UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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APR 03 2019

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Dear Sirs:

This letter transmits the U.S. Environmental Protection Agency's response to the Petition to Withdraw Iowa's authorization to implement the National Pollutant Discharge Elimination System Program submitted by the Iowa Citizen's Community for Improvement, the Sierra Club and the Environmental Integrity Project.

The Petition set forth 31 separate allegations asserting that Iowa's NPDES concentrated animal feeding operations program did not meet the requirements of the Clean Water Act. In July 2012, the EPA issued a preliminary report, finding that 26 of the allegations appeared to have been resolved. The EPA provided a public comment period and did not receive any comments indicating disagreement with the agency's findings, nor has the agency identified reasons since the preliminary report was issued to change this determination. As a result, the EPA now concludes that these 26 allegations were sufficiently addressed and do not warrant the initiation of withdrawal proceedings.

Following issuance of the preliminary report, the EPA and the Iowa Department of Natural Resources entered into a workplan to address the remaining issues. The EPA deferred further action on the Petition until IDNR had an opportunity to address the EPA's findings pursuant to the workplan. In June 2018, you submitted a letter to the EPA reiterating concerns with IDNR's CAFO program and in January 2019 submitted additional documentation related to livestock and poultry production in Iowa and water quality in Iowa. The EPA has now carefully reviewed IDNR's progress toward addressing the findings in the preliminary report and it has reviewed the additional information submitted.

Based on this comprehensive review, the EPA has determined that the allegations do not warrant initiating program withdrawal proceedings. The enclosed document summarizes the EPA's review and the basis for the agency's determination.

If you have any questions regarding this matter, please contact Jeffery Robichaud, Director, Water, Wetlands, and Pesticides Division at (913) 551-7146 or robichaud.jeff@epa.gov.

Sincerely,

James B. Gulliford

Enclosure

Cc: Bruce Trautman, Acting Director, IDNR
Ed Tormey, Acting Division Administrator, IDNR
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ENCLOSURE
DECISION DOCUMENT
Response to Petition to Withdraw Iowa's National Pollutant Discharge Elimination System Permit Program

A Petition for Withdrawal of the National Pollutant Discharge Elimination System (NPDES) Program Authorization from the State of Iowa was submitted to EPA on September 20, 2007, by the Iowa Citizens for Community Improvement, the Sierra Club, and the Environmental Integrity Project (Petitioners). The Petitioners made 31 separate allegations wherein they alleged Iowa's NPDES concentrated animal feeding operations (CAFO) program did not meet the requirements of the Clean Water Act (CWA). In July 2012, EPA issued a preliminary report, attached as Appendix A, finding that 26 of Petitioners' allegations appeared to have been resolved. EPA provided this report to Petitioners in 2012 and did not receive any further communications indicating that Petitioners disagreed with EPA's findings, nor has EPA identified reasons since the preliminary report was issued to change this determination. As a result, EPA concludes that these 26 allegations were sufficiently addressed and do not warrant the initiation of withdrawal proceedings.

Following issuance of the preliminary report, EPA and IDNR entered into a Workplan, attached as Appendix B, to address the remaining issues. EPA deferred further action on the Petition until the Iowa Department of Natural Resources (IDNR) had an opportunity to address EPA's findings pursuant to the Workplan. In June 2018 Petitioners submitted a letter to EPA reiterating their concerns with IDNR's CAFO program and in January 2019 Petitioners submitted additional documentation related to livestock and poultry production in Iowa and water quality in Iowa.[1] EPA has now carefully reviewed IDNR's progress on addressing the findings in the preliminary report and it has reviewed the additional information submitted by the Petitioners. Based on this comprehensive review, EPA has determined that the Petitioner's allegations do not warrant initiating program withdrawal proceedings. This document summarizes EPA's review and the basis for the Agency's determination.

BACKGROUND

Under the CWA, discharges of pollutants into the nation's waters are, in general, regulated under the NPDES program, as established under Section 402 of the CWA (33 U.S.C. § 1342). The CWA gives the EPA Administrator authority to issue and enforce NPDES permits. States may apply for and receive EPA approval to administer the NPDES program governing discharges into waters within their jurisdictions under Section 402(b) (33 U.S.C. § 1342(b)). On August 1, 1978, EPA approved IDNR to administer the NPDES program in the State of Iowa.

EPA may withdraw NPDES program approval where a State program no longer complies with the CWA and its implementing regulations (33 U.S.C. § 1342(c)); 40 C.F.R.§ 123.63(a). EPA may exercise its discretion to initiate withdrawal proceedings including for the reasons set forth in 40 C.F.R.§ 123.63(a):

[1] Petitioners submitted press releases and IDNR data regarding manure spills and manure application and newspaper and journal articles concerning water quality in Iowa and the Gulf of Mexico. While this is helpful information, none of this is new information as EPA routinely receives IDNR press releases regarding manure spills and manure application and the data are publicly available. EPA is currently working with IDNR and other states concerning nutrient issues in Iowa and the Gulf of Mexico as part of the Mississippi River/Gulf of Mexico Hypoxia Taskforce.

1. Where the State's legal authority no longer meets the requirements of [40 C.F.R. Part 123], including:
   i. Failure of the State to promulgate or enact new authorities when necessary; or
   ii. Action by a State legislature or court striking down or limiting state authorities.

2. Where the operation of the State program fails to comply with the requirements of [40 C.F.R. Part 123], including:
   i. Failure to exercise control over activities required to be regulated under this part, including failure to issue permits;
   ii. Repeated issuance of permits which do not conform to the requirements of this part; or
   iii. Failure to comply with the public participation requirements of this part.

3. Where the State's enforcement program fails to comply with the requirements of [40 C.F.R. Part 123], including:
   i. Failure to act on violations of permits or other program requirements;
   ii. Failure to seek adequate enforcement penalties or to collect administrative fines when imposed; or
   iii. Failure to inspect and monitor activities subject to regulation.

4. Where the State program fails to comply with the terms of the EPA/State Memorandum of Agreement required under 40 C.F.R. § 123.24 (or in the case of a sewage sludge management program, 40 C.F.R. § 501.14 of this chapter); or

5. Where the State fails to develop an adequate regulatory program for developing water quality-based effluent limits (WQBELs) in NPDES permits.

In their 2007 petition, the Petitioners asked EPA to withdraw approval of Iowa's NPDES program, alleging that the State is not conducting its program in accordance with the applicable requirements of the CWA and its implementing regulations. The Petitioner's 31 allegations fall within four primary categories. First, that Iowa's statutes and regulations are not as stringent as what is required by the CWA. Second, that Iowa NPDES permits are not sufficiently stringent, in that the permits do not include certain requirements contained in the federal CAFO regulations. Third, that IDNR fails to issue permits to discharging CAFOs that require NPDES permits. Finally, the Petitioners alleged that Iowa fails to administer an adequate CAFO enforcement program because IDNR fails to adequately investigate CWA violations and seek adequate penalties to deter noncompliance by the regulated community.

In October 2011 and pursuant to 40 C.F.R. § 123.64(b)(1), EPA began conducting an informal investigation of the Petitioners' allegations to determine whether there is cause to begin formal withdrawal proceedings. As part of that investigation, EPA forwarded the Petition to IDNR and requested information from the State. EPA also performed an onsite review of records and conducted interviews at all six IDNR field offices and their Des Moines headquarters. In July 2012, EPA issued a preliminary report finding that 26 of Petitioners allegations appeared to have been resolved and deferred further action on the remaining five allegations to provide IDNR with the opportunity to address EPA's preliminary findings associated with these allegations. The preliminary findings in 2012 on these five allegations are summarized below.

- IDNR is not issuing NPDES permits to CAFOs when appropriate (NPDES Permitting Allegations 1 & 2).
- IDNR has not conducted comprehensive inspections to determine whether unpermitted CAFOs need NPDES permits (Compliance & Enforcement Allegation 5).
- In a number of cases reviewed (49%), IDNR failed to act, or did not follow its enforcement response policy when addressing CWA/NPDES permit violations. (Compliance & Enforcement Allegation 2).
- IDNR is not assessing adequate penalties against CAFOs (Compliance & Enforcement Allegation 4).
- Land application setbacks are not equivalent to federal requirements and are not included in IDNR-approved nutrient management plans (Statutory and Regulatory Authorities Allegation 12 and NPDES Permitting Allegation 5).

EPA and IDNR developed a Workplan that established objectives that would allow IDNR to address EPA's preliminary findings. Prior to finalization of the Workplan, EPA sought input from the Petitioners and the public.The final Workplan was signed by EPA and IDNR on September 11, 2013. EPA's oversight of Iowa's implementation of the Workplan consisted of reviewing documentation related to approximately 270 inspection reports and 60 enforcement actions throughout the Workplan's five-year timeframe. EPA also utilized IDNR's annual reports, IDNR databases, facility files, and direct communication, when necessary, to evaluate the claims in the Petition and monitor IDNR's progress toward meeting the Workplan objectives. IDNR has worked extensively over the past five years through the implementation of the Workplan to make improvements in IDNR's NPDES program to address concerns raised in both EPA's preliminary report and the Petition.

DISCUSSION

A. Statutory and Regulatory Authorities

Allegation 12: Iowa law is less stringent than federal law because it allows the application of manure without a separation distance if it is incorporated into the soil within 24 hours rather than establishing separation distances.

Response:

This allegation does not warrant the initiation of withdrawal proceedings.

40 C.F.R. 123.63(1)(i) provides that EPA may withdraw program approval in certain circumstances, including the failure of the State to promulgate legal authorities that meet the requirements of the federal regulations 40 C.F.R. 412.4(c)(5) requires NPDES permits to include a 100-foot setback from downgradient surface waters, open tile line intake structures, sinkholes, agricultural wellheads, or other conduits to surface waters The regulation provides compliance alternatives of a 35-foot wide vegetated buffer or demonstration by the CAFO that a setback or buffer is not necessary because implementation of alternative conservation practices or field specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the 100-foot setback. At the time the petition was filed, and EPA issued its preliminary report, EPA found that Iowa's regulations appeared to be more limited in scope than the federal requirements. In September 2014, IDNR resolved this concern

by incorporating by reference EPA's regulation regarding separation distance. See, 567 IAC 65.3(3)(h) and 65.101(6). This incorporation by reference established a regulatory scheme that meets the requirements of EPA's regulations.

For these reasons, this allegation has been sufficiently addressed to not warrant the initiation of withdrawal proceedings.

B. NPDES Permitting

Allegations 1 & 2: Iowa has failed to issue permits to all open feedlots and confinements that have discharged.

Response:

These allegations do not warrant the initiation of withdrawal proceedings.

40 C.F.R. 123.63(a)(2)(i) provides that the Administrator may withdraw program approval when a State program fails to exercise control over activities required to be regulated, including failure to issue permits. This provision recognizes that a state's exercise of control over activities to be regulated may include the issuance of permits but could also involve other approaches (e. g. , working to remedy the cause of discharge altogether).

Concerns were raised in the Preliminary Report that IDNR lacked the statutory and regulatory authorities to issue NPDES permits to confinement CAFOs that discharge. Iowa Code 459.311(2) and 567 IAC 65.6 were amended to clarify that IDNR has the authority to issue NPDES permits to confinement CAFOs that discharge.

In the preliminary report, EPA reached varying conclusions regarding the adequacy of IDNR's NPDES permitting program for large open feedlots, medium open feedlots, confinement operations and combined operations.[2] Although EPA found that IDNR had an adequate NPDES permitting program for large open feedlot CAFOs, EPA was unable to reach a conclusion on the adequacy of the NPDES permitting program for medium open feedlots because IDNR had yet to evaluate a significant portion of the facilities in this category. Similarly, EPA was unable to reach a conclusion that IDNR's NPDES permitting program for confinement operations was adequate as IDNR had not comprehensively evaluated the "no discharge" claims made by these facilities. Finally, EPA was unable to reach that conclusion for combined operations because IDNR was not comprehensively evaluating these facilities when assessing whether they discharge or if the cause of a past discharge had been remedied.

Since the Petition was submitted, EPA has been working with IDNR to evaluate permit issuance to CAFOs and has found that the state has made significant improvements to its assessment and permitting program. As of July 31, 2018, IDNR has performed desktop assessments at approximately 8,001 facilities and performed approximately 4,369 onsite inspections pursuant to the Workplan. Moreover, IDNR revised its current CAFO inspection program to consistently and comprehensively evaluate facilities on a statewide basis to determine: 1) CAFO status; 2) whether the facility discharges to a Water of the United States (WOUS); 3) whether past discharges at unpermitted CAFOs have been

[2] The term "combined operations" refers to animal feeding operations that utilize both open feedlots and confinement buildings to confine animals.

remedied; and 4) whether the facility is required to obtain an NPDES permit because the CAFO discharges.

As described below, IDNR is now consistently and comprehensively evaluating facilities on a statewide basis to determine whether facilities are required to obtain an NPDES permit and whether past discharges have been remedied for both confinement and open feedlot/combined operations.

Confinement Operations- At the time EPA issued its preliminary report, EPA found that once IDNR documented a discharge, additional follow-up investigations of confinement operations were not sufficiently comprehensive to determine whether a CAFO needed to obtain a permit. Essentially, IDNR needed to assess whether the facility had remedied the discharge and require CAFOs to obtain permits if they failed to do so. As discussed below, IDNR has improved this aspect of its enforcement program.

Although IDNR has not required or received a NPDES permit application from any of the confinement operations that have discharged to a WOUS, IDNR is requiring that facilities with past discharges remedy the cause of the discharge. Concerns were raised in the preliminary report that IDNR lacked the statutory and regulatory authorities to issue NPDES permits to confinement CAFOs that discharge. Iowa Code 459.311(2) and 567 IAC 65.6 were amended to clarify that IDNR has the authority to issue NPDES permits to confinement CAFOs that discharge. After EPA reviewed IDNR data (discharge and inspection spreadsheets), inspections and enforcement actions, the EPA selected 29 confinement facilities for further review (Appendix C). In all cases, the facility/respondent was required to remedy the cause of the discharge. IDNR has indicated that it is continuing to monitor these cases by utilizing its Field Office Compliance Database and conduct follow-up inspections to ensure that any remedies are maintained and implementation is ongoing.

Open Feedlots/Combined Operations – Similar to confinement operations, EPA was unable to conclude that IDNR was issuing NPDES permits to medium open feedlots when appropriate at the time EPA issued its preliminary report.

As of July 31, 2018, IDNR had issued 171 active NPDES permits to open feedlots/combined operations. Thirteen of the 171 NPDES permits have been issued since IDNR began implementing the Workplan in 2013. After reviewing 76 small and medium sized operations, EPA found that most of the facilities with documented evidence of discharge elected to remedy the cause of the discharge or remove themselves from the definition of a CAFO, rather than seek a NPDES permit.

Remedying discharges from open feedlots, combined operations or other outdoor/uncovered production areas presents significant challenges to both the facility and IDNR. Unlike the accidental one-time events that are typical for confinement operations, discharges from open feedlots and combined operations typically are the result of the facility's inability to adequately manage precipitation runoff. Once a discharge has been alleged, many medium sized facilities elect to install controls such as Vegetative Treatment Areas, Solids Settling Basins, and terracing as a permanent remedy. [3] The effectiveness of such remedies is often dependent on the design, construction, operation and maintenance of the control. IDNR has agreed to continue to monitor the effectiveness of these mitigation practices to ensure the facility no longer has a duty to apply for a NPDES permit.

[3] The vast majority of large open feedlots have NPDES permits.

EPA recognizes that states have discretion when administering the NPDES program and that IDNR has the authority to pursue a variety of options to address this challenging issue. Moreover, EPA promotes flexibility for states to implement appropriate and effective programs to protect water quality and human health by ensuring proper management of manure and related wastewater. [4] EPA will continue to examine IDNR's approach through its ongoing oversight role[5].

For the reasons set forth above, EPA finds that IDNR is adequately issuing permits to CAFOs when appropriate and that IDNR has conducted sufficiently comprehensive inspections to determine whether unpermitted CAFOs need NPDES permits. Accordingly, neither one of these allegations warrant the initiation of withdrawal proceedings.

Allegation 5: IDNR does not include setback distances in its CAFO permits.

Response:

This allegation does not warrant the initiation of withdrawal proceedings.

The "[r]epeated issuance of permits which do not conform to the requirements of this part" may also be a basis for withdrawal of NPDES program approval. 40 C.F.R. 123.63(a)(2). EPA evaluated how IDNR was implementing setback distances and compliance alternatives. IDNR has determined, based on research conducted by Iowa State University, that manure injection and incorporation (on the same day as application) on land with a slope of 5% or less and a field phosphorus index of 2.0 or less is an alternative that achieves pollutant reductions equivalent or better than that achieved by a 100-foot setback. These practices have been incorporated into Iowa NPDES permits as setback alternatives since December 2016. IDNR, as the permitting authority, is in the best position to assess the effectiveness of the alternatives described above. EPA has advised that these practices are sometimes not technically feasible in areas of highly erodible soils and there may be field specific scenarios where the 100-foot setback or 35-foot buffer strip may provide superior pollutant reductions compared to injection/incorporation. In these and comparable situations, operators can implement the setback distances or field-specific conservation practices such as cover crops, bioreactors or saturated buffers to ensure comparable pollutant reductions are achieved.

As part of EPA's continuing oversight of the IDNR CAFO program, EPA can continue to work with the state to develop implementation procedures to guide operators in making a site-specific assessment of the benefits of different conservation practices compared to setbacks or buffers. This procedure could include a variety of criteria that capture the variability across the state and across farms that affects the efficacy of the practices, including slope, leaching, soil type, and manure form.

IDNR permits implement the setback and compliance alternative requirements in the federal CAFO regulations, based on IDNR's assessment of the effectiveness of compliance alternatives. Through the actions discussed

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[4] *See*, Environmental Protection Agency; National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 60 Fed. Reg. 7199 and 7232 (Feb. 12. 2003) (codified at 40 C.F.R. Parts 9, 122, 123, and 412).

[5] In FFY2019 EPA Region 7 will be performing its review of IDNR's enforcement, compliance and permitting programs in accordance with EPA's State Review Framework (SRF) and Permit and Program Quality Review (PQR) protocols. IDNR's NPDES program for AFOs/CAFOs will be included in these reviews.

herein, IDNR has resolved the legal deficiency raised by the Petitioners that Iowa's regulation is less stringent than federal law.

In the Preliminary report, EPA also noted that setback requirements were often not included in IDNR approved Nutrient Management Plans (NMP). This omission was the result of the use of outdated templates. EPA recommended that IDNR update the templates and ensure setback requirements are included into NMPs. IDNR has now updated the templates.

For these reasons, this allegation has been sufficiently addressed to not warrant the initiation of withdrawal proceedings.

C. Compliance and Enforcement

Allegations 2 & 4: IDNR fails to take enforcement actions and seek adequate enforcement penalties.

Response:

These allegations do not warrant initiating withdrawal proceedings.

40 C.F.R.123.63(a)(3) provides that the Administrator may withdraw program approval for a number of reasons relating to the State's enforcement program, including when a State program fails to act on violations of permits or other program requirements and fails to seek adequate enforcement penalties.

EPA's preliminary report indicated that: (1) IDNR failed to act or did not follow its enforcement response policy when addressing CWA/NPDES permit violations in 49% of the facility files reviewed by EPA and (2) IDNR's enforcement response appeared to be inadequate.

Whether IDNR fails to act on violations of permits or other program requirements. Since the preliminary report, IDNR has revised its enforcement program to implement its enforcement response policy and document its decision-making processes related to enforcement escalation. These revisions include mandatory training for relevant IDNR staff, development of an enforcement checklist to be used by all IDNR field offices, and mandatory referral of all documented discharges to IDNR Legal Bureau for enforcement evaluation, as well as mandatory calculation and collection of economic benefit for all penalty actions.

IDNR has strengthened its inspection program, allowing EPA to better evaluate the adequacy of IDNR's enforcement program. During EPA's early oversight of the Workplan (2013-14), the Agency found several instances where field offices were not applying the enforcement response policy consistently across the state. Specifically, field office staff were opting to not refer cases with sampling results that confirmed discharges and electing to resolve them informally. After receiving feedback from EPA, IDNR adopted the revised policy of referring all cases that have sampling results that confirm discharges to a WOUS to their Legal Bureau. Since adoption of this revised process, there has been significant improvement, and EPA has only documented one instance where a sampled illegal discharge was not referred to the Legal Bureau. This instance was pointed out to IDNR, and it was referred for enforcement. Accordingly, EPA finds that in the large majority of instances, IDNR has acted on violations of permits or other program requirements.

Whether IDNR penalty actions are adequate for purposes of 123.63. In the preliminary report, EPA advised that IDNR should devise a plan that details the steps IDNR can implement to ensure that penalties sought are sufficient to create a deterrent to noncompliance and adequately collect economic benefit. EPA further advised that all administrative penalty actions should include the recovery of the economic benefit of noncompliance and that IDNR should consider referring cases involving illegal discharges and fish kills to the state Attorney General's office.

EPA's regulations require that states have *the ability* to assess fines in the minimum amounts set out in the regulations. States administering a program must have "available" certain remedies, including the authority to "assess" and "recover" specified penalties and fines. 40 CFR § 123.27(a). In addition, 40 CFR § 123.27(b)(1) provides that that the penalties set forth in § 123.27(a)(3) must be "assessable" for each violation and "assessable up to" the regulatory amount for continuous violations. A civil penalty assessed must be "appropriate to the violation. " 40 C.F.R.123.27(c). These regulations do not require states to assess minimum and maximum penalties or penalties that are identical to those EPA is authorized to assess. Rather, the regulations afford significant flexibility on the part of states in the amount of penalties that are actually assessed in individual enforcement actions. Given this discretion, EPA's evaluation of whether a state's penalty assessments are "adequate" for purposes of 40 C.F.R. 123.63 focuses on whether the state's assessment reflects consideration of penalty factors that are generally relevant to penalties under the Clean Water Act and case law (e. g. seriousness of the violations, amount of economic benefit resulting from the violations, history of the violations, any good faith efforts to comply, economic impact the penalty on the violator, etc.). Iowa Code section 455B.109(1) provides that in assessing a penalty IDNR's director shall consider among other relevant factors the following: (1) economic benefit associated with the violation, (2) gravity of the violation, (3) the culpability of the violator, and (4) the maximum penalty authorized for that violation under Iowa Code chapter 455B. IDNR's enforcement response policy accounts for these same factors. EPA has found that IDNR's approach to penalties, including its enforcement response policy, represents a reasonable approach for assessing adequate penalties because it generally accounts for factors that are widely utilized under the Clean Water Act.

EPA reviewed penalties associated with 63 out of approximately 100 enforcement actions that included CWA/NPDES violations at CAFOs that were filed since the Workplan was signed. EPA assessed both the gravity and economic benefit components of these actions to evaluate the state's progress in documenting its consideration of these two factors. The penalties sought by IDNR also may include other applicable penalty components such as a culpability penalty, a history of violation adjustment, and fish restitution. EPA focused on the gravity and economic benefit components because these are areas that EPA identified in its preliminary report where the state could improve. Table 1 provides comparisons of the average gravity and economic benefit components reviewed by EPA both before and since EPA issued its preliminary report.

IDNR's consideration of the gravity component. Iowa regulations (567 IAC 10.3(2)) and IDNR's enforcement response policy allow IDNR to assess up to $3000 per day for the gravity portion of the penalty and up to $10,000 for the total assessed administrative penalty. Prior to the initiation of the Workplan, EPA's file review revealed that the facility files included little if any supporting information, such as calculations, estimates, or mitigating factors that provided clear rationale for IDNR's decisions related to gravity calculations. The only available information was included in the enforcement action itself and typically consisted of a brief explanation of factors considered when the gravity penalty component was calculated. Since initiation of the Workplan, EPA reviewed IDNR enforcement actions and found that IDNR included a gravity component in all actions reviewed. Case files, reviewed by EPA, included penalty rationale and calculations. EPA concludes that IDNR has made significant

Table 1. Average Penalty Amounts from IDNR Actions Pre and Post Preliminary Report

Violation Type	# of Actions		Average Gravity		Average Econ. Benefit		Average Penalty	
	Pre[1]	Post[2]	Pre	Post	Pre	Post	Pre	Post
Discharge	41	43	$2,981.71	$1997.67	$764.63	$925.58	$5,810.98	$4,238.37
Fish Kill	17	17	$2,882.35	$2,320.59	$373.53	$982.35	$4,497.45	$4,182.35
NPDES Reporting	5	3	$1,340.00	$1,366.67	$220.00	$133.33	$2,700.00	$3,000.00
All Violations	63	63	$2,542.14	$2,054.76	$554.00	$903.17	$4,688.67	$4,164.29

[1] For EPA's preliminary report EPA reviewed all IDNR administrative actions related to AFOs that were filed between October 1, 2006 and September 30, 2011 and identified 70 that had CWA/NPDES violations associated with them. Seven of these actions only contained stipulated penalties and were not included in this table.

[2] For EPA's post preliminary report analysis EPA reviewed 73 IDNR administrative actions related to AFOs that were filed between November 25, 2013 and May 19, 2018 and identified 63 that had CWA/NPDES violations associated with them.

improvements to its processes for calculating and documenting the gravity penalty component to ensure that there is appropriate consideration of this factor in a way that leads to the assessment of adequate penalties.

Prior to the initiation of the Workplan in 2013, the average gravity component associated with enforcement actions reviewed by EPA was $2,542.14 with the maximum value being $6,400.00. Since IDNR began implementation of the Workplan, the gravity penalty collected by IDNR has decreased by 20% to an average amount of $2,054.76 with a maximum amount of $5,000.00. IDNR attributes at least some of this reduction in average gravity to the initiation of formal enforcement actions for illegal discharge cases with lower environmental harm. Prior to Workplan implementation, the decisions to refer discharge cases to IDNR Legal were within the discretion of the individual field offices. Oftentimes, cases were referred only after the field office became frustrated with an operator's efforts toward compliance. This often resulted in relatively longer periods of noncompliance and thus greater gravity penalties. The preliminary report also recommended that IDNR Field Services Bureau should more often exercise the option available to it of recommending that these cases be pursued by the state Attorney General, noting this enforcement path will better ensure that the penalties sought in these cases are commensurate with the gravity of the violations committed. Since the Workplan was implemented, all discharge cases are referred to IDNR Legal for enforcement determination with a copy to the Attorney General's office. As a result, IDNR is now seeking penalties in cases that were historically resolved informally and periods of violation are shortened. As penalties associated with these cases are typically lower than cases with more significant environmental harm and with longer noncompliance periods, the assessment of penalties in these cases has impacted the overall average penalty assessments since initiation of the Workplan. In cases with greater environmental harm (e. g. , fish kills) IDNR relies upon the fish restitution provisions in addition to the gravity component to assess additional fines to the violator. EPA reviewed 17 of 22 enforcement actions that were filed after initiation of the Workplan, involving illegal discharges that resulted in fish kills. All 17 actions had the additional fish restitution values ranging from $348 00 to $162,495.46. [6]

IDNR's consideration of the economic benefit component. Prior to the initiation of the Workplan in 2013, the average economic benefit collected from IDNR enforcement actions against CAFOs was $554 and the maximum economic benefit collected was $3,000. Despite Iowa's regulatory requirement and enforcement response policy recommendation to always assess an economic benefit, nearly one-half

[6] The EPA notes that there were instances where fish restitution penalties were higher than what EPA would be able to seek pursuant to its penalty authorities.

(46%) of enforcement actions did not include any economic benefit assessment. As in the case of the gravity component, EPA found that the facility files contained little, if any, information in the form of calculations, estimates, or mitigating factors that supported or provided clear rationale for IDNR's decisions related to economic benefit and the only information provided was included in the enforcement action itself. In twelve instances involving both open feedlots and confinement operations, IDNR's rationale for a $0 economic benefit factor was that the facility had taken or was taking action to return to compliance and IDNR reasoned the costs of these actions offset any benefit that might have been gained through noncompliance. These examples were inconsistent with the State's own regulations and enforcement response policy, which all advise that penalties reflect removal of any economic gain enjoyed from the facility's noncompliance. In four enforcement actions IDNR assessed no economic benefit penalty at large open feedlots that had illegally discharged. As described in the preliminary report, EPA uses information compiled by Iowa State University Extension that suggests, at a minimum, proper controls for these types of operations will cost between $215,000 and $450,000.

Since the initiation of the Workplan, EPA reviewed IDNR enforcement actions and found that IDNR had assessed an economic benefit component in the majority (89%) of the cases reviewed. In cases where an economic benefit component was not assessed, IDNR provided a reasonable rationale in the case files, or the enforcement actions themselves, to support its decision. This marks significant improvement in the state's processes for calculating and documenting the economic benefit component to ensure that there is appropriate consideration of this factor in a way that leads to the assessment of adequate penalties.

Post Workplan, the average economic benefit collected increased by 63% to $903.17 with a maximum economic benefit component of $5,000. The EPA notes that many of the penalties were associated with one-time, accidental discharges, such as hose breaks or negligence during land application activities, associated with confinement operations. The economic benefit gained from the noncompliance in those types of cases is often quite low because the remedies for the discharges do not involve high capital costs. The average economic benefit recovered by IDNR was therefore lower because of the number of corrective actions that merely require a maintenance and operational change by the CAFO.

While IDNR has made improvements in this area, IDNR's assessment of economic benefit for discharges from open feedlots appears to be lower than the actual cost of compliance using information from Iowa State University, as described above. EPA recommends that IDNR strengthen its assessment of economic benefit for open feedlots to reflect more accurately the violator's actual savings from noncompliance

EPA finds that, as a general matter, IDNR's penalty assessments are adequate because the assessments reflect an appropriate consideration of the relevant factors. IDNR has made significant and continuing progress in this area. The record demonstrates that IDNR has considered the relevant factors in assessing penalties, provided a rationale basis for its penalties assessed and documented its decision-making in an effort to improve transparency. While there may be room for improvement in this area, EPA has determined that the initiation of withdrawal proceedings is not warranted given IDNR's trend of improving its penalty assessment procedures and documentation. EPA will continue to exercise its oversight role to address any shortcomings in IDNR's assessment of the relevant factors.

Allegation 5: IDNR fails to inspect and monitor activities subject to regulation.

Response:

This allegation does not warrant the initiation of withdrawal proceedings.

40 C.F.R.123.63(a)(3) provides that the Administrator may withdraw program approval for a number of reasons relating to the State's enforcement program, including when a State program fails to inspect and monitor activities subject to regulation.

40 C.F.R.123.26(b) provides that State programs shall have inspection and surveillance procedures to determine, independent of information supplied by regulated persons, compliance or noncompliance with applicable program requirements. The state must implement and maintain an "automated, computerized system which is capable of identifying and tracking all facilities and activities subject to the State Director's authority" and a "program for periodic inspections of the facilities and activities subject to regulations. " 40 C.F.R.§ 123.26(b). IDNR's AFO program addresses these requirements.

In the preliminary report, EPA found that IDNR had performed an adequate number of routine compliance inspections at permitted CAFOs. IDNR continues to routinely inspect these facilities at least once every five years consistent with the national 2014 NPDES Compliance Monitoring Strategy (CMS) and satisfying the requirement that IDNR have a program in place for periodic inspections of facilities subject to regulation.

In the preliminary report, EPA also found that IDNR did not have inspection and surveillance procedures in place to determine whether facilities were subject to regulation. In response, IDNR made a number of modifications to its CAFO inspection program. EPA has worked with IDNR to address its allegations and IDNR has significantly improved its program as described below.

In response to EPA's preliminary report, IDNR revised its current CAFO inspection program to more consistently and comprehensively evaluate facilities on a statewide basis to determine: 1) CAFO status; 2) whether the facility is discharging to a WOUS. ; 3) whether discharges at unpermitted CAFOs have been remedied; and 4) whether the facility is required to obtain a NPDES permit because the CAFO discharges. IDNR also developed an inspection plan that meets the inspection goals set forth in EPA's Compliance Monitoring Strategy.

As described below, IDNR has worked diligently and made significant progress towards achieving the objectives set forth above and has dedicated adequate resources for implementation of the NPDES CAFO program.

In the preliminary report, EPA found that IDNR had not assessed the regulatory status and NPDES obligations of the estimated 2,000 medium open feedlots in Iowa and failed to perform discharge assessments of half of large confinement CAFOs. EPA also reached the conclusion that the assessments that had been completed were rarely comprehensive enough for IDNR to conclude whether or not medium or large feedlots discharged. In the preliminary report, EPA found many instances of reports that lacked basic information, such as the areas of the facility inspected, supporting documentation (i. e. , photos, inventory records, etc.) and/or determinations of the facility's AFO and/or CAFO status. In many instances, it was unclear whether the inspector performed an adequate investigation or if the documentation was merely insufficient. As a result, a majority of the inspections reviewed by EPA

contained insufficient information to answer basic questions such as whether the operation was a CAFO, did the operation discharge, was an NPDES permit required, or was the operation in compliance with the CWA.

In the Workplan, IDNR agreed to implement a comprehensive survey to identify AFOs that are CAFOs that discharge to waters of the U. S. and have failed to apply for NPDES permits. To complete this comprehensive survey, IDNR agreed to establish a baseline inventory of all large CAFOs and medium-sized AFOs using the IDNR AFO database. IDNR also agreed to provide a written plan to locate and/or identify any unknown large CAFOs or medium-sized AFOs to supplement the baseline inventory. IDNR would then perform inspections and/or desk audits, in accordance with agreed upon Standard Operating Procedures, at the facilities identified in IDNR's baseline inventory and the newly identified facilities. IDNR's baseline inventory at the initiation of the Workplan identified approximately 8,582 large and medium sized animal feeding operations. IDNR reported in its 2018 annual report that it had completed[7] evaluations (on-site inspection or desk top assessment) of all facilities in the baseline inventory. IDNR also reported that it had identified approximately 5,063 unknown facilities that IDNR will need to further evaluate in order to determine whether these facilities are medium AFOs or large CAFOs subject to the comprehensive survey.[8] To find unknown facilities, IDNR initially cast a wide net to identify the universe of potentially regulated facilities by looking for potential facilities within every section (640 acres) of the State. IDNR then contacted each potential facility to determine whether these facilities meet the definition of a medium AFO or large CAFO, which is a tremendous undertaking.

As of December 31, 2018, IDNR has completed all of these determinations and identified approximately 1,240 facilities that will likely need to be assessed as part of the comprehensive survey. Assessing or inspecting these additional facilities to determine whether they discharge into WOUS will extend beyond the 5-year timeframe of the Workplan IDNR has indicated that these evaluations will be done pursuant to their comprehensive survey SOP. Due to the time-consuming nature of assessing the additional 1,240 facilities pursuant to the Comprehensive Survey, it is reasonable that this assessment will extend beyond the 5-year timeframe of the Workplan. The current process IDNR has in place is sufficient to determine whether a facility is in compliance with program requirements and IDNR has made sufficient progress on this objective.

Since 2013, EPA has evaluated approximately 270 IDNR inspection reports and determined that there has been significant improvement with respect to inspection adequacy. In 2013 and 2014, EPA reviewed approximately 225 inspection reports from all six IDNR field offices. EPA identified discrepancies regarding the way individual inspectors performed inspections. Primarily, these discrepancies were associated with the failure to evaluate all portions of the production area (e. g. omitting mortality management) and the determination that a NPDES permit was not required at facilities that had outdoor, uncontrolled production areas that would likely have observable discharges to a WOUS if the inspection had been associated with a significant precipitation event. Of the 225 reviewed in 2013 and 2014, roughly 75 (33%) fell under one these two categories. EPA shared these findings with IDNR

[7] IDNR reported that between 7/1/2013 and 7/23/2018 it had performed 8,001 desktop assessments and 4,697 onsite inspections.

[8] In December 2013, IDNR submitted a plan to EPA that outlined the steps IDNR would take to identify unknown facilities that are either Medium AFOs or large CAFOs. In February 2018, the IDNR Field Services Compliance Bureau issued a memorandum that further explained the procedures used by field office staff to locate unknown facilities that are either medium AFOs or large CAFOs.

management and staff and IDNR agreed to implement changes to address EPA's concerns. Specifically, IDNR agreed to ensure mortality management areas were evaluated as part of the production area. IDNR also agreed to address facilities with uncontrolled production areas by scheduling follow-up inspections to continue monitoring if the facility discharges to a WOUS. In late 2016, EPA reviewed approximately 45 inspections that occurred in 2015 and 2016 in a continuation of its oversight role. Few, if any, inconsistencies or issues were documented that were similar to those found in 2013 and 2014. Furthermore, EPA's review of IDNR inspections determined that in a majority of the inspections IDNR is properly classifying the facility as CAFO based on its size and the type of animals being confined.

The Agency finds that IDNR implemented inspection processes to determine CAFO status, evaluate of whether the facility discharges to a WOUS, and follow-up when IDNR is unable to conclude that a CAFO does not discharge. The procedures that IDNR has introduced to ensure comprehensive CAFO assessments and inspections satisfy the requirements of 40 C.F.R.123.26(b).

Staff/Inspection Funding: The petition alleged that IDNR did not have sufficient full-time staff to run an adequate AFO program. To evaluate this claim EPA considered the extent to the state's staff/funding affect a state's ability to fulfill the basic program requirements. EPA found in the preliminary report that IDNR staff reductions had required IDNR to significantly reduce the number of inspections performed at both medium AFOs and large CAFOs thus preventing IDNR from fully carrying out its basic responsibilities for the NPDES program. To address this finding, IDNR agreed to seek adequate resources to ensure it could achieve NPDES requirements. In 2013, the Iowa legislature provided IDNR approximately $700,000 to hire additional staff to perform evaluations and inspections pursuant to the Workplan. The Workplan required IDNR to provide annual assessments as to whether it had sufficient resources to implement the Workplan. EPA has reviewed these annual reports and additional documents from IDNR and determined that IDNR has consistently sought and received funding for AFO staff at this level throughout the period of the Workplan. They have also been funded at this level through June 2019.

In recent discussions with Petitioners and in their June 2018 letter, they again asserted that IDNR's CAFO NPDES program lacks sufficient resources to adequately implement the CWA, stating that IDNR's "failure to increase IDNR AFO program funding as the industry continues to grow demonstrates that it lacks sufficient resources to maintain adequate inspection and enforcement activity going forward. " EPA notes that the number of AFOs in Iowa have increased approximately 18% since the inception of the Workplan. [9] Iowa should continue to ensure that its AFO program remains adequately funded and resourced to ensure that IDNR remains capable of identifying AFOs that are subject to the NPDES regulation and implementing the CAFO inspection, permitting, and enforcement program.

Based on the results of EPA's ongoing review of IDNR inspections as discussed above, the Agency concluded that IDNR has sufficient inspection and surveillance procedures to determine, independent of information supplied by regulated persons, compliance or noncompliance with applicable program requirements. IDNR's inspection processes reflect adequate frequency and adequate documentation to determine CAFO status, evaluation of whether the facility discharges to a WOUS, and follow-up when IDNR is unable to conclude that a CAFO does not discharge. The substantial effort and manpower that

[9]This information was extrapolated from the IDNR 2018 construction total spreadsheet submitted to EPA and does not include the 1,200, or so, operations that still require evaluation pursuant to the Comprehensive Survey.

IDNR has committed to site inspections, information gathering, recordkeeping, and other evaluation tools indicate that the state is appropriately directing its resources to address the problems identified in the Petition and EPA's preliminary report.

CONCLUSION

For the reasons set forth above, EPA has determined that the allegations in the Petition do not warrant the initiation of withdrawal proceedings and is therefore denying the Petition. EPA will continue to monitor IDNR's NPDES program performance in accordance with its regular oversight role and duties as set forth in the Memorandum of Agreement entered into by IDNR and EPA.

James B. Gulliford
Regional Administrator
U.S. Environmental Protection Agency Region 7

4/3/19
Date Issued

Appendices
Appendix A: Preliminary Report
Appendix B: Work Plan Agreement
Appendix C: Confinement Operations Reviewed by Region 7

Appendix A

Preliminary Results of an Informal Investigation of the National Pollutant Discharge Elimination System Program for Concentrated Animal Feeding Operations in the State of Iowa (Appendices for this document are not included).

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Preliminary Results of an Informal Investigation of the National Pollutant Discharge Elimination System Program For Concentrated Animal Feeding Operations in the State of Iowa

Region 7
United States Environmental Protection Agency
901 North 5th Street
Kansas City, Kansas 66101

July 2012

This report is not a final agency action. The results of this Initial Investigation are preliminary and findings or conclusions contained within are not final. The Agency intends to take final action on the petition at a later date.

I. Executive Summary
II. Introduction
III. Petitioners' Allegations
IV. Methods
V. Preliminary Results
   A. Statutory or Regulatory Authorities
   B. NPDES Permitting
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   D. Additional Concerns Raised about IDNR's CAFO Program
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Appendices

Appendix 1: Petition to Withdraw
Appendix 2: Notice of Intent to Sue
Appendix 3: Review Protocol
Appendix 4: Region 7 File Review Checklist
Appendix 5: October 28, 2011, EPA Questions Submitted to IDNR
Appendix 6: December 6, 2011, Follow-up EPA Questions for IDNR
Appendix 7: NPDES Permit Review Checklist
Appendix 8: November 18, 2011, IDNR Response to EPA Questions
Appendix 9: December 16, 2011, IDNR Response to EPA Follow-up Questions
Appendix 10: Example Iowa CAFO NPDES Permit
Appendix 11: Letter from Iowa Attorney General Office re: Criminal Penalty Authority
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Appendix 14: IDNR Report to Environmental Protection Commission RE: Summary of Administrative Penalties
Appendix 15: EPA 2007 Compliance Monitoring Strategy

I. Executive Summary

A Petition for Withdrawal of the National Pollutant Discharge Elimination System (NPDES) Program Authorization from the State of Iowa was submitted to EPA on September 20, 2007, by the Iowa Citizens for Community Improvement, the Sierra Club, and the Environmental Integrity Project ("Petitioners"). The Petitioners alleged that Iowa's NPDES concentrated animal feeding operations (CAFO) program does not meet the requirements of the Clean Water Act. The allegations fall within four primary categories. First, that Iowa's statutes and regulations are not as stringent as what is required by the Clean Water Act (CWA). Second, that Iowa NPDES permits are not sufficiently stringent, in that the permits do not include certain requirements contained in the federal CAFO regulations. Third, that Iowa Department of Natural Resources (IDNR) fails to permit discharging CAFOs that require NPDES permits. Finally, the Petitioners alleged that Iowa fails to administer an adequate CAFO enforcement program because IDNR fails to adequately investigate CWA violations and seek adequate penalties to deter noncompliance by the regulated community.

Since 2007, Region 7 has met with the Petitioners several times to discuss the issues raised in the petition. Region 7 has also worked with the IDNR to address areas where its CAFO program arguably did not meet federal requirements, in particular where statutory or regulatory changes were necessary to correct deficiencies. In 2008, 2009, and 2010, the Iowa legislature revised Iowa's animal feeding operation and general NPDES statutes to address several inadequacies identified in the Petition. In August 2010, IDNR promulgated revisions in an effort to address areas in its AFO regulations that, prior to the revisions, were not as stringent as federal requirements. Since the 2010 regulation revisions, new and reissued NPDES permits have incorporated the requirements that became effective as a result of these changes in the regulations.

In August 2011, the Petitioners submitted a Notice of Intent to Sue (NOI) alleging unreasonable delay by the EPA in addressing the allegations raised in the petition. Appendix 2. Since receiving the NOI, Region 7 composed a protocol based, in part, on EPA Region 5's efforts to address a similar 2008 deauthorization petition directed at the State of Illinois. This protocol enumerated the issues initially raised in the petition that Region 7 believes have been adequately addressed and prescribed procedures to evaluate the unresolved issues. This draft protocol was shared with the petitioners and IDNR for comment. The Petitioners did not dispute the resolved issues and agreed, with minor comment, to the proposed protocol.

Pursuant to the protocol, Region 7 queried Iowa's spill, complaint, and fish kill databases and selected animal feeding operation (AFO) facility files to review if, during the last three years, the AFO was associated with a fish kill, had more than one citizen complaint lodged against it, or had a manure spill that had been reported to IDNR. Region 7 staff reviewed approximately 150 AFO/CAFO site files during the week of October 24, 2011. Region 7 also reviewed statewide enforcement/ compliance data and presented IDNR with a number of programmatic questions associated with its implementation of the NPDES program.

The Petitioners' made a total of 31 allegations. Based on Region 7's review, it appears that most of the allegations (26) have been resolved. However, based upon information available during the review, EPA Region 7 preliminarily finds that:

- IDNR has adequate procedures in place to identify large open feedlots and requires permits for large open feedlots that discharge.
- IDNR is not issuing NPDES permits to CAFOs when appropriate.
- IDNR has not conducted comprehensive inspections to determine whether unpermitted CAFOs need NPDES permits.
- In a number of cases reviewed (49%), IDNR failed to act, or did not follow its enforcement response policy when addressing CWA/NPDES permit violations.
- IDNR is not assessing adequate penalties against CAFOs.
- Land application setbacks are not equivalent to federal requirements and are not included in IDNR-approved nutrient management plans.

These preliminary findings form the basis for several required actions that IDNR should implement to address its program deficiencies.

- IDNR should modify its inspection and enforcement procedures to more consistently and more comprehensively document conditions observed during inspections.
- IDNR should provide clarification, either through a formal legal opinion from the state or through statutory/regulatory changes, that non-CWA state law provisions are an outright discharge prohibition that, at a minimum, allows the state program to meet federal requirements. Another, and perhaps most conclusive, option would be for IDNR to promulgate NPDES permitting regulations for confinement CAFOs that discharge.
- IDNR should also revise its current CAFO inspection program to consistently and comprehensively evaluate facilities on a statewide basis to determine 1) CAFO status; 2) whether the facility is discharging to waters of the U.S.; 3) whether discharges at unpermitted CAFOs have been permanently remedied; and 4) whether the facility is required to obtain an NPDES permit because the CAFO discharges. IDNR should develop and implement formal inspection standard operating procedures (SOPs) for each inspection type utilized to evaluate compliance with the CWA and NPDES permits to ensure that all necessary information is gathered and documented in order for consistent and reliable compliance determinations to be made across the state. These determinations should be sufficiently documented.
- As part of this effort, IDNR should develop an inspection plan that at a minimum accomplishes the inspection goals established in EPA's Compliance Monitoring Strategy for all CAFO-related categories. Adequate resources will be necessary for implementation of the NPDES CAFO program.
- IDNR should document its inspection findings that a CAFO does not need NPDES permit coverage because it does not discharge.
- IDNR should also revise its current enforcement program to better follow its enforcement response policy and better document its decision-making processes related to enforcement escalation, as well as its calculation and collection of economic benefit.

- A large number of the AFOs within the medium open lot and large confinement CAFO sectors have not been evaluated to establish their regulatory status; IDNR should establish a plan to timely evaluate these operations.
- IDNR should evaluate the scope of its setback and separation distance requirements in its regulation and ensure that they are equivalent to federal requirements. IDNR should also revise its application forms and templates to ensure that NMPs meet the minimum requirements of Iowa's regulations and federal minimum requirements.

II. Introduction

This report describes the results of an informal investigation of the NPDES program that the IDNR administers to protect or restore water quality from pollutants generated by CAFOs. The EPA, Region 7, conducted the investigation in response to a petition filed by the Environmental Integrity Project, the Sierra Club, and Iowa Citizens for Community Improvement (Petitioners) on September 20, 2007 (Appendix 1). The Petitioners allege that IDNR has failed to fully implement the NPDES program for CAFOs. Federal regulations require the EPA Administrator to respond in writing to any petition to commence withdrawal proceedings. 40 CFR 123.64(b)(1). The purpose of this investigation is to develop the record upon which the Agency will respond to the petition. EPA's response will be either denial of the petition or an order to commence proceedings to withdraw the program. Id. Prior to making a formal response to the petition, EPA may formulate recommendations for corrective actions to be taken by the state.

Section 301(a) of the Clean Water Act (CWA) prohibits the discharge of pollutants from point sources into waters of the United States unless the discharge is authorized under an NPDES permit, or otherwise authorized by the statute. Section 502 of the Act defines the term "discharge" to mean, among other things, any addition of any pollutant or combination of pollutants from a point source to waters of the United States. It defines "point source" to include CAFOs from which pollutants are or may be discharged. It defines the term "pollutant" to include agricultural waste. Under federal regulations, an owner or operator of a CAFO must seek coverage under an NPDES permit if the CAFO discharges.

The CWA § 402(c)(2) requires states with approved NPDES programs, including the state of Iowa, to administer their programs at all times in accordance with § 402 of the Act and the regulations EPA established under § 304(i)(2) of the Act at all times. These regulations appear at 40 CFR Part 123. These regulations include requirements regarding: (1) state programs for NPDES permitting of point sources (40 CFR §123.25); (2) state programs for evaluating compliance by point sources (40 CFR §123.26); and (3) state enforcement authority (40 CFR §123.27).

The Clean Water Act § 402(c)(3) requires the EPA Administrator to withdraw an authorized state NPDES program if, after public hearing, he or she determines that the state is not administering the program in accordance with applicable requirements and the state fails to take corrective action within a reasonable time. While the Petitioners' allegations and EPA's review were focused on IDNR's implementation of the NPDES program for CAFOs, any action to withdraw Iowa's program would affect the entire authorized program, not just those elements

pertaining to CAFOs. Criteria for withdrawal appear at 40 CFR § 123.63. The pertinent criteria to evaluate Petitioners' allegations include the following:

(1) Where the state's legal authority no longer meets the requirements of Part 123, including:
(i) Failure of the state to promulgate or enact new authorities when necessary; or
(ii) Action by a state legislature or court striking down or limiting state authorities.
(2) Where the operation of the state program fails to comply with the requirements of 40 CFR Part 123, including:
(i) Failure to exercise control over activities required to be regulated under Part 123, including failure to issue permits;
(ii) Repeated issuance of permits which do not conform to the requirements of Part 123; or
(iii) Failure to comply with the public participation requirements of Part 123.
(3) Where the state's enforcement program fails to comply with the requirements of Part 123, including:
(i) Failure to act on violations of permits or other program requirements;
(ii) Failure to seek adequate enforcement penalties or to collect administrative fines when imposed; or
(iii) Failure to inspect and monitor activities subject to regulation.

EPA authorized the state of Iowa [1] to administer the NPDES program on August 1, 1978. IDNR has issued approximately 1,600 current NPDES individual permits and approximately 12,500 current authorizations to discharge under NPDES general permits. Information regarding the universe of IDNR's AFOs and CAFOs is summarized in Table 1 below and was compiled using data from IDNR's Animal Feeding Operation Database and additional information provided in IDNR's response to EPA questions (Appendix 9).

Table 1. AFO/CAFO Numbers in Iowa

Type of AFO	Medium AFOs	Large CAFOs	# of facilities covered by Individual NPDES Permit
Open lot	2,000†	182*◊	98*
Confinement	3152*	2,658*	0*
Combined	158*	215*	33*
Total (all types)	5,310	3,055	131

* Source: IDNR Animal Feeding Operation Database (June 2011)
† Source: IDNR's response to EPA questions (Appendix 9)
◊ Region 7 notes that the discrepancy between the number of large open feedlot CAFOs in the database and the number of permitted large open feedlot CAFOs is primarily caused by the fact that operations are listed in the database based on the capacity to confine 1,000 or more cattle but many actually confine fewer than the large CAFO regulatory threshold.

[1] As a result of reorganizations, there has been a series of agencies in Iowa responsible for the implementation of the Iowa NPDES program: the Department of Environmental Quality in the 1970's; the Department of Water, Air and Waste Management in the early 1980's; and the Iowa Department of Natural Resources from the mid-1980's to present.

III. Petitioners' Allegations

The following is an overview of the allegations provided in the Petitioners' September 20, 2007, petition.

A. Statutory and Regulatory Authorities

Allegation 1: House File (HF) 805[2] authorizes discharges from open feedlots that are prohibited by the Clean Water Act by allowing discharges of "settled open feedlot effluent".

Allegation 2: HF 805 omits permitting requirements for medium and small facilities that discharge settled effluent.

Allegation 3: Iowa's definition of "effluent" is inconsistent with the federal definition of effluent.

Allegation 4: The Nutrient Management Plan (NMP) requirements of Iowa statutes are less stringent than federal requirements because of discrepancies created by HF 805's distinction between "open feedlot effluent" and "settled open feedlot effluent".

Allegation 5: Iowa's statutory Alternative Technology (AT) requirements do not address "settled open feedlot effluent".

Allegation 6: Iowa only requires controls on AT systems to prevent discharges between November 1 and March 30 because of "settled open feedlot effluent".

Allegation 7: Once NMPs are approved, they will likely not regulate settled effluent.

Allegation 8: IDNR does not require NMPs from AT systems to provide for settled open feedlot effluent going into an AT system.

Allegation 9: Facilities that are designed to contain a 25 year – 24 hour precipitation event are not required by IDNR to meet sufficiently stringent inspection and recordkeeping requirements.

Allegation 10: The exclusion of livestock markets from Iowa's statutory definition of an "animal feeding operation" is inconsistent with federal law.

Allegation 11: There is no state requirement for CAFOs to "identify appropriate site specific conservation practices to be implemented . . . to control runoff of pollutants to waters of the United States".

Allegation 12: Iowa law is less stringent than federal law because it allows the application of manure without a separation distance if it is incorporated into the soil within 24 hours rather than establishing separation distances.

Allegation 13: Iowa's recordkeeping requirements are less stringent than federal law in that they fail to require the NMP or the NMP compliance records to be maintained on-site, made available to IDNR, or available to the public.

Allegation 14: There is no comparable state requirement to the federal requirement at 40 CFR 412.31(a)(2), which requires specific supporting analyses and other data

[2] This references House File 805, considered by the Iowa legislature in the spring of 2005. HF 805 ultimately passed and resulted in revisions to Iowa Code Sections 459 and 459A, the statutory sections regulating confinement feeding operations and open feedlot operations, respectively.

before a permit is issued with alternative effluent limits. Thus, there is no initial demonstration that an untested AT system will retain pollutants.

Allegation 15: Iowa's regulatory exemption from penalties for "exceeding the nitrogen and phosphorous application rate for an unplanned crop" creates a situation where state law is less stringent than federal law because it does not ensure that phosphorous transport will be minimized and codifies a lack of consequences for non-compliance.

Allegation 16: Iowa's method of counting animals undercounts the number of animals and is therefore less stringent than federal law.

Allegation 17: Federal conflict of interest requirements set forth at 40 CFR 123.25(c) are violated by EPC members' abilities to trade with regulated parties.

B. Permitting

Allegation 1: Iowa has failed to issue permits to all open feedlots that have discharged.

Allegation 2: Iowa has failed to issue permits to all confinement CAFOs that have discharged.

Allegation 3: NPDES permits issued by IDNR do not include all standard terms listed in 40 CFR 122.41.

Allegation 4: Facilities permitted by IDNR have failed to submit NMPs by the 5-31-2007 deadline.

Allegation 5: IDNR does not include setback distances in its CAFO permits.

Allegation 6: Iowa NPDES permits do not include a provision to address pathogens as required by the *Waterkeeper*[3] decision.

C. Enforcement and Compliance

Allegation 1: IDNR's authority to impose criminal penalties against violators is ambiguous. Under IAC 459A.502, open feedlot violations are subject to a civil penalty, as provided in IAC 455B.191. Although HF 805 amended IC 455B.112 to allow the Iowa Attorney General to institute civil or criminal proceedings to enforce Iowa Code Chapters 459 or 459A, it is not clear how that provision interacts with 459A.502's failure to mention criminal penalties. If 459A.502 is interpreted to prevent the imposition of criminal penalties, then Iowa's program is legally insufficient.

Allegation 2: IDNR fails to investigate complaints and take enforcement actions.

Allegation 3: IDNR fails to enforce its NMP submission deadline.

Allegation 4: IDNR fails to seek adequate enforcement penalties or to collect administrative penalties when imposed.

Allegation 5: IDNR fails to inspect and monitor activities subject to regulation.

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[3] *Waterkeeper Alliance, Inc., et. al. v. U.S. EPA*, 399 F.3d 486 (2d Cir. 2005).

D. Other Allegations

Allegation 1: Iowa's Phosphorous Index requirements do not meet the federal requirement because Iowa standards do not include field specific assessment of potential for runoff and the statement that "application rates will minimize runoff."

Allegation 2: IDNR manure management plans (MMPs) are less stringent than federal NMPs.

Allegation 3: Open feedlots propose to discharge and IDNR has failed to issue NPDES permits to these operations.

IV. Methods

Region 7 met informally with the Petitioners and IDNR on several occasions between 2007 and 2010. At each of these meetings Region 7 discussed the Petitioners' allegations. Pursuant to these discussions, IDNR proposed revisions to its statutory authorities to the Iowa legislature in 2008, 2009, and 2010. As a result, the allegations regarding insufficient statutory authority were addressed by IDNR and the Iowa legislature during this period. IDNR also revised its CAFO regulations in an effort to address areas within Iowa's CAFO regulations identified by the Petitioners as less stringent than federal requirements. Finally, IDNR also modified its NPDES permits issued to CAFOs to address allegations raised in the Petition.

In an effort to evaluate the remaining allegations related to permitting, compliance, and enforcement, Region 7 developed a protocol (Appendix 3) to guide its review. This protocol provided responses to the previously addressed allegations, as well as review strategies for those allegations that required additional investigations. A draft of the protocol was provided to the Petitioners and IDNR for comment on October 12, 2011. Region 7 had separate conference calls with the Petitioners and IDNR on October 19, 2011, to facilitate discussion of the protocol and solicit input. The Petitioners did not raise any issues or concerns regarding Region 7's responses to the statutory and regulatory allegations at that time. The discussion of the review and evaluation methods below is limited to Region 7's independent effort to address the permitting and enforcement and compliance issues raised in the Petition.

A. Permitting Issues

Where additional information was necessary to evaluate allegations regarding Iowa NPDES permitting, the protocol required Region 7 review of IDNR files, including selected facility files (complaint investigations, inspection reports, NMPs, MMPs, compliance remedies, etc.), enforcement case files (including enforcement referral files), spill and release reports, fish kill reports, public comments/complaints, and written information requests to the state to determine whether the evidence supports the Petitioners' allegations that there are CAFOs, including open feedlots and confinement operations, subject to NPDES requirements that have not been permitted by IDNR.

The protocol also required Region 7 review of selected NPDES permits issued to CAFOs by IDNR to determine whether they include the standard conditions set forth in 40 CFR 122.41, the setback requirements set forth in 40 CFR 412.4(c)(5), and technology-based standards to reduce

pathogens. Region 7 also reviewed the dates upon which the NMPs for these facilities were submitted to determine whether they were submitted in accordance with applicable terms and conditions of the NPDES permits.

B. Enforcement and Compliance Issues

Where additional information was necessary to evaluate allegations regarding IDNR's compliance monitoring and enforcement at CAFOs, the protocol required file reviews at IDNR Headquarters and Field Offices and/or the Iowa Attorney General's Office, interviews with state staff, and written information requests to the state. To determine whether the evidence supports the allegations set out in Section III.C., above, the protocol required review of:

(1) IDNR files, including selected facility files (and the information contained therein, including complaint investigations, inspection reports, NMPs, MMPs, compliance records, etc.);
(2) enforcement case files (including enforcement referral files);
(3) spill and release reports;
(4) fish kill reports; and
(5) public comments/complaints.

The protocol also required EPA review of implementation and planning documents such as IDNR's enforcement management system (EMS) and CWA Section 106 annual work plans.

The review protocol required EPA staff to determine the following:

(1) Whether IDNR has investigated complaints of violations of state and federal law committed by Iowa CAFOs and where warranted, assessed penalties to deter future violations;
(2) Whether IDNR's program is capable of making comprehensive evaluations of all CAFO facilities subject to regulation under NPDES requirements;
(3) The cause for the inspections IDNR has conducted at AFOs;
(4) Whether, during the course of an inspection, IDNR determines whether the facility subject to the inspection is a CAFO, has discharged, and has met or failed to meet NPDES permit application requirements, including timely submission of its NMP;
(5) Whether IDNR has sought adequate enforcement penalties;
(6) Whether IDNR seeks to collect enforcement penalties once assessed; and
(7) Consistency of IDNR's action with its Enforcement Management System and EPA's Enforcement Response Guide.

In order to investigate Petitioners' allegations related to compliance and enforcement, Region 7 adapted checklists associated with EPA's State Review Framework (SRF) (Appendix 4). The SRF is the tool that EPA uses nationally to evaluate state performance in the NPDES compliance and enforcement program.

C. Information Gathering

Region 7 used IDNR's complaint, fish kill, and spill report databases to select facility files for review. Most of the unaddressed allegations in the Petition concerned IDNR's permitting, inspection, and enforcement with respect to discharging CAFOs. In selecting these files, Region 7 reasoned that using these databases would identify facility files most likely to include actions, or lack of actions, most pertinent to Petitioners' allegations. Region 7, using these databases, selected for review the facility file for any animal feeding operation associated with a manure spill, fish kill, or which was the subject of two or more water-related citizen complaints[4] between October 1, 2008 and September 30, 2011. This time period was selected because it included a majority of the period since the petition was lodged, allowed evaluation of any legislative and regulatory changes IDNR implemented since the petition was lodged, and provided a sufficient number of facility files for the Region to review.

Between October 24 and 28, 2011, Region 7 staff reviewed, in total, 152 facility files using the approach described above. EPA reviewed at least 15 files at each of IDNR's six field offices. EPA reviewed 40 or more files at Field Offices 2 and 3 in Mason City and Spencer, Iowa, respectively. Region 7 reviews at these field offices resulted in a greater number of files being reviewed in the areas of the state with the greatest numbers of CAFOs and significant number of streams with water quality impairments. The selected files provided a cross section of large and medium CAFOs, small AFOs, permitted and unpermitted operations, open feedlot and confinement AFOs, and production area and land application area and transportation-related releases. Region 7 also reviewed data from IDNR's field office database as well as enforcement action data provided by IDNR's Legal Service Bureau.

Region 7 created an evaluation checklist to facilitate the review of the selected IDNR files (Appendix 4). Data obtained during the file review was entered into a database to allow Region 7 to query the collected information to objectively address petition allegations (e.g., IDNR does not timely investigate citizen complaints).

Also pursuant to the protocol, on October 28, 2011, Region 7 submitted to IDNR, a detailed list of general questions seeking information that could not be obtained by a file review (Appendix 5). Follow-up questions were submitted to IDNR on December 6, 2011(Appendix 6). Region 7 also utilized data from IDNR's field office database and animal feeding operations database for identifying AFO/CAFO universe numbers as well as evaluating statewide inspection frequencies.

Additionally, Region 7 reviewed 30% (18) of the 59 NPDES CAFO permits issued or reissued by IDNR since August 2010. This date was selected as a cutoff for the selection of permits to review because it was the date that IDNR revised its NPDES CAFO regulations to address the permit-related allegations in the 2007 deauthorization petition. This time period also allowed

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[4] Region 7 selected facilities with two more "water related" complaints in an effort to identify facilities where multiple unpermitted discharges may have occurred. "Water related" complaints included those complaints at AFOs that included at least one of the following complaint types: composting, dead animals, feedlot runoff, fish kill, manure land application, manure storage handling, silage, sludge, spills, stockpiles, stormwater and water quality.

evaluation of any program changes IDNR has implemented since the petition was filed in 2007 and provided a reasonable and appropriate number of NPDES permits.

V. Preliminary Results

A. Statutory and Regulatory Authorities

Allegation 1: House File (HF) 805 authorizes discharges from open feedlots that are prohibited by the Clean Water Act by allowing discharges of "settled open feedlot effluent".

Allegation 2: HF 805 omits permitting requirements for medium and small facilities that discharge settled effluent.

Allegation 3: Iowa's definition of "effluent" is inconsistent with the federal definition of effluent.

Allegation 4: The Nutrient Management Plan (NMP) requirements of Iowa statutes are less stringent than federal requirements because of discrepancies created by HF 805's distinction between "open feedlot effluent" and "settled open feedlot effluent".

Allegation 5: Iowa's statutory Alternative Technology (AT) requirements do not address "settled open feedlot effluent".

Allegation 6: Iowa only requires controls on AT systems to prevent discharges between November 1 and March 30 because of "settled open feedlot effluent".

Allegation 7: Once NMPs are approved, they will likely not regulate settled effluent.

Response to Allegations 1-7:

The Iowa legislature included a "savings clause" in Iowa Code 459A that states that regulation of open feedlot effluent shall be construed as also regulating settled open feedlot effluent and solids.[5] Iowa Code 459A.103(6) addresses the concerns raised in Allegations 1-7. This concern is further addressed by 567 IAC 65.101(3), which specifically states that medium and large CAFOs shall not discharge manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent unless it is pursuant to a NPDES permit.

[5] In 2005, Region 7 commented on its concern that the language of HF 805, as proposed, appeared to distinguish between open feedlot effluent and settled open feedlot effluent that could render the state statute less stringent than federal requirements. Iowa Code 459A as passed in 2005, previously referred to as HF 805, contains a clause that, in effect, removed the distinction as it pertained to NPDES requirements and addressed Region 7's concern.

Allegation 8: IDNR does not require NMPs from AT systems to provide for settled open feedlot effluent going into an AT system.

Response:

Iowa law requires CAFOs with AT systems to develop and implement NMPs. AT systems in Iowa are designed to treat feedlot effluent in vegetated areas as an alternative to traditional manure containment. Like any NPDES permitted CAFO, CAFOs with AT systems must have an NMP to guide management of nutrients generated at the CAFO. Settled open feedlot effluent at an AT system is destined for the alternative treatment portion of the system (e.g., vegetated treatment area), which is part of the CAFO's production area, where it is to be treated to "achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants that would be discharged under the baseline performance standards." In other words, nutrients are removed via "treatment" rather than stored for future disposal. Since the settled open feedlot effluent is not land applied, a CAFO with an AT system is not required to include rates of application for the vegetated treatment area in its NMP. If any manure nutrients are land applied (such as stockpiled manure solids), rates of application for land application areas would be required to be included in the NMP.

Region 7 reviewed a representative number of individual AT NPDES permits.[6] Based on this review, it appears that Iowa requires all permitted CAFOs with AT systems to develop and implement a NMP and that the NMP must describe how the AT system is designed, constructed, operated and maintained to ensure adequate storage of manure, litter and process wastewater. The AT NPDES permits, in conjunction with the IDNR approved NMPs, include protocols for land application of manure, litter, and process wastewater that ensure appropriate utilization of nutrients.

This allegation is further addressed by the "savings clause" contained in Iowa Code 459A.103(6), and discussed in Response to Allegations 1-7 above, in that, the settled open feedlot effluent and open feedlot effluent are treated the same for NPDES purposes so settled open feedlot effluent is not excluded from regulation.

Allegation 9: Facilities that are designed to contain a 25 year – 24 hour precipitation event are not required by IDNR to meet sufficiently stringent inspection and recordkeeping requirements.

Response:
Since 2010, IAC 567- 62.4(12) has incorporated 40 CFR 412 (federal Effluent Limitation Guidelines) by reference, including the inspection and recordkeeping requirements of 412.37(a) and (b). As a result, Iowa's regulations on this issue are sufficiently stringent.

Section I.A.C (Discharge Limitations) of Iowa individual NPDES CAFO permits require compliance with 40 CFR 412.37(a) & (b) [IAC567-65.104(9)"b" & "e"] as described in Section III.A.4 &6 (General Operation: Minimum Required Practices) of the NPDES permit. Section III.A.4 of the NPDES permits includes the inspection requirements of 40 CFR 412.37(a) and

[6] IDNR renewed 12 individual AT NPDES permits on July 1, 2011. Region 7 reviewed a majority of these permits.

Section III.A.6 of the NPDES permit includes the recordkeeping requirements of 40 CFR 412.37(b).

Section III.A.6 of Iowa individual NPDES CAFO permits requires records to be kept for five years onsite and made available to IDNR upon request. This permit section also includes the production and land application recordkeeping requirements of 40 CFR 412.37(b) & (c).

Region 7 reviewed 18 of the 59 (30%)[7] NPDES permits that IDNR issued since Iowa's NPDES regulations were revised in August 2010 using the review checklist attached as Appendix 7, and found that each of the NPDES permits contained these provisions. It appears that this allegation has been resolved.

Allegation 10: The exclusion of livestock markets from Iowa's statutory definition of an "animal feeding operation" is inconsistent with federal law.

Response:
In 2008, Iowa Code 459.102(4) was revised to include livestock markets within the definition of an animal feeding operation for NPDES permitting purposes. As a result, it appears that this allegation has been resolved.

Allegation 11: There is no state requirement for CAFOs to "identify appropriate site specific conservation practices to be implemented .... to control runoff of pollutants to waters of the United States."

Response:
This is required in IAC 567-65.112(8)"e"(7). This requirement has been incorporated verbatim into Iowa's individual NPDES CAFO permits at Section III.A.5(vii).

Region 7 reviewed 18 of the 59 (30%) NPDES permits that IDNR has issued since Iowa's NPDES regulations were revised in August 2010 and found that each of the NPDES permits contained these provisions. It appears that this allegation has been resolved.

Allegation 12: Iowa law is less stringent than federal law because it allows the application of manure without a separation distance if it is incorporated into the soil within 24 hours rather than establishing separation distances.

Response:
The August 2010 Iowa regulation revisions amended the requirements for land application at IAC 567-65.101(6)(b)(1) to state: "for purposes of the NPDES permit program, if applicable, the person must also demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the

[7] These 18 NPDES permits were evaluated as part of Region 7's October 2011 IDNR file review. Based on the significant percentage of post-2010 NPDES permits reviewed, IDNR's use of standardized permit terms, and the consistent incorporation of these terms in the permits reviewed, Region 7 concluded that these allegations appear to have been resolved and did not seek out additional NPDES permits to review.

100-foot setback required by 40 CFR 412.4(c)(5)." Iowa's revised regulation tracks the alternative conservation practice language of 40 CFR 412.4(c)(5)(ii), but appears to be more limited in scope than the federal requirements. IAC 567-65.101(6)(b)(1) applies only to "designated areas," which does not include all locations required by 40 CFR 412.4(c)(5), including, but not limited to, down-gradient surface waters or other conduits to surface waters.

Region 7 reviewed 18 of the 59 (30%) NPDES permits that IDNR has issued since Iowa's NPDES regulations were revised in August 2010. Region 7 noted that IAC 567-65.101(6) is incorporated by reference at Section IV.3. During the file reviews, Region 7 identified that the setback requirements were often not included in IDNR approved NMPs. It appears that this omission is the result of the use of an outdated template produced by IDNR and used by producers to draft NMPs. Although the regulation has been revised, the revision was not incorporated into the NMPs that were reviewed.

IDNR should ensure that the scope of IAC 567-65.101(6)(b)(1) extends to, among other things, down-gradient surface waters or other conduits to surface waters. IDNR should also update its templates and ensure these requirements are incorporated into NMPs before this allegation may be considered resolved.

Allegation 13: Iowa's recordkeeping requirements are less stringent than federal law in that they fail to require the NMP or the NMP compliance records to be maintained on-site, made available to IDNR, or available to the public.

Response:
Iowa Admin. Code 567-65.112 sets forth Iowa's NMP requirements, which meet the federal requirements for maintaining the NMP on-site, along with records of compliance for five years. These requirements also include provisions for public notice of the NMP and the availability of the NMP to IDNR. These requirements are found in Iowa individual NPDES permits at Section III.A.6 and Section III.A.5, respectively.

Region 7 reviewed 18 of the 59 (30%) NPDES permits that IDNR has issued since Iowa's NPDES regulations were revised in August 2010 and found that each of the NPDES permits contained these provisions. It appears this allegation has been resolved.

Allegation 14: There is no comparable state requirement to the federal requirement at 40 CFR 412.31(a)(2), which requires specific supporting analyses and other data before a permit is issued with alternative effluent limits. Thus, there is no initial demonstration that an untested alternative technology system will retain pollutants.

Response:
Iowa amended IAC 567-65.104(7) in August 2010 to require that NPDES permit applications involving alternative technology shall include the results of predictive modeling.

Pursuant to IAC 567-65.110(6)(a), the results of the predictive modeling are used to determine the suitability of the proposed site for the AT system and to predict the performance of the AT

system as compared to the use of a 25-year, 24-hour runoff containment system, over a 25-year period. The predictive modeling is used to determine the minimum size required for vegetated infiltration basins and vegetated treatment areas. It appears this allegation has been resolved.

Although the predictive modeling was included in the one AT NPDES permit application IDNR has received in the last seven years, the EPA notes that the template used by IDNR for NPDES permit applications does not address the required predicted modeling. The EPA recommends that IDNR revise the application template so that it is consistent with the regulatory requirements.

Allegation 15: Iowa's regulatory exemption from penalties for "exceeding the nitrogen and phosphorous application rate for an unplanned crop" creates a situation where state law is less stringent than federal law because it does not ensure that phosphorous transport will be minimized and codifies a lack of consequences for non-compliance.

Response:
In August 2010, Iowa removed the regulatory exemption from penalties for exceeding nitrogen and phosphorous application rates for an unplanned crop for confinement operations subject to the NPDES permit program. *See* 567 IAC 65.17(6)"b." It appears this allegation has been resolved.

Allegation 16: Iowa's method of counting animals undercounts the number of animals and is therefore less stringent than federal law.

Response:
In 2008, Iowa's legislature removed the distinction between animals confined outside and those confined under roof when determining the number of animals for NPDES permitting purposes. *See* Iowa Code §459A.103(3)(b). It appears this allegation has been resolved.

Allegation 17: Federal conflict of interest requirements set forth at 40 CFR 123.25(c) are violated by EPC members' abilities to trade with regulated parties.

Response:
CWA § 304(i) and 40 CFR 123.25(c) require that state NPDES programs shall ensure that any board or body which approves all or portions of NPDES permits shall not include as a member any person who receives, or has during the previous 2 years received, a significant portion of income directly or indirectly from permit holders or applicants for a permit. In the 2010 legislative session Iowa revised Iowa Code 455B taking NPDES permit appeals out of the hands of the Environmental Protection Commission and placing them with an Iowa administrative law judge to resolve this issue. *See* Iowa Code §455B.174(4)(b). As a result of the statutory change the EPC is no longer involved in NPDES permit-related activities within the scope of 40 CFR 123.25(c). It appears this allegation has been resolved.

B. NPDES Permitting

CAFOs that discharge must apply for NPDES permits. Recent court decisions did not change this well established principle. The *Nat'l Pork Producers Council v. EPA* (*NPPC*) and *Waterkeeper Alliance et al. v. EPA*, 399 F.3d 486 (2d Cir. 2005), decisions do not relieve EPA or authorized States from their responsibilities under the CWA to issue NPDES permits to CAFOs that discharge.[8] Furthermore, a CAFO that has discharged without a permit remains in violation of the CWA so long as there is a continuing likelihood that intermittent or sporadic discharges will recur. *Chesapeake Bay Found., Inc. v. Gwaltney of Smithfield*, 890 F.2d 690, 693 (4th Cir. 1989); *see also Carr v. Alta Verde Indus.*, 931 F.2d 1055, 1062 (5th Cir. 1991). *NPPC* does not affect the well-established principle that discharges of pollutants, whether continuous or intermittent and sporadic, require NPDES permit coverage. CAFOs that have discharged without a permit only cease to be in violation of the Act when circumstances that led to their discharge have changed or been corrected. CAFOs that have discharged in the past will discharge in the future, and are therefore expected to obtain a permit, unless the conditions that led to the discharge are fully remedied.

Allegation 1: Iowa has failed to issue permits to all open feedlots that have discharged.

Response:
The federal CAFO regulations require NPDES permit coverage for all CAFOs that discharge to a water of the United States. *See* 40 CFR 122.23(d). Iowa has a comparable requirement for open feedlots that discharge. *See* IAC 567-65.102.

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[8] In February 2003, EPA issued revised Clean Water Act (CWA) permitting requirements for CAFOs. Both environmental and industry groups challenged the 2003 final rule, and, in February 2005, the U.S. Court of Appeals for the Second Circuit issued its decision in *Waterkeeper Alliance et al. v. EPA*, 399 F.3d 486 (2d Cir. 2005). Among other things, the court held that EPA does not have authority under the CWA to require CAFOs that have only a potential to discharge to obtain NPDES permits. In 2008, EPA issued revised regulations in response to the *Waterkeeper* decision. Among other changes, the revised regulations required CAFOs that discharge or propose to discharge to obtain an NPDES permit. Subsequently, environmental and industry groups filed petitions for review of the 2008 rule, which were consolidated in the U.S. Court of Appeals for the Fifth Circuit. EPA reached a settlement agreement with the environmental petitioners in May 2010. On March 15, 2011, the Fifth Circuit Court of Appeals issued its decision in *NPPC*, which addressed industry groups' challenges to the 2008 CAFO rule.

In *NPPC*, the court vacated the regulatory requirement that CAFOs that "propose to discharge" apply for NPDES permits. Citing *Waterkeeper* and *Service Oil v. EPA*, 590 F.3d 454 (8th Cir. 2009), the court concluded, "these cases leave no doubt that there must be an actual discharge into navigable waters to trigger the CWA's requirements and the EPA's authority. Accordingly, the EPA's authority is limited to the regulation of CAFOs that discharge. . . . we conclude that the EPA's requirement that CAFOs that 'propose' to discharge apply for an NPDES permit is ultra vires and cannot be upheld." *NPPC*, 635 F.3d at 751.

The court upheld, however, EPA's authority to impose a duty to apply on CAFOs that "discharge." The court explained,"[t]he text of the Act indicates that a discharging CAFO must have a permit [because] . . . discharging without a permit is unlawful, [section 301], and punishes such discharge with civil and criminal penalties, [section 309]. The court thus concluded that "[i]t logically follows that, at base, a discharging CAFO has a duty to apply for a permit." *NPPC*, 635 F.3d at 751.

Large Open Feedlot CAFOs

In order for an open feedlot to be considered a large CAFO, the feedlot must confine more than 1,000 cattle other than mature dairy cows or veal calves.[9] 40 CFR 122.23(b)4(iii) and *see* IAC 567-65.100.

Petitioners cite U.S. Department of Agriculture (USDA) data that suggests there are more than 300 large open feedlot CAFOs in Iowa as a basis for alleging that there are many unpermitted large open feedlot CAFOs in Iowa. Region 7 has established that this data was part of annual USDA surveys to assess the number of feedlots and the number of fed cattle marketed in Iowa and categorized feedlots as large based on *capacity*, and not the number of animals actually confined. Also, the surveys did not distinguish between confinement type (i.e, open feedlot, combined or total confinement) and the information was provided voluntarily and not for regulatory purposes. IDNR's AFO database indicates that there are approximately 170 large open lots[10] that are currently active. Animal feeding operations have been a Region 7 priority for almost 10 years. Region 7 has inspected more than 100 animal feeding operations in Iowa, conducted "windshield inspections"[11] in 2006, and has conducted CAFO flyovers in 2010 and 2011 in its efforts to identify discharging and unpermitted CAFOs in Iowa. To date, Region 7 has not identified any basis to conclude that there are large open feedlot CAFOs of which IDNR is unaware or large open lot CAFOs that discharge and operating without NPDES permits. The USDA survey data is not a basis for determining that IDNR is not permitting large open feedlot CAFOs.

Every large open feedlot CAFO identified during the file review had an NPDES permit.

In order to continue identifying large open feedlots on an on-going basis, IDNR staff utilizes a variety of tools such as ArcGIS, EPA flyover photos and spill/complaint investigations. IDNR's Geology and Water Supply Bureau has performed several open feedlot assessments using aerial photography as well (Appendix 8). Also, Iowa law requires that new and/or expanding open feedlots seek a construction permit from IDNR prior to initiating any construction activities related to manure control systems. *See* IAC 567-65.105(1).

There are approximately 98 large open feedlot CAFOs in Iowa that have NPDES permits. During the EPA file review, Region 7 reviewed six files associated with large open feedlot CAFOs. All six of these facilities had NPDES permit coverage. Region 7 also did not document

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[9] The federal CAFO regulations include 12 other animal sectors that would also make an open feedlot a CAFO if the number of animals confined exceeded 40 CFR 122.23(b)(4) or (b)(6) thresholds but an overwhelming majority of the open feedlots in Iowa confine beef cattle (i.e., cattle other than mature dairy or veal). As a result, this discussion addresses the beef cattle sector but is not intended to limit the possibility of operations in other animal sectors triggering the CWA requirements for an NPDES permit.

[10] Region 7 notes that the discrepancy between the number of large open feedlot CAFOs in the database and the number of permitted large open feedlot CAFOs is primarily caused by the fact that operations are listed in the database based on the capacity to confine 1,000 or more cattle but many actually confine fewer than the large CAFO regulatory threshold.

[11] "Windshield inspections" were conducted before Region 7 began flyovers in 2010 and consisted of Region 7 personnel selecting an Iowa county and driving all roads within the county in an effort to identify open feedlot CAFOs that had not applied for NPDES permits.

any instances where IDNR has not permitted a large open feedlot that discharges once the operation comes to its attention.

Based on EPA's enforcement experience, the file review, and the IDNR efforts described above, EPA concludes that it appears IDNR has adequate procedures in place for identifying large open feedlots and requires discharging large open feedlot CAFOs to apply for NPDES permits.

Combined Operations

Combined animal feeding operations confine cattle in both outdoor open feedlot pens and within confinement barns. The outdoor pens are exposed to precipitation, whereas the confinement barns confine cattle in a manner that typically, when properly operated and maintained, does not expose the animals or their manure to precipitation. As discussed above, until 2008, Iowa law excluded cattle housed within confinement buildings from consideration when determining if the number of animals at an animal feeding operation exceeded the 1,000 large CAFO threshold. Petitioners correctly identified that this statute conflicted with federal requirements. The federal CAFO regulations make no distinction between animals confined indoor versus under roof when determining the number of animals, the operation's CAFO status, and NPDES permitting obligations.

Until the 2008 Iowa statutory revision, Iowa statutes prevented IDNR from implementing the CAFO NPDES program as required by the CWA. Since the statute was revised, IDNR has received applications for NPDES permits and issued NPDES permits for combined open feedlot/confinement operations; approximately 40-45 NPDES permits have been issued and no applications have been denied (Appendix 8).

Like IDNR's efforts to identify large open feedlot CAFOs, in an effort to identify combined operations on an on-going basis, IDNR staff use tools such as ArcGIS, EPA flyover photos and spill/complaint investigations to identify combined feedlots. Also, Iowa law requires new and or expanding operations to seek construction permits from IDNR if the operation meets the definition of a large or medium CAFO, regardless of confinement type. Also, IDNR's Geology and Water Supply Bureau has performed several state-wide assessments using aerial photography.

However, as will be discussed in greater detail below, Region 7 has concerns regarding inspection comprehensiveness and consistency when evaluating whether an operation discharges to a water of the United States. During the file review, Region 7 identified three combined operations that claimed an NPDES permit was not necessary because the producer had addressed the cause of the discharge. In two instances, file reviews confirmed that additional confinement barns were constructed to confine all animals under roof. However, based on the documentation in the file, IDNR's inspections were not comprehensive enough to confirm that all production areas were controlled.[12] For example, the inspections did not consider manure handling and storage practices nor did the inspections evaluate feed storage areas. There was nothing in the file indicating that IDNR had considered whether an NPDES permit may be required. The third

[12] Production areas include, among others, manure handling and storage areas, feedstock storage areas and mortality handling areas. All of these areas at a CAFO are subject to Iowa's no discharge requirement unless authorized by a NPDES permit.

operation claimed that, based on terrain and distance to a stream, it did not discharge. There was insufficient information in the facility file for Region 7 to independently validate that a NPDES permit was not required.

While IDNR has made progress in its permitting of combined operations, concerns regarding IDNR's incomplete evaluation of no discharge claims prevent EPA from concluding that this portion of IDNR's NPDES program is adequate.

Medium Open Lot CAFOs

An open feedlot meets the definition of a medium CAFO if it is an AFO[13] that confines 300-999 cattle other than mature dairy cows or veal calves[14] and "pollutants are discharged into waters of the United States through a man-made- ditch, flushing system, or similar man-made device or pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation." 40 CFR 122.23 (b)(6)(ii)(B) and *see* IAC 567-65.100.

Discharges from a medium CAFO are not authorized unless they are in compliance with an NPDES permit. Medium CAFOs are subject to technology based effluent limitations based on the Best Professional Judgment (BPJ) of the permit writer (in this case that is IDNR).

Historically, IDNR informed feedlots that it was appropriate to reduce the number of cattle below 1,000 to avoid the requirement for an NPDES permit. In taking this approach IDNR did not evaluate the possibility that an operation with less than 1,000 cattle could nevertheless be a medium CAFO subject to NPDES requirements. As a result there are many medium AFOs in Iowa that have not been assessed to determine if they meet the definition of a medium CAFO. Region 7's 2008 quadrennial review of Iowa's NPDES program noted identification and NPDES permitting of medium CAFOs as an area of concern. EPA inspections in 2010 and 2011 confirmed that these operations can have a significant impact on water quality. In February 2011, IDNR issued a document titled *Design Criteria for Livestock Waste Control Systems at Open Feedlot Medium CAFOs* which established minimum runoff control requirements for open feedlots that meet the definition of a medium CAFO. To date, only one operation has applied for NPDES permit as a medium CAFO.

IDNR stated in its initial response to EPA's petition-related questions (Appendix 8) that man-made conveyances are ditches, pipes, culverts or other similar man-made devices used to convey manure to a water of the United States. The IDNR looks at the following criteria to make its determination of whether an AFO is a medium CAFO: 1) Does the conveyance make manure discharges from the operation to a water of the United States more likely or facilitate the discharge of the manure?; 2) Has an actual discharge to a water of the United States occurred,

[13] An AFO is a lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, and where crops, vegetation, forage growth, or post harvest residues are not sustained in the normal growing season over any portion of the lot or facility. 40 CFR 122.3(b)(1).

[14] Again, the federal CAFO regulations include 12 other animal sectors that would also make an open feedlot a CAFO if the number of animals confined exceeded 40 CFR 122.23(b)(4) or (b)(6) thresholds but an overwhelming majority of the open feedlots in Iowa confine beef cattle (i.e., cattle other than mature dairy or veal). As a result, this discussion addresses the beef cattle sector but is not intended to limit the possibility of operations in other animal sectors triggering the CWA requirements of a NPDES permit.

likely to occur, or been documented?; and 3) Does the AFO meet the size criteria to be a medium CAFO? (Appendix 8).

EPA has a few concerns regarding IDNR's statement in its response to EPA's questions regarding its NPDES program. In its response, IDNR stated the following:

> The IDNR AFO database has 1,122 beef facilities with a head count of 300-999 animals. There are likely several hundred more facilities in that animal unit range for which IDNR has no record. Therefore, IDNR estimates there are approximately 2,000 facilities statewide with a head count of 300-999 animals. How many of these estimated 2,000 facilities fall within the medium CAFO definition is difficult to determine due to a number of factors such as variability in runoff controls related to precipitation, animal numbers due to market conditions, and feed costs. Appendix 9

Based on this answer, Region 7 must conclude that IDNR's program to identify and evaluate medium open feedlots is inadequate. IDNR has been unable to assess the regulatory status and NPDES obligations of the estimated 2,000 medium AFOs in Iowa. Region 7's review of statewide inspection data corroborate the conclusion that IDNR has been unable to fully assess which medium sized open lot AFOs in the state meet the regulatory definition of medium CAFO, and thus are subject to NPDES permitting.[15] IDNR has not articulated a plan that will allow the department to timely evaluate the medium AFO universe.

In summary, the Petitioners alleged that Iowa has failed to issue permits to all open feedlots that have discharged. IDNR has an adequate NPDES permitting program for large open feedlot CAFOs. While IDNR has made progress in its permitting of combined operations, concerns regarding IDNR's inadequate evaluation of no discharge claims prevent a conclusion that this portion of its NPDES program is adequate. Finally, information submitted by IDNR stating that a significant portion of its medium AFO universe has not been evaluated leads Region 7 to conclude that this portion of Iowa's NPDES permit program is inadequate. As a result, it appears IDNR does not adequately evaluate open feedlots and issue permits to those that meet the regulatory definition of medium CAFOs and need permits.

<u>Allegation 2</u>: Iowa has failed to issue permits to all confinement CAFOs that have discharged.
Response:

Petitioners have alleged that Iowa's NPDES CAFO program is inadequate because it has not issued NPDES permits to confinement CAFOs that have discharged to waters of the United States.

[15] Region 7's findings related to inspection coverage and adequacy are discussed in Section V.C. of this report.

Statutory Discharge Prohibition

Iowa law requires that a confinement feeding operation shall retain all manure[16] between periods of manure disposal and shall not discharge manure directly into a water of the state or a tile line that discharges directly into a water of the state. *See* Iowa Code 459.311(1). In regard to land application practices, the statute requires that manure shall be disposed of in a manner that will not cause surface water pollution. *See* Iowa Code 459.311(3). The requirement applies to all confinement operations and is not based on the operation's capacity. *See* Iowa Code 459.311. IDNR has asserted that these non-CWA state law provisions are an outright discharge prohibition that, at a minimum, allows the state's program to meet federal requirements.[17]

However, the Iowa statutes and regulations for confinement feeding operations do not clearly prohibit all pollutant discharges to waters of the United States. The state law provisions for confinement feeding operations are not clear enough on their face to enable EPA to conclude that the state's program meets the minimum federal requirements. In order to make such a conclusion, clarification is needed, for example, through a formal legal opinion from the state or through statutory/regulatory changes.

Provided these issues are addressed to ensure that the state's requirements, in fact, prohibit all discharges of all pollutants from confinement CAFOs, including production and land application areas, such a prohibition could be deemed to negate the need for a NPDES permitting scheme if IDNR could also demonstrate that there were, in fact, no discharging confinement CAFOs subject to NPDES permitting. However, such a demonstration would require an adequate inspection and enforcement program to monitor compliance and create a deterrent to noncompliance. Documented failures of IDNR to follow its EMS and concerns about the adequacy of IDNR inspections make it impossible to conclude that the non-NPDES state regulatory program for confinement feeding operations, even without the issues discussed above, meets minimum requirements at this time.

Based on the findings of the file review, it appears that IDNR responds to discharge complaints, manure spill reports, and fish kills. In nearly all instances of discharges, IDNR timely required the confinement operations to stop the discharge. However, there was little follow up by IDNR on inspection, maintenance, and recordkeeping practices to ensure that the cause of the discharge was permanently remedied. During the file review, Region 7 identified many instances where CAFOs discharged but claimed a NPDES permit was not necessary because the owner/operator had addressed the cause of the discharge. However, IDNR's investigation documentation is not sufficiently comprehensive to confirm that the cause of the discharge was remedied. Furthermore, the inspection documentation did not confirm that all production areas were adequately controlled to prevent discharges. The information in the files was insufficient to allow Region 7 to independently validate that the operations do not discharge, and therefore, NPDES permits are not required. In fact, Region 7 found that most IDNR files did not contain information demonstrating that IDNR systematically evaluated whether a NPDES permit was

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[16] *"Manure"* means animal excreta or other commonly associated wastes of animals, including but not limited to, bedding, litter, or feed losses. IC 459.102(39).

[17] June 9, 2010, correspondence from Wayne Gieselman, Administrator, IDNR to William Spratlin, Director, Water Wetlands and Pesticide Division, EPA Region 7.

required at a confinement CAFO that had discharged. As will be discussed below, Region 7's concerns are further compounded by the fact that IDNR has not conducted initial no-discharge evaluations, as recommended by EPA's Compliance Monitoring Strategy, at a large percentage of the large confinement CAFOs and, therefore, cannot confirm that NPDES permits are not required.

NPDES permitting authority

IDNR has historically asserted that it has the authority to issue NPDES permits to confinement CAFOs. In 2006, IDNR proposed to issue such a permit and asserted authority pursuant to Section 402(b) of the CWA (33 USC 1342(b)), IC 455B.174, and IAC sections 567-62.4(12), 63.5(1), 65.2, and 65.4-6. However, ultimately, this NPDES permit was never issued.

In 2010, the Iowa legislature revised IC 459.311 to require confinement feeding operations that are CAFOs to comply with NPDES permitting requirements as provided in the CWA and 40 CFR parts 122 and 412. IC 459.311(2). The revision required the adoption of regulations to implement a NPDES permitting program applicable to confinement operations. Id. The legislature included a caveat that any rules adopted pursuant to IC 459.311 shall be no more stringent than federal requirements. *See* Id.

IDNR has historically asserted that it has the authority pursuant to IC 455B.174 to issue NPDES permits to confinement CAFOs. This was before the state amended IC 459.311in 2010 to require the promulgation of regulations to implement a NPDES permitting program applicable to confinement operations. EPA recommends that IDNR provide clarification, perhaps through an Iowa Attorney General Opinion, that the department can still, in fact, as it has asserted in the past, issue NPDES permits to discharging confinement CAFOs pursuant to IC 455B.174 or other authority. This clarification should specifically address the issue of whether the Department is authorized to issue NPDES permits to discharging confinement CAFOs without the regulations required by IC 459.311(2).

Another, and perhaps most conclusive, option would be for IDNR to promulgate NPDES permitting regulations pursuant to IC 459.311(2) for confinement CAFOs that discharge.

As discussed above, in addition to the uncertainty over IDNR's authority to permit confinement operations, EPA also has concerns regarding the lack of documentation that IDNR followed its EMS and concerns regarding the adequacy of IDNR inspections for confinement CAFOs.

For the reasons described above, Region 7 cannot conclude that IDNR is meeting its obligation to permit confinement CAFOs that discharge.

Allegation 3: NPDES permits issued by IDNR do not include all standard terms listed in 40 CFR 122.41.

Response:
IDNR updated the Standard Conditions applicable to all NPDES CAFO permits in 2008. Iowa incorporates these terms into all NPDES CAFO permits and includes them as an attachment to the permit. Iowa's Standard Conditions include the applicable 40 CFR 122.41 terms. The notable exception is that the Standard Conditions do not contain the bypass and upset standard

terms found in 40 CFR 122.41. The absence of upset or bypass terms in the Standard Conditions results is a prohibition of such events and, as result, does not render the permit less stringent than federal requirements.

Region 7 reviewed 18 of the 59 (30%) NPDES permits that IDNR has issued since Iowa's NPDES regulations were revised in August 2010 and found that each of the NPDES permits contained the required provisions. As a result, it appears this allegation has been resolved. The review checklist is attached as Appendix 7.

Allegation 4: Facilities permitted by IDNR have failed to submit NMPs by the 5-31-2007 deadline.

Response:

During its October 2011 file review, Region 7 did not identify any instances where an NPDES permitted CAFO had not submitted an NMP. It appears this allegation has been resolved.

Allegation 5: IDNR does not include setback distances in its CAFO permits.

Response: See response discussion for Allegation 12 in Section V.A., above.

Allegation 6: Iowa NPDES permits do not include a provision to address pathogens as required by the *Waterkeeper* decision.

Response:
In response to the Second Circuit remand in the *Waterkeeper* decision, the 2008 CAFO rule revisions affirmed that the Best Conventional Control Technology (BCT) limitations adopted in the 2003 CAFO rule revisions do, in fact, represent the best conventional control technologies for fecal coliform (pathogens). *See* 73 FR 70463. The 2003 regulation established that BCT for large CAFO production areas is the effluent limitation guidelines established by 40 CFR 412.31(a).[18] The effluent limits for large CAFO land application areas are established by 40 CFR 412.31(b). Discharges from land application areas are subject to the development and implementation of the best management practices specified in 40 CFR 412.4 and the recordkeeping requirements of 412.37(c). *See* 40 CFR 412.31(b).

Iowa individual NPDES permits include the production area effluent limits at Section 1.A.1 and incorporate 40 CFR 412.31 by reference (Appendix 10). The requirement that the production area shall be operated in accordance with 40 CFR 412.37 is contained in Section 1.A.2 of the NPDES permit. *Id.*

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[18] (a) For production areas. Except as provided in paragraphs (a)(1) through (a)(2) of this section, there must be no discharge of manure, litter, or process wastewater pollutants into waters of the U.S. from the production area.
(1) Whenever precipitation causes an overflow of manure, litter, or process wastewater, pollutants may be discharged into U.S. waters provided:
(i) The production area is designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event;
(ii) The production area is operated in accordance with the additional measures and records required by 412.37(a) and (b). 40 CFR 412.31(a).

The requirement that the CAFO meet the land application effluent guidelines is found in Section I.A.2 and Section III.A. 5&6 of the individual NPDES permit. *Id.*

Region 7 reviewed 18 of the 59 (30%) NPDES permits that IDNR has issued since Iowa's NPDES regulations were revised in August 2010 and found that each of the NPDES permits contained these provisions. As a result, it appears this allegation has been resolved.

C. Compliance and Enforcement

Allegation 1: IDNR's authority to impose criminal penalties against violators is ambiguous. Under Iowa Code 459A.502, open feedlot violations are subject to a civil penalty, as provided in Iowa Code 455B.191. Although HF 805 amended Iowa Code 455B.112 to allow the Iowa Attorney General to institute civil or criminal proceedings to enforce Iowa Code Chapters 459 or 459A, it is not clear how that provision interacts with 459A.502's failure to mention criminal penalties. If 459A.502 is interpreted to prevent the imposition of criminal penalties, then Iowa's program is legally insufficient.

Response: Iowa Code 455B.112 specifically provides the Iowa Attorney General authority to institute civil or criminal proceedings, including actions for injunctions pursuant to Iowa Code 459, 459A, and 459B. The Iowa Attorney General's Office has opined that neither Iowa Code section 459.603 (authorizing civil penalties for violations of "subchapter III" of chapter 459), nor Iowa Code section 459A.502 (authorizing civil penalties for violations of "this chapter" [459A], preclude criminal enforcement under Iowa Code section 455B.191(3)(a)(1) for negligent or knowing violation of the provisions contained in Iowa Code section 455B.186(1) (Appendix 11). Per the state's Attorney General's opinion, neither chapter 459 nor chapter 459A would be construed to effectively remove criminal liability from confinement or open feedlot operations for illegal discharges to waters of the State. It appears this allegation has been resolved.

Allegation 2: IDNR fails to investigate complaints and take enforcement actions.

Response:[19]

Under Iowa Code § 459.601 IDNR is required to conduct an investigation of all complaints if the department determines that the complaint is legally sufficient and an investigation is justified. In IDNR's responses to Region 7's questions (Appendix 8), IDNR indicated that nearly all complaints and spills related to CAFOs are investigated. They also indicated that for those complaints that do not result in an onsite investigation, IDNR attempts to provide the complainant with information about compliance and technical requirements so that the complainant can understand the regulations and IDNR's authority to respond to their allegations. *Id.*

[19] The response to Allegation 2 only pertains to the Petitioners' claim that IDNR does not investigate complaints. The response associated with the allegation that IDNR does not take enforcement actions is addressed in Region 7's response to Allegation 4 under the Compliance and Enforcement section of this report.

Depending on the nature and severity of the complaint, an onsite investigation may be immediate or may be delayed to a time that staff is more readily available and can schedule other work in the same area to be more efficient in the use of time and resources. *Id.* IDNR's standard for investigating complaints is no later than 2 weeks from receipt of the complaint unless it is considered to be an imminent situation. *Id.* These complaint inspections are not announced in advance, unless there is a special need for a producer to be there with information that normally would not be on-site. *Id.*

Based on EPA's evaluation of IDNR's complaint database, between October 1, 2008, and September 30, 2011, IDNR received approximately 790 complaints that were related to AFOs. As part of EPA's effort to investigate the Petitioners' allegation that IDNR fails to investigate complaints and take enforcement actions, Region 7 selected for review 23 facility files that had multiple water related complaints associated with them. In total, Region 7 reviewed 77 separate complaint investigations at 46 different facilities.

All 77 complaints identified through EPA's file review were investigated by IDNR or were referred to appropriate state agencies. It should be noted that not all of these investigations resulted in an onsite visit. In three cases, IDNR investigated/responded to the complaint via phone call. As noted above, IDNR generally investigates complaints within 14 days of receipt of the complaint, and 85 percent of the complaint investigations reviewed were initiated within this 14-day timeframe. Only three exceeded 30 days. Eighty days was the maximum number of days documented by Region 7.

IDNR has adequate procedures in place for receiving and ensuring proper consideration of information submitted by the public about violations as required by 40 CFR §123.26. In regards to the requirements of 40 CFR 123.27(d) related to investigating all citizen complaints, Region 7 finds that IDNR field office staff investigate the complaints that IDNR receives.[20] It appears this allegation has been resolved.

Allegation 3: IDNR fails to enforce its NMP submission deadline.

Response:
IAC 567-65.112(4) requires that IDNR shall not approve an application for a permit to construct a settled open feedlot effluent basin or AT system unless the owner of the open feedlot operation applying for approval submits a nutrient management plan together with the application for the construction permit as provided in rule 567—65.105(459A). IDNR will not issue an NPDES permit unless the construction application includes a NMP for IDNR review and approval.

During its October 2011 file review, Region 7 did not identify any instances where a CAFO did not submit an NMP with its permit application. This allegation appears to have been resolved.

[20] While Region 7 finds that IDNR investigates the complaints that it receives, Region 7 found that evaluations associated with these investigations were neither sufficiently comprehensive for IDNR to confirm the CAFO status of the subject facility nor conclude that the operation did not have a duty to seek NPDES permit coverage. These issues are discussed in more detail under *Allegation 5* of the *Compliance and Enforcement* section of this report.

Allegation 4: IDNR fails to seek adequate enforcement penalties or to collect administrative penalties when imposed.

Response:
In order to assess the Petitioners' allegations that IDNR fails to seek adequate enforcement penalties or to collect administrative penalties when imposed, EPA evaluated 1) the degree to which IDNR follows its enforcement response policy; 2) the degree to which IDNR penalty actions are adequate for the given violations; and 3) IDNR's collection of penalties. To complete this analysis, EPA evaluated statewide data on the number and types of enforcement actions taken at AFOs, as well as, reviewed actual enforcement actions and other supporting documents (referral packages, emails, etc.) as part of the file reviews in each field office.

The guidance that IDNR follows to assure compliance and conduct enforcement is described in IDNR's Enforcement Management System (EMS) document (Appendix 12). To better understand the state's protocol for escalating enforcement responses to address noncompliance, EPA discussed this matter with management from the IDNR Field Services and Legal Services Bureaus during the program review. Within the context of this review and the discussion below, informal enforcement includes Notices of Violation (NOVs) or similar warning letters, while formal enforcement includes administrative consent orders, administrative orders, and judicial orders, any of which may have been issued with or without penalties. The following provides an outline of IDNR's protocol as presented by IDNR and its EMS.

Upon determination of a violation, pursuant to its EMS, IDNR has thirty days to issue a NOV to the facility unless the field office deems the violation to pose significant danger to human health or the environment or to merit immediate escalation for other reasons. IDNR might give the facility up to ninety days to return to compliance, during which time field office staff might revisit the facility or offer technical assistance.

If the facility does not return to compliance within ninety days following issuance of the NOV, or if any violation was deemed to merit escalation, IDNR evaluates the violation against enforcement priorities and referral standards, which are outlined in the EMS document. If the violation meets these priorities or standards, the field office forwards a summary of violations and evidence to the field office supervisor responsible for coordinating the AFO/CAFO component of the NPDES program (i.e., the Field Office #3 supervisor). The inspector, field office supervisor, and Field Service bureau chief then decide whether to refer the case to Legal Services.

If Field Services decides to proceed with a referral, the EMS states that the coordinating field office should prepare a complete referral package within ten days and forward the package to Legal Services. The referral package is to follow the template provided in the EMS, which includes a description, history, and chronology of the violations as well as a penalty recommendation with justifications for economic benefit, gravity, and culpability. IDNR is subject to a statutory cap of $10,000 for administrative penalties; therefore, if Field Services determines that a penalty in excess of $10,000 is warranted, Field Services recommends in the referral that the case be pursued judicially by the state Attorney General (AG).

Upon receipt of the referral package, the chief legal counsel of Legal Services forwards the referral package to the AG for consideration, regardless of whether the recommended penalty exceeds $10,000. The AG retains the prerogative to take or reject any case of its choosing. If the AG does not elect to take the case, the $10,000 cap on penalty becomes effective and the case must proceed administratively within IDNR. Legal Services attempts to settle cases on consent but unilateral compliance orders are employed for exceptions such as emergency orders to address violations directly impacting human health and the environment. The EMS protocol provides that Legal Services should send the respondent an initial draft consent order or a compliance order within 90 days of receiving the case from Field Services and those settlements pursuant to consent orders should be negotiated within 120 days of the respondent's receipt of the draft consent order.

Degree to which IDNR follows its enforcement response policy

Region 7 reviewed inspection reports and enforcement actions associated with the 152 facility files selected for Region 7 review. Region 7 used these files to assess how IDNR pursued informal and formal enforcement actions for CWA/NPDES violations documented at CAFOs and the degree to which IDNR followed its own EMS. When evaluating how IDNR addressed NPDES permitted facilities, EPA assessed how all NPDES permit violations (including discharges) were addressed. For unpermitted CAFOs, EPA assessed how IDNR addressed unauthorized discharges. Results are summarized below in Table 2.

A majority (51%) of the enforcement responses for CWA/NPDES permit violations identified by IDNR were appropriate for the violation when reviewed against IDNR's EMS. However, Region 7 documented a number (49%) of instances where IDNR's enforcement response was inadequate and contrary to the EMS. In most of these instances Region 7 was unable to determine from file documents if there were mitigating circumstances justifying deviation from IDNR enforcement protocol. There was little, if any, information in the files that provided IDNR's rationale for its decision not to pursue an enforcement action that was appropriate per IDNR's EMS (e.g., unauthorized discharge addressed through NOV).

Table 2. IDNR Enforcement Response at Facilities Discharging to WOUS.

File Review Parameter	Value	Preliminary Findings
# of facilities where IDNR documented CWA/NPDES violations	43	Unpermitted CAFOs – 31 NPDES permitted CAFOs – 12
% of enforcement responses reviewed that are appropriate to the violations.	51%	22 of 43 (51%) files had enforcement response types that were appropriate for the violation when reviewed against the procedures in IDNR's EMS.
% of instances reviewed where there was either no enforcement response or the response was inadequate	49%	9 of 43 (21%) files documented illegal discharges that were addressed through a NOV only. In most instances there was no documentation in the file as to why these violations were not escalated to formal enforcement. 5 of 43 (12%) files did not have any type of enforcement follow-up for documented discharges. 7 of 43 (16%) files had inspections where IDNR documented NPDES permit violations other than illegal discharges. IDNR took no action in any of these cases. The only reference to these violations was in the inspection report.

The degree to which IDNR penalty actions are adequate

The Petitioners assert that IDNR penalties for CAFO discharges are too low and therefore fail to provide any deterrent effect. They also assert that IDNR rarely collects its maximum penalty, even for the most egregious manure spills.

EPA's policy on civil penalties establishes that in order for a penalty action to be adequate, it must serve as a deterrent for future violations, allow for fair and equitable treatment of the regulated community and provide timely resolution of the environmental impacts. If a penalty is to achieve deterrence, both the violator and the general public must be convinced that the penalty places the violator in a worse position than those who have complied in a timely fashion. Neither the violator nor the general public is likely to believe this if the violator is able to retain an overall advantage from noncompliance. Moreover, allowing a violator to benefit from noncompliance punishes those who have complied by placing them at a competitive disadvantage. This creates a disincentive for compliance (Appendix 13).

To assess the degree to which IDNR's penalties are adequate, Region 7 reviewed the penalties associated with approximately 70 enforcement actions that included CWA/NPDES violations at CAFOs[21] and assessed both the gravity and economic benefit components of their administrative actions.

Gravity

IDNR's EMS and Iowa regulations (567 IAC 10.3(2)) allow IDNR to assess up to $3000 per day for the gravity portion of the penalty. Gravity is one component of the total penalty IDNR seeks. The penalties sought by IDNR also may include other applicable CWA penalty components such as a culpability penalty, a history of violation adjustment, and recovery of economic benefit. All enforcement actions reviewed included a gravity component in the penalty calculation. Table 3 summarizes the average gravity components associated with administrative penalty actions taken by IDNR between October 2006 and September 2011. Region 7's file review revealed that the facility files included little if any supporting information, such as calculations, estimates, or mitigating factors, that provided clear rationale for IDNR's decisions related to gravity calculations. The only available information was included in the enforcement action itself and typically consisted of a brief explanation of factors considered when the gravity penalty component was calculated.

[21] Region 7 reviewed all IDNR administrative penalty actions issued to AFOs between October 1, 2006 and September 30, 2011 and identified 70 that had CWA/NPDES violations associated with them.

Table 3. Average Gravity Components and Penalties from IDNR Administrative Actions

Violation Type	# of Actions	Average Gravity Component	Average Penalty
Discharge	41	$2,981.71	$5,810.98
Fish Kill	17	$2,882.35	$4,497.45
NPDES Reporting	5	$1,340.00	$2,700.00
Total	63	$2,542.14	$4,688.67

In its effort to evaluate the Petitioners' claim that CAFO penalties are too low, Region 7 attempted to identify trends that pointed to disparities between the seriousness of the violation and the penalty assessed. For example, are penalties associated with discharges or fish kills comparable to the amount assessed for NPDES reporting violations? Penalty numbers summarized in Table 3 indicate that penalties involving discharges or fish kills, on average, contain a slightly larger gravity component than penalties associated with NPDES reporting violations. This distinction does not appear to be significant enough to have a deterrent effect upon violators to prevent these more egregious situations. In some instances, a penalty assessment may include the state-only requirement for a discharger to pay a fish-restitution penalty component. As part of referring such cases to its Legal Services Bureau, IDNR Field Services Bureau should more often exercise the option available to it of recommending that these cases be pursued by the state Attorney General. This enforcement path will better ensure that the penalties sought in these cases are commensurate with the gravity of the violations committed.

Economic Benefit

It is EPA policy that penalties should generally, at a minimum, remove any significant economic benefit resulting from failure to comply with the law. IDNR's EMS and Iowa regulations (567 IAC 10.3(2)) require that IDNR always assess the actual or reasonably estimated economic benefit when seeking an administrative penalty. The EMS also requires that IDNR staff document information used to calculate the economic benefit including any supporting documentation justifying their calculation.

For CAFOs, the economic benefit from noncompliance is typically associated with failures to adequately contain and land apply manure and other livestock wastes. Because of the high costs associated with these activities, individuals can easily gain a tremendous competitive advantage by delaying or avoiding the costs associated with complying with the law and/or obtaining a NPDES permit. As a result, recouping the economic benefit incurred by CAFO operators is crucial to creating the deterrence that is needed to prevent future violations.

The average economic benefit collected was $554 and the maximum economic benefit collected was $3000. Despite Iowa's regulatory requirement and EMS recommendation to always assess an economic benefit, nearly one-half (46%) of these enforcement actions did not include any economic benefit assessments. Similar to the gravity component, Region 7

found that the facility files contained little, if any, information in the form of calculations, estimates, or mitigating factors that supported or provided clear rationale for IDNR's decisions related to economic benefit and the only information provided was included in the enforcement action itself. In twelve instances involving both open feedlots and confinement operations, IDNR's rationale for a $0 economic benefit factor was because the facility had taken or was taking action to return to compliance and IDNR reasoned the costs of these actions offset any benefit that might have been gained through noncompliance. These examples are inconsistent with EPA's policies on economic benefit and the State's own regulations and EMS, which all require removal of any economic gain enjoyed as a result of the facility's noncompliance. There also were four instances where IDNR assessed no economic benefit penalty at large open feedlots that had illegally discharged. Each of these facilities contained between 1750 and 4000 head of cattle. Region 7 uses information from Iowa State University Extension that suggests, at a minimum, proper controls for these types of operations will cost between $215,000 and $450,000. EPA's BEN model estimates the economic benefit for delaying these costs of construction for 1 year to be between $15,000 and $30,000. In all of these instances, IDNR's failure to recover the economic benefit allowed these facilities to enjoy an economic advantage that their competitors did not.

Because of IDNR's failure to follow its regulatory requirement and EMS recommendation to recover any economic benefit in almost one-half of the penalty actions for CWA/NPDES permit violations, Region 7 does not believe IDNR's administrative penalties adequately recover the economic benefit of noncompliance and do not serve as an adequate deterrent.

IDNR's Collection of Penalties

Collection of assessed penalties is managed by IDNR's Legal Service Bureau. In most instances the attorney assigned to a case is responsible for collecting and tracking any associated penalty payments. IDNR has the option of referring cases with unpaid fines to Iowa's Department of Revenue (IDR) for collection; however, IDNR has no formal policy for how and when this referral takes place. Typically IDNR attorneys use an informal process (i.e., phone call) to notify the individual against whom the penalty was assessed that the penalty is late. Referrals are made when the attorney determines the informal process to be ineffective.

IDNR tracks penalty payments as well as unpaid penalties and routinely reports this information to the Iowa's Environmental Protection Commission (Appendix 14). Similar to the analysis of economic benefit and gravity, Region 7 looked at 70 penalty actions involving CWA/NPDES violations at CAFOs and compared that with IDNR's list of unpaid penalties. EPA documented two instances where penalty actions associated with CWA/NPDES violations had not been collected. In both instances penalty payments were less than six months past due and the Legal Services Bureau attorneys were working to collect them. During its review of files at IDNR's field offices, Region 7 also looked at approximately 14 case files where an administrative enforcement action included penalties for CWA/NPDES violations. In each of these instances, IDNR had documentation demonstrating that the penalties had been paid.

Allegation 5: IDNR fails to inspect and monitor activities subject to regulation.

In order to assess the Petitioners' allegations related to inspections, Region 7 evaluated the number and types of inspections that IDNR performs at CAFOs and the quality of IDNR's inspection or compliance evaluation reports. EPA assessed both statewide inspection data and a select number of individual facility files at each of IDNR's six field offices. As discussed in Section IV (Methods) above, Region 7 used IDNR complaint, fish kill, and spill report databases to select facility files for review. A checklist (Appendix 4) was used to systematically gather information for Region 7 to use in its evaluation. Region 7 reviewed 279 individual inspection/evaluations from the 152 facility files selected for review.

Inspection Coverage – Degree to which IDNR performs NPDES inspections at AFOs/CAFOs

EPA's October 2007 NPDES Compliance Monitoring Strategy (CMS) (Appendix 15) establishes benchmarks for CAFO inspection frequencies across the country. The CMS identifies that an objective of CAFO inspections is to verify that CAFOs are not illegally discharging to waters of the U.S. and thus subject to NPDES permitting. The CMS also establishes that inspections must verify that NPDES permitted CAFOs are in compliance with their permits. In its effort to evaluate IDNR's NPDES CAFO inspection program, Region 7 used these benchmarks to determine if the frequency of IDNR's inspections are sufficient to sustain an adequate compliance monitoring program.

Large and Medium CAFOs With NPDES Permits

The CMS recommends that all large and medium CAFOs with NPDES permits be inspected at least once every five years. Iowa has approximately 131 large CAFOs operating under IDNR-issued NPDES permits. All of these permits have been issued to either large open feedlots or large combined operations. No NPDES permits have been issued to large confinement operations. There were also no NPDES permits issued to medium CAFOs of any type.[22]

To assess whether IDNR is inspecting NPDES-permitted facilities at least once every five years, Region 7 reviewed inspection data from IDNR's Field Office database for inspection activity between FFYs 2009-2011. IDNR performed 85 inspections at permitted CAFOs during this period. The number of inspections represents approximately 64% of Iowa's permitted CAFO universe. This data indicates that IDNR is on track to inspect 100% of these facilities every five years.

To further assess the adequacy of IDNR's inspection frequencies, Region 7 compared IDNR's inspection activity with its inspection commitments made in IDNR's Performance Partnership Grant (PPG) work plans for FFYs 2009-2010 and FFYs 2011-2012. Within each of these grant cycles, IDNR committed to inspecting 48 NPDES permitted CAFOs. For

[22] One NPDES permit application for a medium open feedlot CAFO was received by IDNR in late 2011 but the permit had not yet been issued at the time this report was drafted.

grant cycle 2009-2010, IDNR exceeded its commitment by performing 65 inspections. IDNR completed 20 inspections during the 2011 portion of the 2011-2012 cycle, and there does not appear to be any indication that IDNR will not meet its PPG obligations by the end of FFY 2012. It should be noted that the PPG work plan outlines work commitments agreed to by EPA and IDNR and provides a framework for reporting performance. This PPG work plan only covers those activities that utilize PPG and state matching funds and does not establish minimum requirements for an authorized program as outlined in 40 CFR 123.

EPA finds that IDNR has performed and continues to perform an adequate number of routine compliance evaluation inspections at large NPDES permitted CAFOs and satisfies the CMS recommendation that all NPDES permitted CAFOs are inspected at least once every five years.

Large CAFOs without NPDES Permits

The CMS recommends that all large CAFOs without NPDES permits be inspected by October 2013 (i.e., within five years after the CMS became effective) to determine whether the facility discharges. Thereafter, the unpermitted CAFO may be inspected as needed based on the possibility of an unauthorized discharge. IDNR indicates that there are approximately 2,900 unpermitted large confinement CAFOs in Iowa. IDNR implements a variety of inspection types to oversee a broad range of state and federal requirements applicable to AFOs/CAFOs. A list and description of these inspection types is included in Appendix 9. As part of its review, Region 7 requested that IDNR identify the specific inspection types IDNR may use to make an initial determination if a large CAFO discharges. Region 7 also requested information about which inspection types IDNR may use to meet the CMS goal for "as needed" follow up. To satisfy these CMS inspection frequency goals, IDNR indicated they used *Open Feedlot Routine, Confinement Routine* and *Manure Management Plan* Inspection types.
In its effort to assess whether IDNR is inspecting these facilities within five years to determine if a CAFO discharges, Region 7 reviewed inspection data from IDNR's Field Office database that covered inspection activity between 2008-2011. Results are summarized below in Table 4.

Table 4. CWA Inspections at Unpermitted Large CAFOs

Inspection Type	2008	2009	2010	2011	Totals
Confinement Routine	0	3	1	4	8
MMP	309	443	131	59	1482
Open Feedlot Routine	6	3	2	2	20

Results suggest that IDNR has yet to perform a discharge assessment at nearly half of the large CAFOs in Iowa. Since 2008 IDNR has performed some type of discharge assessment at approximately 1510 unpermitted large CAFOs, roughly 52% of Iowa's large CAFO universe. The MMP inspection is, by far, the most common inspection type used to evaluate

large CAFOs. Recent IDNR staff reductions[23] have forced the agency to significantly reduce the number of these inspections, suggesting that overall inspection numbers at large CAFOs without NPDES permits will likely continue to decrease. Moreover, the results of Region 7's file review indicate that the MMP inspections are rarely comprehensive enough for IDNR to make a determination that an unpermitted CAFO does not discharge.

In regard to performing as needed follow up inspections at large unpermitted CAFOs, IDNR relies primarily on citizen complaints and spill reports to determine if an additional inspection is warranted. As part of this review, EPA evaluated IDNR's response to complaints (see Allegation 2 above). Region 7 found that, fundamentally, IDNR's response to complaints is timely and addresses the subject of the complaint or spill report. However, beyond IDNR's investigation of the concerns raised in a complaint, there was little indication that the investigations were sufficiently comprehensive for IDNR to confirm that the subject CAFO did not discharge and conclude that the CAFO did not have a duty to seek NPDES permit coverage.

Medium AFOs without NPDES Permits

The CMS recommends that all medium AFOs without NPDES permits be inspected one time initially to determine whether the facility meets the definition of a medium CAFO. The CMS also recommends that additional inspections be conducted as needed based on citizen complaints or other information. IDNR has reported that there are approximately 4,300 unpermitted medium AFOs in Iowa, consisting of open feedlots, confinements and combined operations. Similar to the large CAFO categories, EPA requested that IDNR identify the specific types of inspections used by IDNR to assess the regulatory status of medium AFOs. IDNR indicated they use, *Open Feedlot Routine, AFO Small Open Lot, Confinement Routine and Manure Management Plan* inspection types to make this determination (Appendix 9). To assess whether IDNR is performing the initial assessment of these facilities, EPA reviewed inspection data from IDNR's Field Office database that covered inspection activity between 2008-2011. Results are summarized in Table 5 below.

Table 5. CWA Inspections at Medium AFOs

Inspection Type	2008	2009	2010	2011	Totals
Confinement Routine	0	6	8	24	38
MMP	267	352	118	63	800
Open Feedlot Routine	14	5	0	5	24
AFO Small Open Lot	17	16	30	62	125

Results indicate that IDNR has performed inspections at approximately 987 medium AFOs since 2008. This equates to inspection of roughly 22% of Iowa's estimated medium AFO universe. The MMP inspection was also the most common type utilized by IDNR to assess medium AFOs and, as discussed above, the number of these inspections has been reduced

[23] See Appendix 5, IDNR's November 11, 2011, response to EPA questions. Attachment 1 of IDNR's response is a table showing full time equivalent (FTE) positions for IDNR's AFO program. For confinements (the vast majority of unpermitted large CAFOs), FTEs devoted to inspections have been reduced by as much as 60% since 2007.

significantly because of budgets cuts. Moreover, the results of Region 7's file reviews indicate that the MMP inspections are rarely comprehensive enough for IDNR to establish whether the elements that define an AFO as a medium CAFO are present or whether the operation otherwise discharges.

In regard to performing as needed follow up inspections at medium AFOs, IDNR again relies primarily on citizen complaints and spill reports to determine if an additional inspection is warranted. As part of this review EPA evaluated IDNR's response to complaints. Region 7 found that, fundamentally, IDNR's response to complaints is timely and addresses the subject of the complaint or spill report. However, based on the file review, the evaluations associated with the responses were neither sufficiently comprehensive for IDNR to confirm the CAFO status of the subject facility nor conclude that the operation did not have a duty to seek NPDES permit coverage.

Small AFOs

EPA's review of data from IDNR's Field Office database indicates that IDNR has identified approximately 1,350 small AFOs. IDNR does not routinely perform inspections at facilities within this category unless IDNR receives a citizen complaint or other significant information that warrants investigation by IDNR. This approach is consistent with the recommendations in the CMS for small AFOs, which are only subject to regulation under the NPDES CAFO permitting program requirements if the AFO is designated a CAFO.

Quality of Inspection or Compliance Evaluation Reports

State program requirements in 40 CFR 123.26(b) provide that "state programs shall have inspection and surveillance procedures to determine, independent of information supplied by regulated persons, compliance or noncompliance with applicable program requirements." Also, State "investigatory inspections shall be conducted, samples shall be taken and other information shall be gathered in a manner . . . that will produce evidence admissible in an enforcement proceeding or in a court." 40 CFR 123.26(d).

EPA's file review included files from each of IDNR's six field offices and consisted primarily of facilities with spills and/or complaints. IDNR's on site inspections are the primary mechanism IDNR uses to document discharges from CAFOs. As a result, these inspections and the corresponding inspection reports are the primary mechanisms for IDNR and/or EPA to determine whether a CAFO must obtain a NPDES permit and whether permitted CAFOs are in compliance with all permit terms and conditions. EPA identified 149 of 280 (53%) inspection reports where there was insufficient information in the report to allow Region 7 reviewers to confidently conclude that an accurate and comprehensive compliance determination was made by IDNR. Region 7 reviewers identified significant variations in how IDNR field offices documented their complaint and spill investigations. A variety of Reports of Investigation, memorandums, database entries, letters and checklists were used by IDNR to document these inspections. With this large number of reporting mechanisms also came a wide variance in how inspectors' findings and observations were documented and varying levels of detail. In many instances the reports lacked basic information, such as what areas of the facility were inspected, supporting

documentation (i.e., photos, inventory records, etc.) and/or determinations of the facility's AFO and/or CAFO status. In many instances, it was unclear whether the inspector performed an adequate investigation or if the documentation was insufficient. As a result, a majority of the inspections reviewed by Region 7 contained insufficient information to answer basic questions such as whether the operation was a CAFO, did the operation discharge, was an NPDES permit required, or was the operation in full compliance.

In its response to Region 7's questions (Appendix 9), IDNR indicated that IDNR performs either a 'confinement routine' or 'open feedlot routine' inspection when there is a concern that a facility is not in compliance with the CWA. However, from the file review, it does not appear that IDNR consistently utilizes these inspection types when investigating complaints, spills and discharges/fish kills associated with CAFOs. Instead, most of these inspections focus exclusively on the response to the issue or cause that instigated the complaint or spill report and are not a sufficiently comprehensive evaluation of the facility.

While there were some instances where IDNR's inspections at open feedlots evaluated the possibility that a NPDES permit was required, Region 7 did not find any instances where inspections at confinement operations made this determination.

D. Additional Concerns Raised Regarding Iowa's CAFO program

Allegation 1: Iowa's Phosphorous Index requirements do not meet the federal requirement because Iowa standards do not include field specific assessment of potential for runoff and the statement that "application rates will minimize runoff".

Response:
In 2010 Iowa Administrative Code 567-65.112(8) was revised to require in a NMP a phosphorous index of each field that meets the requirements of Iowa Administrative Code 567-65.17(17) which, in turn, requires the phosphorous index to meet the requirements of USDA Natural Resource Conservation Service Iowa Technical Note 25. Moreover, IAC 567-65.112(8)(a) includes restrictions on the application of open feedlot effluent based on a phosphorous index of each field and includes total phosphorous available to be applied from the open feedlot effluent. These revisions appear to resolve this allegation.

Allegation 2: IDNR manure management plans (MMPs) are less stringent than federal NMPs.

Response:
Iowa requires that CAFO facilities subject to NPDES requirements submit an NMP along with their permit applications. MMPs are only required to be submitted by non-discharging facilities not otherwise subject to NPDES requirements; therefore, their terms are not required to be as stringent as federal NMPs.[24] It appears that this allegation has been resolved.

[24] However, if these unpermitted CAFOs land apply manure, litter, or process wastewater, they would be subject to 40 CFR 122.42(e)(1)(vi)-(ix) to ensure that all precipitation-related discharges from land application are composed entirely of agricultural stormwater. The practices required by 40 CFR 122.42(e)(1)(vi)-(ix) include identifying appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the U.S.; identifying protocols for appropriate testing of manure, litter, process wastewater, and soil; establishing protocols to land apply manure, litter, or process wastewater in accordance with site specific nutrient management practices that ensure the appropriate

Allegation 3: Open feedlots propose to discharge and IDNR has failed to issue NPDES permits to these operations.

Response:
Following the Fifth Circuit's decision in the National Pork Producers case, facilities that propose to discharge are not required to seek a NPDES permit. Please see Section V.B. and footnote 12, above. It appears that this allegation has been resolved.

VI. Preliminary Findings that Require Action by IDNR

Below is a summary of Region 7's preliminary findings that require corrective action by IDNR to comply with requirements for state programs found in 40 CFR Part 123 and to improve the effectiveness of its CAFO program.

Finding 1:
IDNR is not issuing NPDES permits to CAFOs when appropriate. IDNR has asserted that its non-CWA state law provisions are an outright discharge prohibition that allows the state to meet federal requirements. The state law provisions for confinement feeding operations are not clear enough on their face to enable EPA to conclude that the state's program meets federal requirements. In regard to NPDES permitting authority, IDNR has historically asserted that it has the authority to issue NPDES permits to confinement CAFOs. Statutory revisions and a lack of NPDES permitting regulations have created a lack of clarity as to IDNR's authority to issue NPDES permits to confinement CAFOs that discharge. With the exception of large open feedlots, IDNR has been unable to fully assess which CAFOs are subject to NPDES permitting. Region 7 also identified deficiencies associated with inspection completeness and thoroughness as well as a lack of consistency across IDNR field offices when evaluating whether a facility discharges. This problem is further compounded by the fact that it appears IDNR has been unable to make initial no discharge evaluations at a majority of the unpermitted confinement CAFOs and evaluations of the two discharge criteria at a majority of the medium AFOs in Iowa. For the reasons described above, Region 7 cannot conclude that IDNR is meeting its obligation to permit CAFOs that discharge.

It appears that the significant reduction in AFO –related staff since 2007 has, in part, prevented IDNR from fully carrying out its responsibilities for the NPDES program. Adequate resources are necessary to ensure IDNR's ability to continue to implement the CAFO NPDES permitting program.

Finding 2:
IDNR has not conducted comprehensive inspections to determine whether unpermitted CAFOs need NPDES permits. IDNR is not conducting routine, periodic inspections of all operations that may be subject to NPDES regulation. EPA's review of facility files, as well as state inspection data, indicate that IDNR has failed to perform comprehensive inspections at a majority of the

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agricultural utilization of the nutrients in the manure, litter, and process wastewater; and identifying specific records that will be maintained to document the implementation and management of the minimum elements described in 40 CFR 122.42(e)(1)(vii) through (e)(1)(viii).

large unpermitted CAFOs and unpermitted medium sized AFOs. IDNR's CAFO inspection reports are not complete and do not include all required information needed to make an accurate compliance determination.

Again, it appears that the significant reduction in AFO –related staff since 2007 has, in part, prevented IDNR from fully carrying out its responsibilities for the NPDES program.

Required Action(s) to address Findings 1 and 2:

The state law provisions for confinement feeding operations are not clear enough on their face to enable EPA to conclude that the state's program meets federal requirements. In order to make such a conclusion, clarification is needed, either through a formal legal opinion from the state or through statutory/regulatory changes. EPA recommends that IDNR provide clarification perhaps through an Iowa Attorney General Opinion, that the department can still, in fact, as it has asserted in the past, issue NPDES permits to discharging CAFOs pursuant to IC 455B.174 or other authority. This clarification should specifically address the issue of whether the Department is authorized to issue NPDES permits to discharging CAFOs without the regulations required by IC 459.311(2). Another, and perhaps most conclusive, option would be for IDNR to promulgate NPDES permitting regulations pursuant to IC 459.311(2) for confinement CAFOs that discharge.

IDNR should also revise its current CAFO inspection program to consistently and comprehensively evaluate facilities on a statewide basis to determine 1) CAFO status; 2) whether the facility is discharging to waters of the U.S.; 3) whether discharges at unpermitted CAFOs have been permanently remedied; and 4) whether the facility is required to obtain an NPDES permit because the CAFO discharges. IDNR should develop and implement formal inspection standard operating procedures (SOPs) for each inspection type utilized to evaluate compliance with the CWA and NPDES permits to ensure that all necessary information is gathered and documented in order for consistent and reliable compliance determinations to be made across the state. These determinations should be sufficiently documented.

As part of this effort, IDNR should develop an inspection plan that at a minimum accomplishes the inspection goals established in EPA's Compliance Monitoring Strategy for all CAFO related categories. Adequate resources will be necessary for implementation of the NPDES CAFO program.

Finding 3:
EPA finds that in a number of cases reviewed (49%), IDNR failed to act, or did not follow its enforcement response policy when addressing CWA/NPDES permit violations. EPA documented a substantial number of cases where IDNR's enforcement response appeared to be inadequate and contrary to EPA and state guidance documents. There was little, if any, information in the files that provided IDNR's rationale for its decision to not pursue an enforcement action and in a number of instances the files did not contain documentation of mitigating circumstances that justified deviation from IDNR enforcement protocol (e.g., unauthorized discharge addressed through NOV). An overarching issue associated with IDNR enforcement actions is the adequacy of IDNR inspections and documentation.

Finding 4:
IDNR is not assessing adequate penalties against CAFOs. EPA documented a number of cases where IDNR's penalty enforcement response appeared to be inadequate and contrary to EPA and state guidance documents. In most of these instances the file did not substantiate whether the lack of, or minimal, penalty enforcement was appropriate because there was little, if any, information (e.g., mitigating factors) in the files that provided IDNR's rationale for its decision to not seek penalties. In addition, EPA finds that IDNR's administrative penalties do not serve as an adequate deterrent. The penalties calculated do not appear to adequately recover the economic benefit of noncompliance and are insufficient, in general, to serve as a deterrent in cases involving discharges or fish kills.

Required Action for Findings 3 and 4:
IDNR should comply with its EMS and pursue enforcement actions with penalties when required by its EMS. Any deviation from the actions required by the EMS should be fully documented in the facility file. In addition, all administrative penalty actions should include the recovery of the economic benefit of noncompliance. IDNR should consider referring cases involving illegal discharges and fish kills to the state Attorney General's office for enforcement.

IDNR should provide a plan to EPA, consistent with the Compliance and Enforcement discussions above, and IDNR's EMS, to ensure consistent and thorough evaluation and documentation of CWA violations at CAFOs. This plan should also detail steps IDNR can implement to ensure that penalties are sought in accordance with its EMS to create a stronger deterrent to noncompliance and adequately collect economic benefit. Region 7 also recommends IDNR provide a plan to ensure consistent documentation of inspection findings, penalty calculations and enforcement responses by enforcement staff.

Finding 5:
Land application setbacks are not equivalent to federal requirements and are not included in IDNR-approved nutrient management plans. Petitioners correctly identified that Iowa NPDES permit setback terms were inconsistent with federal requirements. Iowa's 2010 regulation revisions attempted to address this issue but Region 7 notes that the scope of the setback revisions may continue to be less than necessary to be equivalent to federal requirements. Iowa's revised regulation tracks the alternative conservation practice language of 40 CFR 412.4(c)(5)(ii), but appears to be more limited in scope than the federal requirements. IAC 567-65.101(6)(b)(1) applies only to "designated areas," which does not include all locations required by 40 CFR 412.4(c)(5), including, but not limited to, down-gradient surface waters or other conduits to surface waters. This difference in scope appears to render the state regulation less stringent than the federal rule.

During the file reviews, Region 7 identified that setback requirements were often not included in IDNR approved NMPs. It appears that this omission is the result of the use of an outdated template produced by IDNR and used by producers to draft NMPs. Although the regulation has been revised and the Iowa's NPDES permits incorporate the state regulation by reference, these requirements were not incorporated into the NMPs that were reviewed. NMP requirements are NPDES permit terms so the NMP inadequacies must be deemed nonconformance with Part 123.

Required Action for Finding 5:
IDNR should evaluate the scope of its setback and separation distance requirements in its regulation and clarify that it is equivalent to federal requirements. IDNR should also revise its application forms and templates to ensure that NMPs meet the minimum requirements of Iowa's regulations and federal minimum requirements.

Appendix B

Work Plan Agreement Between the Iowa Department of Natural Resources and the Environmental Protection Agency Region 7

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Work Plan Agreement
Between
The Iowa Department of Natural Resources and the Environmental Protection Agency Region 7

The Iowa Department of Natural Resources (DNR) and the U.S. Environmental Protection Agency (EPA) Region 7 currently work together to implement the federally authorized, National Pollutant Discharge Elimination System (NPDES) Program within Iowa in a timely, appropriate and effective manner. We establish priorities, negotiate program commitments and work sharing, and evaluate program performance.

DNR and Region 7 are executing this Work Plan as a means to strengthen Iowa's implementation of the federally authorized NPDES program. This Work Plan contains activities and commitments by DNR and Region 7 that generally span federal fiscal years (FFY) 2013 – 2019.

DNR and Region 7 will monitor progress under this Work Plan via existing program to program communications, new reporting pursuant to this Agreement, as well as during our annual joint senior management planning meeting. Work Plan elements may be adjusted by mutual agreement. As part of our joint Performance Partnership Grant (PPG) planning process, DNR and Region 7 will formally assess the need to negotiate any revisions to this Work Plan.

The execution of this Agreement demonstrates our continuing commitment to environmental improvement through a strong partnership and shared responsibility for meeting our regulatory obligations.

Entered into on 9/11/13

For DNR:

Chuck Gipp
Director

Bruce Trautman for,
Chuck Gipp

For U.S. EPA Region 7

Karl Brooks
Regional Administrator

The DNR Work Plan for Administration of the NPDES Concentrated Animal Feeding Operation (CAFO) program.

I. Background: Petition for Withdrawal

A Petition for Withdrawal of the NPDES Program Authorization from the State of Iowa was submitted to EPA on September 20, 2007, by the Iowa Citizens for Community Improvement, the Sierra Club, and the Environmental Integrity Project (Petitioners). The Petitioners allege that Iowa's NPDES concentrated animal feeding operations (CAFO)[1] program does not meet the requirements of the Clean Water Act (CWA).

EPA conducted an informal investigation of the Petitioners' allegations and issued a report (referred to herein as the "report") in July 2012. The report discusses EPA's preliminary findings and the actions that the DNR must take for its program to comply with CWA requirements for authorized state NPDES programs. The report did indicate that DNR had resolved 26 of the 31 alleged deficiencies noted by Petitioners in its Petition for Withdrawal.

II. Work Plan Action Items for DNR to address Region 7's Required Actions

The following expands upon DNR's September 2012 Response to EPA's report and outlines the specific actions that DNR agrees to take to address the remaining five deficiencies included in the preliminary findings in EPA's report.

Execution of this Work Plan in and of itself does not constitute resolution of the 2007 Petition for Withdrawal.

Objective 1: Recommend promulgation of NPDES permitting regulations for confinement CAFOs that discharge to waters of the U.S.

1. DNR intends to recommend to the Environmental Protection Commission (Commission) that the Commission incorporate by reference the federal regulations necessary to fully implement the NPDES permitting program for confinement CAFOs that discharge to waters of the U.S. Within 180 days of execution of this Work Plan or within 180 days of notification from Region 7 that the previously submitted list of regulations to be incorporated is correct, whichever occurs last, DNR will recommend action to promulgate the proposed rules in the Iowa Administrative Bulletin pursuant to Iowa Code Chapter 17A.

2. DNR will recommend that the Commission adopt by reference the revised rules within one year of execution of this Work Plan.

Indicia of Progress: Within 180 days of receipt of written acknowledgment from Region 7 that the federal regulations to be adopted by reference is correct or within 180 days of execution of this

[1] When used in this document, animal feeding operation (AFO) and concentrated animal feeding operation (CAFO) mean as defined in 40 CFR 122.23.

Work Plan, whichever occurs last, DNR recommends that the Commission publish Notice of Intended Action. DNR recommends that the Commission adopt the revised rules within one year of execution of this Work Plan.

Objective 2: Recommend promulgation of Iowa regulations related to setback and separation distances so that they are equivalent to federal requirements.

1. DNR intends to recommend to the Commission that the Commission adopt by reference federal regulations that fully implement the NPDES permitting program with respect to land application setback and separation distances for open feedlot CAFOs. Within one year of execution of this Work Plan, DNR agrees to recommend adoption by reference of applicable regulations related to setback and separation distances for open feedlot CAFOs. DNR will recommend rulemaking as set forth in Paragraph 1 of Objective 1 above.

Indicia of Progress: Within 180 days of receipt of written acknowledgment from Region 7 that the federal regulations to be adopted by reference are correct or execution of this Work Plan, whichever occurs last, DNR recommends that the Commission publish a Notice of Intended Action. DNR recommends that the Commission adopt the revised rules within one year of execution of this Work Plan.

Objective 3: To revise DNR application forms and templates to meet the minimum federal requirements.

1. Within 60 days of execution of this Work Plan, DNR agrees to revise its construction permit application to include the predictive modeling requirement associated with alternative technologies and to require the additional information needed to determine whether the CAFO discharges. The revised application will include a provision stating that alternative technologies require extensive monitoring and reporting conditions in any permit; in addition, an application for a permit does not guarantee that a permit will be granted or that any permit granted will be renewed.

2. Within 60 days of execution of this Work Plan, DNR agrees to revise its nutrient management plan template to include manure application setback requirements.

Indicia of Progress: Revisions to DNR's construction permit application and nutrient management plan templates are completed within 60 days of execution of this Work Plan.

Objective 4: Compliance Evaluation and Inspections

A. To implement a comprehensive survey to identify AFOs that are CAFOs that discharge to waters of the U.S. and have failed to apply for NPDES permits.

1. Within 30 days of execution of this Work Plan, DNR will establish a baseline inventory of all known large CAFOs and medium-sized AFOs in Iowa based upon up-to-date information contained in DNR's AFO database and provide this number to Region 7. Within 90 days of execution of this Work Plan, DNR will provide Region 7 a written plan to systematically locate

and/or identify any unknown large CAFOs and medium-sized AFOs to supplement the baseline inventory. Private or personally identifiable information will not be included as part of these submittals.

2. Within 5 years of the execution of this Work Plan, DNR shall perform a Comprehensive Survey of all large CAFOs and medium-sized AFOs that currently do not have NPDES permits to identify, independent of information supplied by regulated persons, CAFOs that discharge to a water of the U.S. and have failed to comply with NPDES permit application or other program requirements. The Comprehensive Survey shall be performed pursuant to and consistent with the CWA CAFO portions of the IDNR Comprehensive Survey Standard Operating Procedure (SOP) which is attached to this Work Plan.

3. DNR shall document for each facility the basis for its decision regarding the type of evaluation to be conducted.

4. DNR agrees to perform approximately 20% of these evaluations annually.

Indicia of Progress: Within 30 days of execution of this Work Plan, DNR establishes a baseline inventory of all known large CAFOs and medium-sized AFOs. Within 90 days of execution of this Work Plan, DNR submits a written plan to systematically inventory any unknown large CAFOs and medium-sized AFOs. All large CAFOs and medium-sized AFOs without NPDES permits shall be evaluated pursuant to the CWA CAFO portions of the IDNR Comprehensive Survey SOP within 5 years of the execution of this Work Plan, in accordance with Subsection A of this Objective.

B. To perform appropriate CWA NPDES compliance evaluation inspections at NPDES permitted CAFOs.

1. DNR agrees to perform CWA/NPDES inspections at all NPDES permitted CAFOs in Iowa within 5 years of the execution of this Work Plan, and to complete approximately 20% of these inspections annually, in accordance with the prioritization established in Paragraph 2 below. The CWA/NPDES inspections shall be conducted pursuant to and consistent with the CWA CAFO portions of the IDNR Concentrated Animal Feeding Operation NPDES On-Site Inspection SOP attached to this Work Plan.

2. DNR and Region 7 agree that it is appropriate to prioritize inspections of NPDES permitted facilities with spills or legally sufficient complaints as set forth in Iowa Code §459.601 or 567 IAC 65.113 (459A) that involve a water of the U.S.

Indicia of Progress: All NPDES permitted CAFOs shall be inspected pursuant to the CWA CAFO portions of the IDNR Concentrated Animal Feeding Operation NPDES On-Site Inspection SOP within 5 years of the execution of this Work Plan. DNR inspects approximately 20% of permitted facilities annually.

C. Resources and Training

1. Pursuant to Senate File 435 (2013), DNR received an increase of $700,000 for its animal feeding operation program. This will result in approximately 7 additional full-time staff from the previous fiscal year in order to conduct the evaluation and inspections required by this Work Plan. In the annual reports required pursuant to Section 7.2 of this Work Plan, DNR will provide an assessment as to whether it has sufficient resources to meet the requirements of this Work Plan, and if not, what additional resources are needed.

2. Within 180 days of execution of this Work Plan, DNR will develop a CAFO NPDES training curriculum for all staff conducting NPDES evaluations and inspections at AFO/CAFOs. The curriculum will be completed by all existing AFO/CAFO inspectors and their field office supervisors within 270 days of execution of this Work Plan. New AFO/CAFO staff/inspectors will complete the curriculum within three months of their start date. The curriculum will cover state and federal CWA-related matters, including CAFO inspector training requirements for DNR inspectors. DNR shall develop and provide the training curriculum to Region 7 for review and comment within 180 days of execution of this Work Plan.

Indicia of Progress: Within 180 days of execution of this Work Plan, DNR will develop and submit to Region 7 a CAFO NPDES training curriculum. Within 270 days of execution of this Work Plan, DNR implements a satisfactory training program for AFO/CAFO inspectors.

Objective 5: Timely issue NPDES permits that meet federal requirements to all CAFOs that DNR determines discharge to waters of the U.S. and take timely and appropriate enforcement action if necessary.

1. In accordance with Objective 4, DNR agrees that upon completion of an evaluation of a CAFO operating without an NPDES permit, where DNR determines the CAFO is required to obtain an NPDES permit because it discharges to a water of the U.S., DNR will notify the CAFO within 60 days after completion of its evaluation and require the CAFO to either: submit an application for an NPDES permit to DNR within 90 days from the date of DNR's notification or longer if additional time is necessary; or immediately put in place interim remedial measures that eliminate the discharge to waters of the U.S. followed by permanent measures that eliminate the cause of the discharge to waters of the U.S. DNR may provide these notifications through commencement of an informal or formal action, depending on DNR's best judgment about what will bring the CAFO into compliance with the CWA. DNR agrees to track the CAFO's response and ensure that a permit application is submitted or discharge cause is clearly eliminated, relying on enforcement (or further enforcement) if necessary.

2. Within 180 days after receipt of each application for an NPDES permit submitted according to this Objective, DNR will complete a draft permit that contains facility-appropriate provisions designed to control all discharges from the CAFO in a manner consistent with federal effluent limitations for CAFOs. At the termination of the public comment period for each draft permit, and after consideration of all public comments received, DNR agrees to expeditiously issue a final permit for each such CAFO.

3. Unpermitted discharges are subject to enforcement at any time but DNR recognizes that in some cases, depending on the nature and severity of the discharge, it may be appropriate to require a CAFO to implement interim controls while the CAFO's permit application and permit are under development.

Indicia of progress: As DNR implements the IDNR Comprehensive Survey SOP pursuant to Objective 4 for evaluating CWA compliance at AFOs and CAFOs operating without an NPDES permit, DNR will notify facilities that discharge to a water of the U.S. of the need for a permit or the immediate need to put in place remedial measures that clearly eliminate the cause of the discharge to waters of the U.S., commencing informal or formal action as appropriate, and issuing permits in accordance with the timelines set forth in this Objective.

Objective 6: To implement enforcement program that ensures penalties are sought in accordance with DNR's EMS and creates a stronger deterrent to noncompliance.

1. DNR agrees to carry out enforcement against CAFOs with illegal discharges to waters of the U.S. or NPDES permit violations in accord with its Enforcement Management System (EMS) manual. DNR will document the basis for enforcement response decisions. When seeking administrative penalties, DNR agrees to assess the actual or reasonably estimated economic benefit in accordance with 567 IAC 10.3(2) and the EMS manual, including both delayed and avoided cost of compliance. In specific cases where DNR does not seek or recover full economic benefit, DNR will document the case-specific rationale and/or mitigating factors supporting DNR's decision to not seek full economic benefit. DNR will also document mitigating factors used for the non-economic benefit component of assessed penalties.

2. DNR agrees to develop checklists necessary to ensure consistent and appropriate enforcement responses by enforcement staff within 60 days of execution of this Work Plan.

3. DNR agrees to complete any required staff training on its revised EMS and penalty calculations within 120 days of execution of this Work Plan.

Indicia of Progress: DNR develops enforcement checklists within 60 days of execution of this Work Plan. DNR completes any required training within 120 days of execution of this Work Plan. DNR assesses appropriate economic benefit when seeking administrative penalties.

Objective 7: To keep the EPA and the public up-to-date on DNR's progress towards implementation of this Work Plan.

1. DNR agrees to provide progress reports on its progress with implementing Objectives 1-6 of this Work Plan within 90 days, 210 days and one year from the date of execution of this Work Plan. Progress reports will be posted on DNR's website.

2. Beginning in 2014 and ending in FFY 2019, DNR agrees to submit an annual report by August 1 of each year that summarizes all relevant results associated with DNR's implementation of this Work Plan. In the annual report, if DNR has not met the 20% annual evaluation

requirement discussed above, DNR agrees to reassess available resources and progress towards meeting the Work Plan's requirements. The annual report will be posted on DNR's website.

Indicia of Progress: DNR's progress with implementing Objectives 1-6 of the Work Plan are posted on DNR's website. DNR provides annual reports to Region 7.

Appendix C

Confinement Operations with Discharge to Waters of the United States That Were Reviewed by EPA Region 7

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ɔnfinement Operations with Discharge to Waters of the United States ıat Were Reviewed by EPA Region 7

Date Filed	Case Name	Enforcement Type
2/4/2014	Douglas Reimer	Administrative Consent Order
4/18/2014	Dairy Venture LLC	Administrative Consent Order
6/20/2014	Grant Wells	Administrative Consent Order
3/2/2015	LDR Ranch. Ltd.	Administrative Consent Order
3/30/2015	MLS Legacy, LLLP & Clinton Vos	Administrative Consent Order
6/2/2015	Porter Farms, Inc.	Administrative Consent Order
6/17/2015	Smith Ag, inc.	Administrative Consent Order
9/8/2015	Lindoah, LLC dba Hog Haven	Administrative Consent Order
9/16/2015	D & L Swine, LLC	Administrative Consent Order
10/21/2015	Richard L. Schumaker	Administrative Consent Order
1/25/2016	Paul Sealine	Administrative Consent Order
2/15/2016	NMC Holdings, LLC	Administrative Consent Order
2/27/2016	Darryl Banowetz (D&D Dairy)	Administrative Consent Order
2/27/2016	Logan Swartz dba S&K Custom	Administrative Consent Order
4/16/2016	Krauskopf Pumping Service, LLC	Administrative Consent Order
6/14/2016	Carroll Farms, LLC	Administrative Consent Order
8/22/2016	Patricia Plagge Jorgensen	Administrative Consent Order
9/9/2016	Ryken Farms, Inc.	Administrative Consent Order
11/16/2016	Cooperative Credit Company	Administrative Consent Order
11/23/2016	Swine Graphics Enterprises - ADL VI Sow F	Administrative Consent Order
1/9/2017	Jeff Kruse	Administrative Order
1/19/2017	Doug Streit	Administrative Consent Order
2/14/2017	Clarence Rohlfsen	Administrative Consent Order
4/5/2017	Steve Kerns	Administrative Consent Order
5/10/2017	Trent Linkenmeyer	Administrative Consent Order
6/7/2017	Cory Hall and Brian Crees	Administrative Consent Order
11/16/2017	Kingsley Sow, LLC	Administrative Consent Order
3/27/2018	LCNJ Farms, LLC	Administrative Consent Order
4/9/2018	Donald Albrecht/David Albrecht	Administrative Consent Order