrams.
2. Letter should be a standard letter, letter of non-compliance, notice of violation (NOV), or notice of referral, as appropriate. Letter should include citation for rule or NPDES violation.
3. If there is a referral based on the inspection, the violation(s) must meet the enforcement criteria identified in the Iowa DNR Enforcement Management System Manual and approval from the Field Office Supervisor and AFO Enforcement Coordinator.

#### **C. Office/Database Update**

1. Update all information in AFO database and FOCD.
2. Record inspection and transmittal date in NPDES database.
3. Add inspection report and any updates to the file.
4. Mark Outlook calendar for any subsequent follow-up or due dates.

September 11, 2013