



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

OFFICE OF  
THE REGIONAL ADMINISTRATOR

The Honorable Tom Latham  
United States House of Representatives  
2217 Rayburn House Office Building  
Washington, D.C. 20515

Dear Representative Latham:

Thank you for your June 7, 2012, letter to Administrator Lisa Jackson about the Environmental Protection Agency Region 7's use of piloted aircraft in Iowa to reduce water-quality impacts caused by discharges of untreated manure, litter or process wastewater from concentrated animal feeding operations. I appreciate your concern and I welcome the opportunity to explain the EPA's use of aerial over-flights as one of the many tools that are used as part of the compliance assurance process to identify discharging sources that may impact water quality.

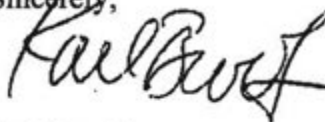
The EPA has not used "drones" or unmanned aircraft for enforcement or compliance investigations. The EPA is authorized to investigate and enforce U.S. environmental laws and uses a variety of sources of information in carrying out its important mission to protect human health and the environment including aerial over-flights, state records, historic information such as census maps and data, the internet and other publicly available sources of information, as well as non-public information such as citizen tips and complaints. The EPA's investigations of potential violations of environmental laws typically involve business operations, including farms and other agricultural enterprises, and not private residences. The Clean Water Act clearly maintains EPA's oversight authority to ensure compliance with the law and to take enforcement action, as necessary and appropriate.

EPA Region 7 uses aircraft as a cost-effective tool to help the Agency and our state partners, such as Iowa Department of Natural Resources, effectively identify the most significant areas of concern and focus on-site inspections of CAFOs where problems are most likely to exist. On the ground inspections at livestock and poultry operations can cost up to \$10,000 or more per inspection, which is why EPA uses over-flights, which generally cost between \$1000 and \$2500, to identify possible compliance issues at animal feedlots.

The enclosure includes numbered responses to the questions in your June 7, 2012, letter. Your interest in a practice used by a wide variety of government agencies provides a welcome opportunity to improve public understanding of the EPA's work with federal and state partners, as well as with the regulated community, to protect Iowa's vital waters.

Thank you again for your letter. If you have additional questions, or if you would like to discuss this issue further, please contact me at 913-551-7006 or your staff may contact Sarah Hatch, Congressional and State Liaison, at 913-551-7199.

Sincerely,

A handwritten signature in black ink that reads "Karl Brooks". The signature is written in a cursive style with a large, prominent "K" and "B".

Karl Brooks

Enclosure

cc: Chuck Gipp, Iowa Department of Natural Resources

***Q1. What type of aircraft is EPA using to conduct its aerial surveillance in Region 7, and is surveillance being conducted in other regions of the country?***

Since EPA Region 7 began flights in March 2010, the Agency has used both the Cessna 172RG and Cessna 210. Both are single engine piloted aircraft. Aerial over-flights occur throughout the country for a variety of purposes.

***Q2. Are the aircraft owned by EPA, and if so, how many and of what type does your agency own?***

The aircraft used for these flights are not owned by EPA. EPA Region 7 relies upon contractors to provide pilots and aircraft to assist with our flights. Specifically EPA Region 7 utilizes an interagency agreement between the EPA and the Department of Interior, National Business Center, Aviation Management Directorate. The Aviation Management Directorate assists with acquisition services and aviation safety. Section 104(b) of the CWA authorizes EPA to cooperate with other federal departments and agencies in investigations. Information on the DOI aviation program and the services it provides is available on the DOI website at: <http://amd.nbc.gov>, which includes information on the list of approved service providers. EPA has also occasionally used small aircraft owned by other government agencies, such as the Fish and Wildlife Service.

***Q3. How many flights has EPA conducted in Region 7, or elsewhere in the country, and over what span of time?***

In Iowa, the completed flights include three in 2010; five in 2011 and one in 2012. In Nebraska, the completed flights include six in 2011 and three in 2012. To date EPA Region 7 has performed sixteen individual flights since the Region began performing them in 2010. Since 2006, the EPA has conducted flights under the interagency agreement with DOI to investigate a variety of potential water pollution problems.

***Q4. How long has the EPA been conducting such surveillance?***

Flights to assess animal feeding operations in Region 7 did not begin until March 2010. Initial flights were conducted in Iowa. The flights were continued because of their success in gathering timely information that allowed Region 7 to focus on those operations likely to be polluting surface waters and threatening public health or the environment. Flights began in Nebraska in March 2011. The EPA water enforcement program across the country has been using aerial over-flights for nearly a decade.

***Q5. By what statutory authority does your agency conduct its aerial surveillance program?***

The EPA's governing statutes provide general and specific authority for the agency to conduct investigations, collect information, require reporting, perform monitoring, conduct inspections, and take other actions necessary to ensure our nation's environment is protected from unlawful pollution. The Clean Water Act clearly maintains EPA's oversight authority to ensure compliance with the law and to take enforcement action, as necessary and appropriate.

The Supreme Court considered the matter of EPA's authority to conduct aerial assessments in *Dow Chemical v. U.S.*, 476 US 227 (1986), stating:

Congress has vested in EPA certain investigatory and enforcement authority, without spelling out precisely how this authority was to be exercised in all the myriad circumstances that might arise in

monitoring matters related to clean air and water standards. When Congress invests an agency with enforcement and investigatory authority, it is not necessary to identify explicitly each and every technique that may be used in the course of executing the statutory mission. Regulatory and enforcement authority generally carries with it all modes of inquiry and investigation traditionally employed or useful to execute the authority granted.

*Dow Chemical* at 233.

The Court reasoned that the specific statutory provisions for information collection and inspection authority appear to expand, not restrict, EPA's general powers to investigate. The Court concluded that EPA, as a regulatory and enforcement agency, needs no explicit statutory provision to employ methods of observation commonly available to the public at large and held that the use of aerial observation and photography is within EPA's statutory authority. *See Dow Chemical* at 234.

***Q6. Out of which specific line item does the EPA fund its aircraft for the use of aerial surveillance, and in its totality, how is the program funded?***

The use of aerial over-flights may be funded by individual EPA regions or through EPA's Water Enforcement Division at Headquarters. Headquarters funding for these activities comes from the Agency's Environmental Program Management (EPM) appropriation. Within the EPM appropriation, over-flights have been funded from (1) the Civil Enforcement Program Project and (2) for over-flights in the Chesapeake Bay watershed, from the Geographic Programs--Chesapeake Bay Program Project.

***Q7. In total, how much has your agency spent on its aerial surveillance? Over what span of time?***

EPA's Water Enforcement Division entered into an Interagency Agreement with the Department of Interior (DOI), National Business Center, Aviation Management Directorate in 2006 to conduct over-flights to examine various potential water pollution problems throughout the country. Since 2006, EPA has spent approximately \$90,000 under this interagency agreement.

***Q8. If contracting services are used to conduct aerial surveillance, by what criteria does EPA choose such service, and what companies or entities are used to carry out the surveillance?***

Section 104(b) of the Clean Water Act authorizes EPA to cooperate with other federal departments and part of the DOI Aviation Management Directorate's mission is to provide aviation services to federal agencies. Information on the DOI aviation program and the services it provides is available on the DOI website at: <http://amd.nbc.gov>, which includes information on the list of approved service providers. EPA identifies service providers who have the aircraft and other equipment needed for a particular over-flight. EPA then identifies the most cost-effective option from the identified service providers. In addition to the DOI agreement, some EPA regions may have arranged for over-flights using various agreements or funding mechanisms.

***Q9. How are farms or entities selected for surveillance?***

In Region 7, the primary purpose of these flights is to provide an efficient and cost effective manner for screening large numbers of animal feeding operations to determine if a more comprehensive evaluation is required to assess CWA compliance. The flights provide real time information not available from other sources that routinely generate satellite and aerial imagery of animal feeding operations in

Nebraska and Iowa watersheds, such as U.S. Department of Agriculture's (USDA) National Agriculture Imagery Program (NAIP), U.S. Geological Survey (USGS), Google and Microsoft. This information allows Region 7 to avoid inspections at facilities that do not appear to be polluting surface water, which are, by far, the majority. The timely information allows Region 7 to focus its limited resources on those operations most likely to be polluting surface waters and threatening public health or the environment.

EPA Region 7's process for identifying where it will fly involves looking at areas that contain high concentrations of large and medium sized animal feeding operations and/or watersheds where the state has identified impaired rivers and streams. When looking at impaired waters, EPA Region 7 focuses on waters where the causes of the impairment could be attributed to animal feeding operations (i.e., ammonia, bacteria, fish kills, low dissolved oxygen, etc.). Once an area is identified, we then plan a flight path that will allow for us to cover as many large and medium sized facilities as possible.

**Q10. Is there follow-up with the farms or entities after an aerial surveillance flight?**

Not a single Region 7 enforcement action has been pursued which relied solely on photographs obtained during these flights. The flights have been used as a screening tool to focus on-the-ground inspections on those operations likely to be polluting surface waters and threatening public health or the environment.

**Q11. Has information gathered through aerial surveillance contributed to any fines or legal action taken against agricultural producers?**

As stated above, EPA Region 7 has not taken any enforcement actions based solely on evidence contained in an aerial photograph. EPA Region 7 has however taken enforcement actions at animal feeding operations where aerial photographs were obtained and follow-up inspections were conducted. A summary of these actions is in the table below:

EPA Enforcement Actions at CAFOs Where Aerial Images Were Collected*			
	Administrative Compliance Orders	Administrative Penalty Orders	Letters of Warning
Iowa	25	8	6
Nebraska	4	2	8
* As of 6/1/2012			

**Q12. Are images taken during surveillance? If so, for what purposes are these images used and for how long are they kept by EPA?**

EPA Region 7 only takes photographs during the flights. EPA Region 7 has not used video equipment.

Photos are used for enforcement purposes as described in answers to questions 10 and 11.

EPA Region 7 maintains these images pursuant to the EPA Record Schedules 207 and 211. Schedule 207 applies to enforcement action files and includes all administrative, judicial and landmark cases. Retention timeframes for schedule 207 are summarized below:

Enforcement Type	Retention Time
Administrative Cases	10 years after settlement or closure of case.
Judicial Cases	20 years after settlement or closure of case.
Landmark Cases	Permanent record. Transferred to national archives after 20 years.

Schedule 211 applies to compliance and enforcement files not associated with the enforcement action types discussed above and are to be kept for five years after file closure by EPA.

Aerial photographs associated with facilities that EPA Region 7 has determined do not warrant any of the enforcement action types discussed above are maintained pursuant to EPA Record Schedule 211 and are to be kept for five years after file closure by EPA.

In Region 7, the images are maintained by the Water Enforcement Branch of the Water, Wetlands and Pesticides Division in conjunction with the Region 7 Records Center.

***Q13. Are these images shared with any other governmental or private entities?***

Region 7 believes that all animal feeding operations assessed as part of an EPA Region 7 flight could be subject to inspection by NDEQ or IDNR. As the agencies authorized to implement the National Pollutant Discharge Elimination System (NPDES) program, NDEQ and IDNR have comparable inspection authority to inspect effluent sources, such as animal feeding operations. The EPA maintains concurrent inspection and enforcement authority with authorized state NPDES programs and has been performing on-the-ground inspections in all Region 7 states for decades. Information gathered during the flights is shared with the state environmental agencies.

In some instances EPA Region 7 has provided copies of images to state environmental agencies in Iowa and Nebraska. EPA Region 7 also includes photographs in subsequent inspection reports if it is determined an on-the-ground inspection is warranted and conducted. Images that support an Agency enforcement action might be shared with the Department of Justice, judges, or others involved in the adjudication process.

***Q14. What type of data is collected during surveillance and what is done with the data after it is collected? For how long is the data kept by EPA?***

As described above for Region 7 in answers to questions 10 through 13.

***Q15. How is a landowner's private information protected by the collection or transmission of such data?***

As Agency records, these images are subject to the Freedom of Information Act. Whether the images would be released under FOIA or determined to be exempt from disclosure will be evaluated for each FOIA request. Applicability of the FOIA exemptions will be determined on a case by case basis.

The elevation (above 1,200 feet) at which EPA Region 7 flights occur make it impossible to eliminate all areas outside the animal feeding operation from being photographed. Moreover, the angle sometimes necessary to assess an operation (the plane rarely flies directly over the facility because the operation is viewed through a cockpit window) is such that the images are taken from an angle that may capture some land and buildings beyond the facility. Images taken from the ground would have a similar tendency to capture land and buildings on the horizon. However, like images taken on the ground and since the EPA is seeking the greatest clarity and detail possible in every image, every effort is made to ensure that the sole subject of every photo is the production or land application areas of an animal feeding operation. Also like photos taken from the ground, the images may unintentionally capture areas that are not subject to CWA regulation.

EPA Region 7 has collected images that include residential buildings. In some instances residential buildings are located within, or immediately adjacent to, animal feeding operations. Consequently, there are instances where residential buildings are captured in the images. Similar to the discussion immediately above, there are also instances where the photographer may take a photo at a fairly long distance or at angles that may include entire sections of land that may have multiple structures and/or facilities not associated with the subject of the photograph.

***Q16. Are more aerial surveillance flights planned in Region 7, or any other part of the country?***

For the remainder of federal fiscal year (FFY) 2012, Region 7 intends to perform additional flights in Nebraska and in Iowa. EPA Region 7 plans on continuing to use the flights beyond FFY 2012. However, those flights have not yet been scheduled. Flights are also being considered for other parts of the country.

***Q17. Are other federal agencies aware of these surveillance flights?***

EPA Region 7 has shared information on its flights with USDA. The Department of Interior is also aware of these flights because the contracted pilots and planes are part of DOI's program to provide flight services to the DOI and other federal agencies. The Department of Justice would be aware of overflights that provide evidence in a judicial action.

***Q18. Are state or local authorities notified prior to surveillance flights?***

In Region 7, it is standard practice to notify the state environmental agencies prior to EPA performing a flight. During the initial flights in 2010, EPA Region 7 also notified appropriate county sheriff departments. However, law enforcement notification was discontinued in 2011 because the altitude at which they are conducted (greater than 1,200 feet) and the limited time spent over any single operation did not result in any citizen concerns raised to EPA Region 7. Also, a single day's flight may cover hundreds of square miles and many separate jurisdictional areas. Due to the lack of complaints in 2010, Region 7 concluded the time intensive process of notifying every local authority along the flight path was not necessary.

***Q19. Are farmers notified at any time that their farms are under surveillance by aerial flights?***

EPA Region 7 has informed the Nebraska and Iowa regulated community (e.g., livestock and poultry producers) that Supreme Court precedent supports EPA's authority to perform these flights to investigate CWA issues. To further share information with cattle producers in northeast Nebraska about Region 7's flights, the agency also worked with the University of Nebraska-Lincoln Ag Extension to convene a well attended information meeting in West Point, Nebraska on March 13, 2012. Staff from Senator Johanns and Representatives Fortenberry and Smith attended Region 7's West Point presentations and question and answer session. Several Nebraska press and cattle trade representatives attended and reported extensively.