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## DRINKING WATER

### EPA Needs to Collect Information and Consistently Conduct Activities to Protect Underground Sources of Drinking Water

#### Why GAO Did This Study

Since the early 2000s, increased oil and gas production has resulted in an increase in wastewater that must be managed properly. The majority of wastewater from oil and gas production is injected into underground wells known as class II wells. These wells are regulated to protect drinking water sources under EPA's UIC class II well program and approved state class II programs. EPA oversees state programs, and EPA regions manage programs in states without approval.

GAO was asked to review EPA's oversight of programs' inspection and enforcement information and activities. This report examines the extent to which EPA has collected inspection and enforcement information and conducted oversight activities needed to assess that class II programs protect underground sources of drinking water. GAO reviewed federal and state laws and regulations and EPA guidance and analyzed a nongeneralizable sample of significant violations. GAO interviewed EPA and state officials from programs in a nongeneralizable sample of eight states selected based on shale oil and gas regions, among other factors.

#### What GAO Recommends

GAO recommends that, among other things, EPA require programs to report well-specific inspections data, clarify guidance on enforcement data reporting, and analyze the resources needed to oversee programs. EPA generally agreed with GAO's findings, but does not plan to require well-specific data and analyze needed resources. GAO continues to believe that EPA should take both actions to better assess if programs protect underground sources of drinking water.

View [GAO-16-281](#). For more information, contact Alfredo Gómez at (202) 512-3841 or [gomezj@gao.gov](mailto:gomezj@gao.gov).

#### What GAO Found

The Environmental Protection Agency (EPA) has not collected specific inspection and complete or consistent enforcement information, or consistently conducted oversight activities, to assess whether state and EPA-managed Underground Injection Control (UIC) class II programs are protecting underground sources of drinking water. EPA guidance calls for states and EPA regions to report certain information and for EPA to assess whether programs are effectively protecting underground sources of drinking water, but the agency does not. Specifically:

- EPA annually collects summary data from state and EPA-managed programs on the types of inspections they conduct. However, these data are not specific enough to determine the number of different types of inspections that states and EPA regions are to conduct to meet their annual goals. Such goals are specified at the well level (e.g., to inspect 100 percent of wells associated with emergency responses). Under federal internal control standards, managers are to compare actual performance to planned or expected results and analyze significant differences. Without well-specific data on inspections, EPA cannot assess whether state and EPA-managed programs are meeting annual inspection goals.
- EPA collects information on unresolved significant violations of state and EPA-managed programs to determine if the agency needs to take action to enforce applicable program requirements. However, GAO's analysis of a nongeneralizable sample of 93 significant violations for fiscal years 2008 through 2013 found that state and EPA-managed programs did not report data on such violations completely or consistently. For example, of 29 such violations that had not been enforced after 90 days as required, programs reported 7 to EPA. According to EPA and state officials, the cause was inconsistent interpretations of EPA's reporting guidance. EPA officials said they are aware that the data reported on such violations are not complete or consistent, but the agency has not clarified in guidance what data programs should report. Until it does so, EPA does not have reasonable assurance that it has the data needed to assess if it must take enforcement action.

EPA has not consistently conducted oversight activities necessary to assess whether state and EPA-managed programs are protecting underground sources of drinking water. For example, GAO found in June 2014 that EPA does not consistently conduct oversight activities, such as annual on-site program evaluations. According to EPA guidance, such evaluations should include a review of permitting and inspection files or activities to assess whether the state is protecting underground water. In California, for example, EPA did not regularly review permitting, and in July 2014, after a state review of permitting, EPA determined that the program was out of compliance with state and EPA requirements. EPA officials said that they have few resources to oversee UIC class II programs, but EPA has not conducted a workforce analysis consistent with GAO's work on strategic human capital management to identify the resources needed for such oversight. Without conducting such an analysis, EPA will not be able to identify the human capital or other resources needed to carry out oversight of the UIC class II programs to help ensure that they protect underground sources of drinking water.