



April 2017

# OIL AND GAS DEVELOPMENT

## Improved Collection and Use of Data Could Enhance BLM's Ability to Assess and Mitigate Environmental Impacts

Accessible Version

# GAO Highlights

Highlights of [GAO-17-307](#), a report to the Ranking Member, Committee on Natural Resources, House of Representatives

## Why GAO Did This Study

BLM is responsible for managing oil and gas development on federal lands while mitigating related environmental impacts. BLM seeks to do so, in part, by applying requirements to the leases and drilling permits it issues to operators. These requirements may include environmental mitigation practices outlined in BLM's best management practices policy. In some cases, operators may request exceptions to lease and permit requirements. GAO was asked to examine BLM's efforts to mitigate environmental impacts from oil and gas development.

This report examines the extent to which BLM (1) approved requests for exceptions to lease and permit requirements and how these decisions were made and documented, (2) involved the public in the development of lease and permit requirements and in the approval of exception requests, and (3) implemented and assessed the effectiveness of its best management practices policy. GAO examined laws, regulations, and BLM policies and documents; surveyed and visited BLM field offices; and conducted interviews with BLM officials and other stakeholders.

## What GAO Recommends

GAO is making six recommendations, including that BLM develop a policy for tracking and documenting exceptions. Interior generally concurred with GAO's recommendations.

View [GAO-17-307](#). For more information, contact Frank Rusco at (202) 512-3841 or [ruscof@gao.gov](mailto:ruscof@gao.gov).

April 2017

## OIL AND GAS DEVELOPMENT

### Improved Collection and Use of Data Could Enhance BLM's Ability to Assess and Mitigate Environmental Impacts

#### What GAO Found

The extent to which the Bureau of Land Management (BLM) approved requests for exceptions to oil and gas lease and permit requirements is unknown, primarily because BLM's process for considering these requests and documenting decisions varied across field offices. Oil and gas operators may request exceptions to a permit requirement, such as prohibition of drilling in an area during times of the year when certain wildlife are present. BLM may approve such a request—allowing the operator to continue to drill during a portion of the normally prohibited time—if, for instance, no wildlife are present. GAO's survey of 42 BLM offices found that fewer than half tracked data on exception requests. Additionally, GAO found that the process for considering these requests and documenting decisions varied. BLM does not have a policy requiring field offices to consistently track exception data or documented procedures specifying how requests should be considered and documented. Because BLM does not consistently track exception request data or have a consistent process for considering requests and clearly documenting decisions, BLM may be unable to provide reasonable assurance that it is meeting its environmental responsibilities.

BLM has consistently involved the public in developing lease requirements and, to a lesser extent, permit requirements. For example, GAO reviewed 35 lease sales that occurred from calendar years 2012 through 2015 at the six field offices visited and found that in all cases the field offices provided the public an opportunity to review and comment on lease parcels to be offered for sale. BLM has not generally involved the public in the approval of exception requests. According to BLM's policy, public notification of an exception is not required unless granting it would result in a substantial modification or waiver of a lease requirement, which, according to BLM officials, rarely occurs.

BLM has generally implemented its best management practices policy by including key practices as permit requirements, but it has not consistently documented inspections or used inspection data to assess the policy's effectiveness. The policy identifies four key practices that should be considered for inclusion as permit requirements in nearly all circumstances: (1) painting facilities to blend with the environment, (2) constructing roads to certain BLM standards, (3) implementing interim reclamation, and (4) completing final reclamation. During file reviews at six BLM field offices, GAO found that at least one of the four key practices was included as a permit requirement in almost all of the 109 files reviewed. However, in reviewing documentation of inspections, GAO found that documents were not consistent and not always sufficient to determine whether BLM had verified key practices. GAO further found that BLM generally does not use data collected from inspections to assess the effectiveness of permit requirements in mitigating environmental impacts. BLM does not have guidance specifying how inspections should be documented and how inspection data should be used. Without sufficiently detailed documentation of inspections and effective use of data from inspections, BLM is unable to fully assess the effectiveness of its best management practices policy to mitigate environmental impacts.

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**Abbreviations**

AFMSS	Automated Fluid Minerals Support System
BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
FLPMA	Federal Land Policy and Management Act of 1976
Interior	Department of the Interior
NEPA	National Environmental Policy Act of 1969
PMDS	Performance Management Data System

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April 25, 2017

The Honorable Raul Grijalva  
Ranking Member  
Committee on Natural Resources  
House of Representatives

Dear Mr. Grijalva:

Development of the nation’s domestic sources of oil and gas on federal, state, and private land continues to make a critical contribution to our nation’s energy supply. At the same time, the effect of this development on the environment—including wildlife—and surrounding communities has generated concern among some federal and state government officials and conservationists. The Bureau of Land Management (BLM), within the Department of the Interior (Interior), is responsible for managing oil and gas resources that lie under federal and private land for which the federal government retains mineral rights. The Federal Land Policy and Management Act of 1976 (FLPMA), as amended, directs Interior to manage federal land for multiple uses, such as recreation and mineral extraction, while also taking any action required to prevent “unnecessary or undue degradation” of this land.<sup>1</sup>

BLM seeks to mitigate the environmental impacts of oil and gas development in large part through lease and permit requirements—specifically, lease stipulations and drilling permit conditions of approval.<sup>2</sup> These requirements, for example, may prohibit drilling during certain months of the year to minimize wildlife disturbance. In 2004, BLM issued a policy on best management practices that was intended to reduce, prevent, or avoid adverse environmental or social impacts from oil and gas development.<sup>3</sup> Best management practices can include, for example, actions intended to protect wildlife habitat or reduce visual changes to the landscape. These practices can be required by BLM as lease and permit

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<sup>1</sup>43 U.S.C. § 1732.

<sup>2</sup>In this report, we use the term “lease requirements” to refer to lease stipulations. We use the term “permit requirements” to refer to permit conditions of approval.

<sup>3</sup>Bureau of Land Management, *Integration of Best Management Practices into Application for Permit to Drill Approvals and Associated Rights of Way*, Instruction Memorandum 2004-194 (Washington, D.C.: February 2004).

requirements or implemented voluntarily by operators. In some cases, BLM may grant operators' requests for exceptions to lease and permit requirements if certain conditions are met. BLM conducts environmental inspections to verify operators' compliance with lease and permit requirements and monitoring inspections to assess the effectiveness of the requirements.

You asked us to review BLM's efforts to mitigate the environmental impacts of oil and gas development. This report examines (1) the extent to which BLM approved requests for exceptions to lease and permit requirements intended to mitigate environmental impacts, and how these decisions were made and documented; (2) the extent to which BLM involved the public in the development of lease and permit requirements and in the approval of exception requests; and (3) the extent to which BLM implemented its best management practices policy and assessed its effectiveness in mitigating environmental impacts. Because of availability of data and the issuance of policies, the time frame varied for each of the objectives.

To conduct this work, we visited a nongeneralizable sample of 6 BLM field offices and conducted semistructured interviews with BLM officials. We selected the 6 field offices based primarily on (1) geographic variability and (2) oil and gas leasing and permitting activity. We also surveyed BLM officials and interviewed representatives of nongovernmental organizations and a professional organization representing the perspectives of oil and gas operators. To determine the extent to which BLM approved requests for exceptions to lease and permit requirements, and how these decisions were made and documented for fiscal years 2005 through 2015, we surveyed officials at 52 BLM offices in the field (while most of these were field offices, some were district offices). Officials from 42 offices responded, which constituted an 81-percent response rate. At the 6 field offices we visited, we selected a nongeneralizable sample of 54 exception requests made in fiscal years 2009 through 2015 and reviewed the supporting documentation.

To determine the extent to which BLM involved the public in developing lease and permit requirements and in the approval of exception requests, we analyzed documents related to lease sales held during calendar years 2012 through 2015 by the 6 BLM field offices we visited, conducted follow-up interviews with BLM field office officials based on responses to our semistructured interview, reviewed relevant BLM policies and guidance, and interviewed BLM's program contact for its ePlanning

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initiative. We also interviewed officials at the 6 BLM field offices we visited about public involvement in the exception request process.

To examine the extent to which BLM implemented its best management practices policy and assessed its effectiveness to mitigate environmental impacts, we conducted a file review at the 6 field offices we visited to identify the extent to which best management practices were included as permit requirements and verified as implemented during environmental inspections. Specifically, we reviewed 109 randomly selected files associated with wells that had approved permits from fiscal year 2006 through 2015, which included 152 inspection documents. We also reviewed data from BLM's Performance Management Data System (PMDS) related to the number of monitoring inspections the 6 field offices reported that they conducted from fiscal years 2010 through 2015, and we corroborated these data with the relevant BLM field offices.<sup>4</sup> To assess the reliability of data used for our review, we interviewed BLM officials regarding data systems included in our review, confirmed with BLM state office officials the number of lease sales included within our scope, and corroborated PMDS monitoring inspection records with BLM field office officials. On the basis of these steps, we determined the data were sufficiently reliable for our purposes. A more detailed discussion of our objectives, scope, and methodology is presented in appendix I.

We conducted this performance audit from June 2015 to April 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence we obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

This section provides information on BLM's mission and organizational structure for management of oil and gas development, BLM's process for overseeing the development of federal oil and gas resources and mitigating environmental impacts, and our prior work on BLM's management of federal oil and gas resources.

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<sup>4</sup>We selected this time period because BLM's monitoring policy went into effect in fiscal year 2010.

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## BLM's Mission and Organizational Structure

BLM's mission is to maintain the health, diversity, and productivity of public land for present and future generations. As part of this mission, BLM manages more than 245 million surface acres of federal land for multiple uses, including recreation; range; timber; minerals; watershed; wildlife and fish; natural scenic, scientific, and historical values; and the sustained yield of renewable resources. BLM oversees onshore oil and gas development on and under BLM-managed federal land, under other federal agencies' land, and under private land for which the federal government has retained mineral rights—a total of about 700 million subsurface acres.

BLM manages these responsibilities through its headquarters office in Washington, D.C.; state offices; district offices; and field offices. BLM's headquarters office develops guidance and regulations, and the state, district, and field offices manage and implement the bureau's programs. BLM's oversight of oil and gas development is led by field offices located primarily in the Mountain West, the center of much of BLM's onshore oil and gas development.

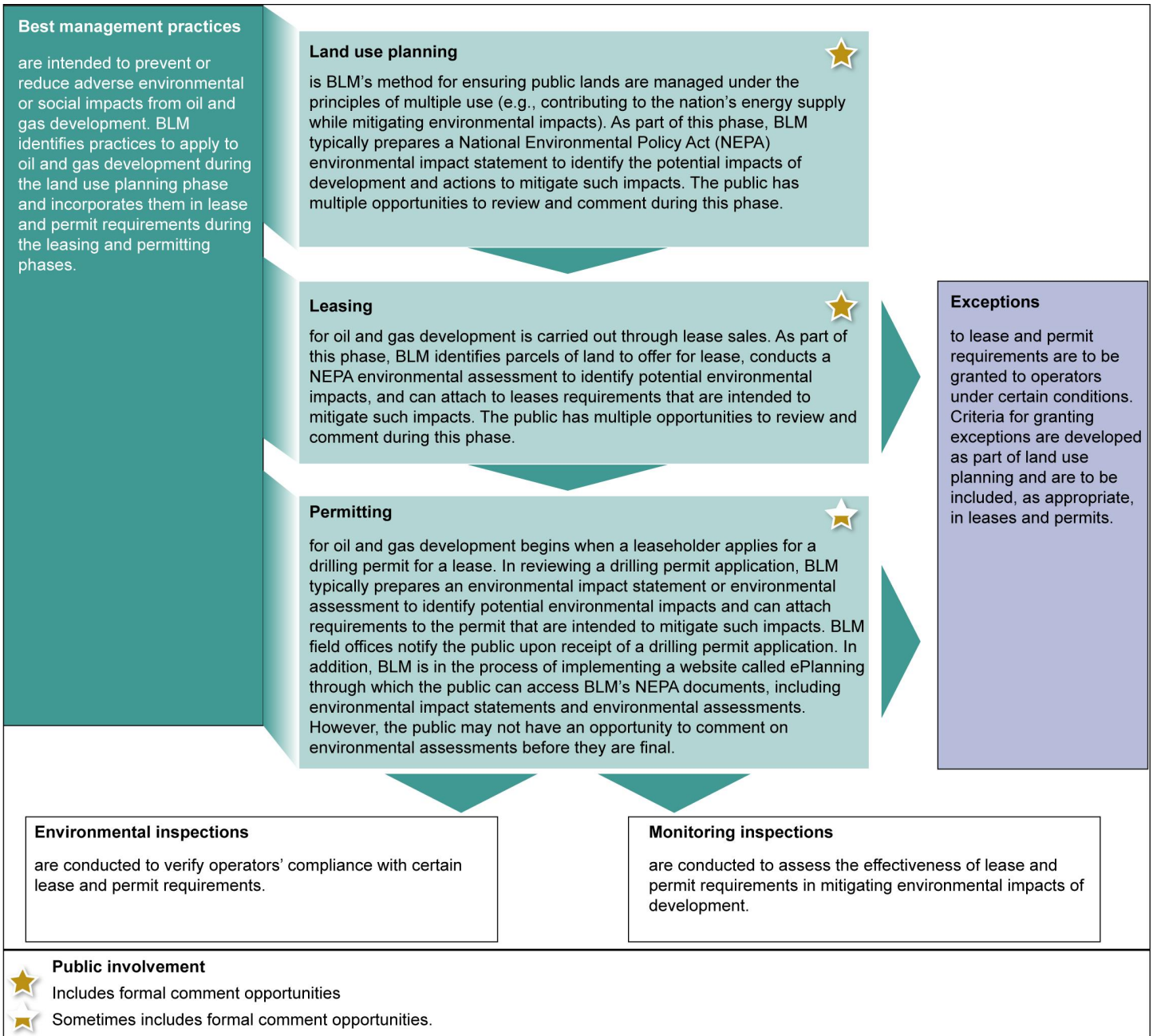
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## BLM's Process for Overseeing Federal Oil and Gas Resource Development and Mitigating Environmental Impacts

BLM's process for overseeing federal oil and gas resource development consists of three phases, each of which includes opportunities to mitigate impacts of development on the environment. These phases—land use planning, leasing, and permitting—incorporate mitigation through, for example, lease and permit requirements, including best management practices. BLM can grant exceptions to these requirements, and it conducts environmental and monitoring inspections intended, respectively, to verify operators have implemented the requirements and to assess the effectiveness of the requirements in mitigating environmental impacts of development. The process is illustrated in figure 1.



**Figure 1: Bureau of Land Management’s (BLM) Process for Overseeing Federal Oil and Gas Resource Development**



Source: GAO analysis of BLM documents. | GAO-17-307

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## BLM's Land Use Planning, Leasing, and Permitting Phases

FLPMA requires the Secretary of the Interior to develop land use plans and, when appropriate, revise them.<sup>5</sup> The plans identify, among other things, federal land and mineral resources that will be available for oil and gas development and other activities. As part of developing or revising land use plans, BLM is required under the National Environmental Policy Act of 1969 (NEPA), as amended, to evaluate likely environmental impacts of proposed actions in the plan, such as developing oil and gas resources in certain areas.<sup>6</sup> Generally, BLM prepares an environmental impact statement—a detailed analysis of the likely environmental effects of a proposed action—in preparing a land use plan. However, depending on the anticipated level of public interest and potential for significant impacts, BLM may instead develop an environmental assessment—a more concise analysis developed for an amendment to the plan.<sup>7</sup> BLM officials said the agency uses the land use plans and environmental impact statements to (1) help develop reasonably foreseeable development scenarios to estimate outcomes, such as the number of wells to be involved and the surface disturbance that may occur under the land use plan; (2) identify land open and closed to leasing; (3) identify resource protection measures, such as lease requirements and environmental best management practices; and (4) establish monitoring protocols. BLM develops land use plans over several years. During a plan's development, BLM coordinates with state and local governments and collaborates with stakeholders, including oil and gas operators, nongovernmental organizations, and state wildlife agencies, and provides multiple opportunities for comment by the public.<sup>8</sup> Comments can address such topics as criteria for granting exceptions to lease requirements and the appropriateness of best management practices.

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<sup>5</sup>Revisions to land use plans are necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that an entire plan or a major portion of a plan no longer serves as a useful guide for resource management. Bureau of Land Management, *Land Use Planning Handbook*, H-1601-1, p. 46 (Washington, D.C.: 2005). BLM generally evaluates plans for potential revision at least every 5 years.

<sup>6</sup>Pub. L. No. 91-190 (1970), codified as amended at 42 U.S.C. §§ 4321-4347.

<sup>7</sup>Bureau of Land Management, *National Environmental Policy Act Handbook*, H-1790-1, section 3.2.2; 43 C.F.R. § 1610.5-5 (Washington, D.C.: 2008).

<sup>8</sup>See, 43 C.F.R. § 1610.2.

Once a land use plan is completed, BLM holds a lease sale. Operators may purchase a lease for land identified by the land use plan as available for oil and gas development.<sup>9</sup> As part of this phase, BLM generally conducts an environmental assessment to determine whether the proposed development is likely to significantly impact the environment.<sup>10</sup> In the assessment, BLM can propose applying lease requirements that were identified in the land use plan, where many of the requirements are intended to protect the environment. For example, a lease requirement may state that an operator cannot drill within a specified distance of a raptor's nest during its breeding season. BLM allows the public to review and comment on draft environmental assessments for lease sales, including proposed lease requirements. In addition, the public may protest a lease before it is offered for sale. When a lease is offered for sale, the lease requirements identified through the environmental assessment are included as requirements for holding the lease.

Operators that have obtained a lease must submit to BLM a drilling permit application and obtain BLM's approval before drilling any new oil or gas wells. A complete drilling permit application must include, among other things, a "Surface Use Plan of Operations" that includes the operator's plan for reclaiming disturbed land during production (known as interim reclamation) and upon final abandonment of the site (known as final reclamation). The reclamation plan outlines the specific steps the operator proposes to take to reclaim the well site, which may include recontouring the land to better match the surrounding landscape, redistributing the topsoil, and replanting the site with native plant species.

As part of the permitting phase, BLM generally conducts a NEPA analysis—that is, an environmental impact statement or an environmental assessment—to identify any site-specific environmental impacts from the proposed oil and gas activity. On the basis of this analysis, BLM may identify certain requirements to attach to the permit. According to BLM officials, these permit requirements are generally attached to ensure environmental protection, safety, or conservation of mineral resources and may be based on environmental best management practices,

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<sup>9</sup>Leasing of federal oil and gas resources is generally authorized by the Mineral Leasing Act of 1920, as amended. This authority is implemented by BLM through regulations at 43 C.F.R. Subpart 3100.

<sup>10</sup>Bureau of Land Management, *Oil and Gas Leasing Reform—Land Use Planning and Lease Parcel Reviews*, Instruction Memorandum 2010-117 (Washington, D.C.: May 2010).

described below. While BLM notifies the public that an operator has submitted a drilling permit application, BLM may or may not require public comment on the associated NEPA analysis. According to BLM's *NEPA Handbook*, the type of public involvement required when an environmental assessment is prepared is at the discretion of the decision maker and can include public notification before or during preparation of the environmental assessment, among other types of involvement.<sup>11</sup> After BLM approves a drilling permit, the operator generally has a 2-year window to drill the well and begin production, subject to any lease or permit requirements. However, BLM may extend the drilling permit for up to 2 additional years if an operator requests an extension in writing.

### BLM's Best Management Practices Policy

In 2004, BLM issued its best management practices policy, which defines environmental best management practices as innovative mitigation measures applied on a site-specific basis to prevent or reduce adverse environmental or social impacts.<sup>12</sup> BLM can include best management practices as lease and permit requirements or, in some cases, operators may apply them voluntarily.

BLM's policy identifies four key practices that should be considered as lease or permit requirements in nearly all circumstances: (1) painting of facilities to blend with the surrounding environment, (2) design and construction of roads in accordance with BLM guidance, (3) interim reclamation, and (4) final reclamation. There are numerous additional best management practices that, according to the policy, BLM field offices should consider on a site-specific basis. Such practices may include installing raptor perch avoidance structures, placing wellheads underground, drilling multiple wells from a single pad, and screening facilities from view.

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<sup>11</sup>*National Environmental Policy Act Handbook*.

<sup>12</sup>BLM issued IM 2004-194 in 2004 and later updated it with Bureau of Land Management, *Integration of Best Management Practices into Application for Permit to Drill Approvals and Associated Rights of Way*, Instruction Memorandum 2007-021 (Washington, D.C.: November 2006).

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### Exceptions, Waivers, and Modifications to Lease and Permit Requirements

To help BLM manage resources based on current conditions, BLM's regulations and policies allow it to grant operators' requests for exceptions, waivers, or modifications to lease and permit requirements. Exceptions are one-time exemptions for a particular site within a lease; waivers are permanent exemptions from a lease requirement; and modifications are changes to the provisions of a lease requirement, either temporary or for the term of the lease.<sup>13</sup> BLM issued a policy in November 2007 providing guidance on (1) including exception, waiver, and modification criteria in BLM land use plans and (2) reviewing and approving exceptions, waivers, and modifications to lease and permit requirements.<sup>14</sup> Criteria for considering exception requests are generally developed through the NEPA process as BLM develops its land use plans.

### BLM's Inspection and Enforcement Program

To help ensure operators' compliance with all lease and permit requirements, as well as with certain laws and regulations, BLM has an inspection and enforcement program, which comprises a variety of inspection types. Among these are environmental inspections, intended to verify operators' compliance with certain lease and permit requirements, and monitoring inspections, intended to assess the effectiveness of lease and permit requirements in mitigating environmental impacts of development.

Environmental inspections are BLM's primary mechanism to verify operators' compliance with lease and permit requirements, including best management practices, related to the surface environment and to initiate enforcement actions, if needed. For example, BLM may perform environmental inspections to help ensure that operators are adhering to lease and permit requirements designed to mitigate the impact of oil and

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<sup>13</sup>According to BLM staff, exceptions are much more commonly requested than waivers or modifications. Because requests for waivers and modifications rarely occur, this review focuses on BLM's process for considering and granting exceptions to lease and permit requirements.

<sup>14</sup>Bureau of Land Management, *Exceptions, Waivers, and Modifications of Fluid Minerals Stipulations and Conditions of Approval, and Associated Rights of Way Terms and Conditions*, Instruction Memorandum 2008-032 (Washington, D.C.: 2007).

gas development on sensitive species and their habitat. Environmental inspections typically are performed by BLM staff, such as natural resource specialists, environmental protection specialists, or other resource program specialists. These staff document the inspections using hard copy forms and BLM's electronic system for oil and gas management, the Automated Fluid Minerals Support System (AFMSS).

In addition, BLM conducts monitoring inspections to collect quantitative or qualitative data for the purpose of assessing the effectiveness of lease and permit requirements in mitigating environmental impacts of development. BLM is required by Council on Environmental Quality (CEQ) regulations to establish a monitoring and enforcement program, where applicable, for any mitigation. To fulfill this requirement for oil and gas development, BLM issued a policy in 2009 to ensure adequate monitoring of oil and gas development and clarify how staff are to conduct and track monitoring inspections.<sup>15</sup> Specifically, the policy requires that BLM field offices that have oil and gas programs conduct monitoring inspections to assess the effectiveness of lease and permit requirements in mitigating environmental impacts of development. BLM field offices are to independently track monitoring inspections and report via BLM's PMDS the number of inspections completed.

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## Our Prior Work Related to BLM's Management of Federal Oil and Gas Resources

During the past 10 years, we have reported on various aspects of BLM's management of federal oil and gas resources. In March 2007, as part of our work on major management challenges at the Department of the Interior, we reported that the numbers of oil and gas permit approvals had increased in recent years and that the effect of resulting development on surrounding communities and the environment would depend on BLM's use and enforcement of lease and permit requirements.<sup>16</sup> In March 2010, we found that Interior's long-standing efforts to implement a mobile computing solution to allow BLM employees to document inspection results while in the field were behind schedule, and we recommended

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<sup>15</sup>Bureau of Land Management, *Use and Application of the Fluid Minerals Surface and Environmental Monitoring Program Element—MW*, Instruction Memorandum 2009-224 (Washington, D.C.: 2009).

<sup>16</sup>GAO, *Posthearing Questions: Major Management Challenges at the Department of the Interior*, [GAO-07-659R](#) (Washington, D.C.: Mar. 28, 2007).

that the Secretary of the Interior direct BLM to implement such technology.<sup>17</sup> In May 2014, Interior officials stated that BLM had issued policies related to allowing BLM staff, including staff conducting inspections in the field, to wirelessly connect to BLM's information technology system via laptops when in the field. In July 2010, we found that BLM's publicly available data related to lease protests (i.e., instances where the public challenged BLM's leasing decisions) were incomplete and inconsistent, and we recommended that Interior determine and implement an agency-wide approach for collecting protest information that was complete, consistent, and available to the public.<sup>18</sup> In 2016, BLM officials reported that the agency had issued guidance to standardize the collection and public display of data related to lease protests. In August 2013, we reviewed BLM's processing of drilling permit applications and other efforts to protect the environment.<sup>19</sup> Among other things, we found that BLM had increased the number of environmental inspections it conducted of federal oil and gas wells and facilities from 2007 through 2012, but that BLM's methods for prioritizing inspections may not identify wells that pose the greatest environmental risk and that BLM's documentation of enforcement actions was not consistent. We recommended that BLM improve its ability to prioritize environmental inspections and consistently document enforcement actions. Interior agreed with our recommendations but has not fully implemented them.

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## The Extent to Which BLM Approves Exception Requests Is Unknown, and BLM Field Office Processes for Considering These Requests and Documenting Decisions Vary

The extent to which BLM approves requests for exceptions to environmentally related lease and permit requirements is unknown because BLM does not have comprehensive or consistent data on these

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<sup>17</sup>GAO, *Oil and Gas Management: Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes*, [GAO-10-313](#) (Washington, D.C.: Mar. 15, 2010).

<sup>18</sup>GAO, *Onshore Oil and Gas: BLM's Management of Public Protests to Its Lease Sales Needs Improvement*, [GAO-10-670](#) (Washington, D.C.: July 30, 2010).

<sup>19</sup>GAO, *Oil and Gas Development: BLM Needs Better Data to Track Permit Processing Times and Prioritize Inspections*, [GAO-13-572](#) (Washington, D.C.: Aug. 23, 2013).

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requests. Additionally, BLM's processes for considering exception requests and documenting its decisions vary across its field offices.

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### The Extent to Which BLM Approves Requests for Exceptions to Lease and Permit Requirements Is Unknown

BLM does not have consistent data on requests for exceptions to lease and permit requirements. BLM officials in headquarters stated that they did not consistently track data on operator requests for exceptions to lease and permit requirements or BLM's decisions at a bureau-wide level.<sup>20</sup> These officials further stated that BLM does not have a policy requiring its field offices to consistently track these exception data. As a result, the extent to which BLM approves exception requests is generally unknown.

To identify available exception data, we surveyed BLM officials at offices in the field and found that fewer than half of the field offices tracked data on operator requests for exceptions to either lease or permit requirements for fiscal years 2005 through 2015. Officials representing 42 BLM offices responded to our survey. Regarding exceptions to lease requirements, after excluding 6 offices because officials stated that they had received few or no exception requests, we found that 10 of the remaining 36 offices responded that they tracked these data, 24 responded that they did not track these data, and 2 responded that they were unsure whether they tracked these data. Regarding exceptions to permit requirements, after excluding data from 4 offices because officials stated that they had received few or no exception requests, we found that 16 of the remaining 38 offices responded that they tracked these data, 21 responded that they did not track these data, and 1 responded that it was unsure whether it tracked these data.

Further, we found that of the 6 BLM field offices we visited, 5 tracked exception data. However, officials from 3 of the 5 offices stated that the data were not consistently tracked, raising concerns about the data's reliability. At one of these offices, officials told us that they tracked data only for requests to exceptions to requirements related to a single species. Officials stated that while they may have received exception

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<sup>20</sup>BLM's AFMSS database has the capability to track some of this information, but field offices are not required to do so.



requests for other environmentally related lease and permit requirements, they believed the number was low. An official from another office stated that while the office has a spreadsheet to track the data, the spreadsheet has been inconsistently updated. Officials from another office told us that the responsibility for tracking data had been left to employees who had inconsistently tracked the data and had since retired and that, for a period of time, they had not tracked exceptions. Officials at the single office that did not track exception data at the time of our visit subsequently told us that they planned to start tracking these data. When asked to estimate the number of exceptions approved per year at this office, officials offered widely varying estimates. One official estimated that the office might receive 10 requests per year, while other officials within the same office estimated they have had years with more than 100 requests.

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### BLM Field Office Processes for Considering Exception Requests and Documenting Decisions Vary

BLM field office processes for considering exception requests and documenting decisions on them varied from fiscal years 2009 through 2015, and the reasons for the decisions were not always clear from the documentation. In November 2007, BLM issued a policy on reviewing and approving exceptions.<sup>21</sup> BLM included as an attachment to the policy written instructions on how field offices were to review and approve exceptions. The written instructions state that an exception decision should be fully documented in the case file with an appropriate level of environmental review. The written instructions state that BLM field office staff's review and recommendations should be documented along with any necessary mitigation and provided to the authorized officer for approval or disapproval.

Overall, BLM officials told us that the general process is that an exception request is made in some written format, such as a sundry notice (a standardized form for submitting information to BLM), e-mail, or BLM form. Upon receiving the request, BLM field office staff are to assess the request, review decision criteria, and make a decision. The decision is then to be communicated back to the operator as per BLM's November 2007 guidance. Within this general process, our review of the 6 BLM field offices we visited found significant variation in how BLM officials consider exception requests and document decisions. We found that BLM field

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<sup>21</sup>BLM IM 2008-032.

office processes for considering exception requests and documenting decisions varied in the following ways.

- **Standardized request form.** We found that 2 of the 6 field offices required operators to use a standardized form when requesting an exception, while the remaining offices received requests via a letter or sundry notice. In reviewing files, we found that there was more complete information about the request in offices using a standardized form for exception requests. For example, one of the forms required information on the permit or lease requirement involved, a description of the proposed exception to the requirement, and the justification for the request. In other offices that did not have a standardized form, information on the operator requests varied. In some cases the operator provided a detailed explanation of the request, whereas in other instances little information was provided other than that an exception was requested.
- **Lease versus permit requirements.** BLM officials in all 6 field offices told us that they make minimal distinction between lease and permit requirements when reviewing exception requests. Knowing which requirement is at issue is necessary to determine the applicable exception criteria. When reviewing BLM files, we found that sometimes documentation in the file clearly indicated the exception request was related to a permit requirement, whereas other times it was unclear whether the request related to a permit or lease requirement.<sup>22</sup> Without clear documentation in the file indicating whether the request is for a permit or lease requirement, it may be difficult to identify what exception criteria, if any, apply to the request.
- **Written exception policy.** We found that 3 of the 6 BLM field offices had a written policy for processing exception requests. These policies, according to BLM officials, were developed to provide greater specificity about the exception process. According to BLM officials at 1 of the offices with a written policy, having a written policy helps them communicate expectations to operators for how exception requests will be considered.
- **Internal checklist.** We found that 2 of the 6 field offices employed an internal checklist for processing exceptions, though an official in 1 of the offices stated that staff used it inconsistently. In 1 of these offices, the checklist details a sequential review process where signatures

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<sup>22</sup>In these instances, we first looked for applicable permit requirements. If none were present in the file, we looked for applicable lease requirements.

and comments are made by the relevant decision makers. Specifically, the form requires input from BLM's project lead and wildlife biologist, state fish and game officials, and the BLM field office manager. In completing the checklist, officials are to identify the applicable criteria for considering the request and describe whether there is any biological benefit for the proposed action. The field office manager receives the checklist after relevant input has been made by BLM staff and then completes a signature box on the form for granting, denying, partially granting, or not concurring. Space is also provided for the field office manager to provide an explanation of the decision. In contrast, other offices did not have a standardized form for considering the request and approved or denied the request via sundry notice without an explanation. In these instances, BLM's actual process for considering the request was unclear.

- **Compensatory mitigation.** We found that 1 of the 6 field offices frequently requires compensatory mitigation when approving an exception. This means that if the field office grants an exception, it requires the operator to take some other action to mitigate the environmental impacts of the exception. According to BLM officials, the office has developed a standard practice of requiring operators to improve 25 acres of habitat for each approved month of an exception to a wildlife-related seasonal drilling limitation. According to these officials, this practice was developed over time. BLM officials also told us that allowing year-round drilling for certain projects could minimize disturbance to wildlife by allowing drilling to be completed sooner. For example, a project might have taken 3 years to complete if seasonal permit drilling requirements were in effect, whereas it might take 1 1/2 years to complete if BLM approves an exception to seasonal drilling permit requirements.
- **Resource management plan exception criteria.** We found that the primary resource management plan for all 6 BLM field offices we visited had generally identified criteria for granting exceptions, in accordance with BLM's November 2007 policy. However, the specificity of the criteria varied. One of the resource management plans we reviewed included very specific exception criteria for a number of lease and permit requirements. For example, the plan describes lease requirements related to a type of habitat used by birds for mating. It specifically states that surface disturbance is prohibited or restricted within a 1/4 mile perimeter of the habitat, if occupied. The plan then identifies the particular conditions under which BLM may approve an exception request. Specifically, the plan states that BLM may approve the exception if it is determined that the "action is of a scale, sited in a location, or otherwise designed so that

the action will not impair the function and suitability of sharp-tailed grouse breeding habitat.” In contrast, another resource management plan includes less specific criteria for granting exceptions. The plan states that exception requests from seasonal lease and permit requirements will be coordinated with the state wildlife agency and that requests are to be analyzed and documented individually for compliance with the resource management plan and NEPA. However, the plan further states that “there is no clear formula” for arriving at these biological recommendations. In addition, the plan does not include specific information on any particular lease or permit restriction; rather, the plan lays out a variety of factors to consider, such as weather.

In reviewing a nongeneralizable sample of 54 exception decisions made in fiscal years 2009 through 2015 at the 4 field offices that could provide us with data, we found that documentation of exception decisions varied.<sup>23</sup> We examined each file for a range of information, including (1) documentation on the operator’s request for the exception, (2) whether the exception request related to a lease or permit requirement, (3) whether the exception criteria were specified, (4) the basis for the field office’s decision, and (5) how the decision was communicated to the operator. We found that of the 54 exception decisions reviewed, 27 were well documented, 20 were partially documented, and 7 were not well documented.<sup>24</sup> While BLM has some written guidance on considering and documenting exception requests, it may not result in BLM staff documenting exception decisions fully or clearly because the November 2007 guidance does not specify the format for documenting the exception requests and decisions. We found that the checklist used for considering and documenting exception decisions employed in 1 of the field offices provided an effective means to consistently and clearly document the decision making process. In other offices that did not employ such a checklist, the reasons for the exception decisions were not always clear. *Standards for Internal Control in the Federal Government* states that agencies are to clearly document transactions and other significant

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<sup>23</sup>Of the 6 field offices that we visited, 2 were unable to provide us with exception data.

<sup>24</sup>Of the nongeneralizable 54 exception decisions from fiscal years 2009 through 2015 we examined at the 4 field offices that could provide us with data, 49 exception requests were approved and 5 were denied. BLM officials at 2 offices stated that while the data may indicate that BLM approves a majority of the exception requests, the data can be misleading because operators frequently reach out informally to discuss potential exception requests. In these instances, BLM may inform an operator that it is unlikely that BLM will approve the request, in which case the operator may not formally submit it.

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events and that documentation should be readily available for examination.<sup>25</sup> Without consistent and clear documentation of exception decisions, BLM may not be able to justify its decisions and provide reasonable assurance that its decisions were consistent with its responsibilities under NEPA.

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## BLM Has Involved the Public in the Development of Lease and Permit Requirements to Varying Extents but Not When Considering Exception Decisions

BLM consistently involved the public when developing lease requirements and to some extent when developing permit requirements. However, BLM generally did not involve the public when considering an operator's request for an exception to a lease or permit requirement.

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### BLM Consistently Involved the Public in Developing Lease Requirements

In 2010, BLM introduced bureau-wide reforms to the oil and gas leasing process, and since the implementation of these changes, it has consistently involved the public in the development of lease requirements, as part of the lease sale process. As part of the leasing reforms, most parcels that field offices determine should be available for lease are subject to a site-specific NEPA analysis, generally in the form of an environmental assessment, and lease requirements are identified as part of this process. Such lease requirements are often developed through BLM's land use planning phase and applied to specific leases during the leasing phase. Officials from environmentally related nongovernmental organizations, state wildlife agencies, and the oil and gas industry stated that they comment on the initial development of lease requirements during the planning phase. In addition, the public has formal opportunities to comment on land use plans, including lease requirements, as described in the background section of this report. During the leasing

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<sup>25</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999). GAO has revised and reissued *Standards for Internal Control in the Federal Government*, with the revision effective as of October 1, 2015. See GAO-14-704G (Washington, D.C.: September 2014).

phase, field offices are required to provide a 30-day public review and comment period for the environmental assessment before forwarding their lease recommendations to the BLM state office. In addition, state offices must provide a 30-day public protest period prior to the lease sale date.

We reviewed 35 lease sales that occurred from calendar years 2012 through 2015 at the 6 field offices we visited. In all cases the field offices provided the public with an opportunity to review and comment on the environmental assessment associated with parcels to be offered for sale, and some of the comments provided by the public pertained to proposed lease requirements. For example, in some cases the public commented that additional, or changes to, lease requirements would better protect environmental resources from the effects of proposed development. As part of the lease sale process, BLM reviews and responds to comments on draft environmental assessments. The agency may make changes to the environmental assessment if it determines changes are appropriate. BLM includes these comments and its response in the final version of each environmental assessment. We also found that, in all cases, BLM provided the public with an opportunity to protest the lease sale.

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### BLM Involved the Public to Some Extent in the Development of Permit Requirements

BLM involved the public to some extent when developing drilling permit requirements, but the level of involvement varied depending on the field office and characteristics of the permit. BLM's Onshore Order 1 requires BLM field offices to notify the public of all drilling permit applications received.<sup>26</sup> Officials at all of the 6 field offices we visited stated that their offices follow this requirement by posting information identifying the proposed development—often the cover page of the drilling permit application—in an area of their office that is available to the public, such as a reading room. Members of the public then have the opportunity to review this information and submit comments. However, the field offices generally do not post the information electronically on BLM's public website. According to representatives of environmentally related nongovernmental organizations, when BLM does not make this

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<sup>26</sup>Bureau of Land Management, *Onshore Oil and Gas Order No. 1: Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Approval of Operations*. (Washington, D.C.: March 2007).

information available on a website, it is difficult for the public to track potential drilling activities and comment.

Once a drilling permit application is received, BLM field offices complete an environmental assessment to assess the potential environmental impacts of the proposed development. As part of this process, the agency can develop permit requirements, which are intended to mitigate environmental impacts. In 2014, BLM began implementing a website called ePlanning through which BLM field offices are required to make environmental assessments associated with drilling permits (among other documents) available to the public. Prior to the use of ePlanning, the public could not access drilling permit environmental assessments on a centralized site, although officials from 2 of the field offices we visited stated that they previously posted some limited information about the environmental assessments on their individual field office websites. According to BLM policy, BLM's ePlanning website is intended to standardize the agency's land use planning documents and allow public access to NEPA documents, including environmental assessments completed as part of the oil and gas permitting process. According to BLM's ePlanning implementation plan, when the plan is fully implemented, BLM offices will be required to post all NEPA documents on the site within 1 week of completion and must include all associated draft and final documents. Documents posted to ePlanning must be updated within 1 week of any status change. According to a BLM official responsible for overseeing the implementation of ePlanning, while the agency expects the site to be fully implemented by late 2017, the remaining implementation steps involve internal, technical changes to the system. The official stated that the aspects of the site that are accessible to the public are "fully functional" at this time, meaning that BLM offices are currently posting all NEPA-related documents to the site.

Officials from all of the 6 field offices we visited stated that their office posts environmental assessments related to oil and gas permits to ePlanning when they are final. However, officials from only 1 of the 6 field offices stated that their office makes a draft version of the environmental assessment available online; officials from the other 5 stated they post a draft version of the environmental assessment only sometimes. Officials from 4 of these offices explained that they would post a draft if development in the area was likely to be of substantial public interest. For example, BLM officials stated that proposed development near a national park or a populated area may warrant increased public involvement. Again, representatives of environmentally related nongovernmental organizations stated that, in some cases, it is difficult to identify and

comment on proposed drilling activities. While BLM's ePlanning policy requires that all draft and final versions of environmental assessments be posted to the site, BLM's *NEPA Handbook* states that CEQ regulations do not require agencies to make environmental assessments available for public comment and review, and that public involvement is at the discretion of the decision maker. According to the handbook, such public involvement may include external scoping, public notification before or during preparation of an environmental assessment, public meetings, or public review and comment of the completed environmental assessment and unsigned "Finding of No Significant Impact." BLM field offices are not required to produce a draft environmental assessment in all cases, but if a draft is produced, the offices are required to post the document for public review on ePlanning.

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### BLM Generally Did Not Involve the Public When Considering Exception Requests

BLM officials stated that they have generally not involved the public when considering operator requests for exceptions to lease and permit requirements. According to BLM's policy, public notification is not required unless granting an exception would result in a substantial modification or waiver of a lease requirement. According to BLM officials, this is seldom the case, particularly if the exception criteria are outlined in the land use plan. According to a BLM official, one circumstance in which the public could be involved is when an operator requests an exception at the time a drilling permit is requested. In this circumstance, the public may be able to submit comments on BLM's environmental assessment for the permit, depending on the scale of the proposed drilling project. However, BLM officials from all 6 offices we visited stated that public involvement in exception requests was infrequent. BLM officials stated that in many cases public involvement may not be practical. For example, an operator may experience drilling complications and need an exception to drill 1 or 2 additional days beyond a seasonal deadline. BLM officials stated that in such cases, it would be impractical to solicit public input given the need to respond to the operator's request promptly. Additionally, BLM officials stated that if they are making a decision in accordance with exception criteria in the lease or permit developed through the NEPA process, public involvement is not required.

Representatives of environmentally related nongovernmental organizations told us that they typically do not comment on exception request decisions because BLM generally does not notify, or solicit input



from, the public when determining whether to grant an exception. Several representatives told us their organizations focus their efforts on providing comments related to lease and permit requirements early in the oil and gas development process. For example, several representatives told us their organizations provide the majority of their input when BLM is developing its resource management plans or identifying lease parcels for sale. One representative said that the organization rarely finds out when operators have been granted exceptions and so at times believe incorrectly that lease and permit requirements are in effect. One representative told us that the representative's organization attempted to develop informal agreements with certain BLM field offices whereby BLM staff would notify the organization when an exception request was submitted. However, according to the representative, the organization was unable to develop such agreements. Another organization's representative stated that BLM and operators often agree to an exception verbally and document the decision afterwards, precluding any opportunity for public comment. This representative noted that some exceptions, such as those that allow an additional 1 or 2 days of work, might not warrant comments. However, the representative stated that if an exception request were made for a more significant activity, such as a road proposal for an area that has a no surface occupancy requirement, the organization would like the opportunity to provide comments. A representative of an oil and gas industry association stated that operators make requests in accordance with criteria laid out in leases and permits and that the exception process is a key part of BLM's adaptive management policy, which attempts to provide for a flexible management approach based on current resource conditions.

Of the 6 BLM field offices we visited, only 1 made information about exception decisions available to the public, both in the office and on its website. The Office of Management and Budget issued a memorandum in December 2009 directing agencies to publish government information online with the goal to increase accountability, promote informed participation by the public, and create economic opportunity. Also, *Standards for Internal Control in the Federal Government* state that information should be recorded and communicated to those who need it, which can include external stakeholders, in a form and within a time frame that enables them to carry out their internal control and other responsibilities.<sup>27</sup> NEPA and BLM regulations and guidance provide

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<sup>27</sup> [GAO/AIMD-00-21.3.1](#)

multiple opportunities for public involvement during BLM's land use planning process. The substance of this involvement could be dependent on the effects of BLM's past decisions in implementing aspects of its resource management plans, including those related to exceptions. However, BLM does not require that its field offices make the results of exception decisions available to the public. Without access to information on how often exception requests are made and approved and the reasons for the decisions, the public may not have the information necessary to provide substantive input into BLM's land use planning process.

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## **BLM Has Generally Implemented Its Best Management Practices Policy but Has Not Consistently Documented Inspections or Used Data to Assess the Policy's Effectiveness**

BLM has generally implemented its best management practices policy by including key practices as permit requirements. However, BLM has not consistently documented environmental inspections, which are intended to verify that operators have implemented permit requirements. Moreover, BLM has not effectively used data from monitoring inspections, which are intended to assess the effectiveness of lease and permit requirements in mitigating environmental impacts of development.

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## **BLM Has Generally Implemented Its Best Management Practices Policy by Including Key Practices As Permit Requirements**

BLM has generally implemented its best management practices policy by including key practices as permit requirements. As described previously, BLM's policy on best management practices states that there are four key practices, described in table 1 that should be considered for inclusion as permit requirements in nearly all circumstances. Our review of 109 randomly selected well files at six BLM field offices found that at least one of the four key practices had been included as a permit requirement in nearly all of the files we reviewed. Specifically, of the 109 files we reviewed, 108 (99 percent) included at least one of the four key practices, 105 (96 percent) included at least three of the four practices, and 82 (75 percent) included all four of the key practices as permit requirements.

**Table 1: Bureau of Land Management’s (BLM) Four Key Best Management Practices**

Practice	Description
Painting of facilities	All new facilities should be painted a color that best allows them to blend with the background, typically a vegetated background.
Design and construction of roads	All new roads should be designed and constructed to a safe and appropriate standard—no higher than necessary—in accordance with BLM’s surface operating standards.
Interim reclamation	Interim reclamation of well locations and access roads—which can include partially reshaping and revegetating roads and reducing the amount of bare ground surrounding the well—should occur soon after the well begins production.
Final reclamation	Final reclamation should include recontouring of all disturbed areas, including access roads, to the original contour or a contour that blends with the surrounding topography.

Source: BLM. | GAO-17-307

BLM’s policy states that field offices should consider requiring other best management practices, such as those described on BLM’s website, on a site-specific basis. BLM field office officials we interviewed stated that all drilling permits include best management practices, though field offices generally do not track this information. Officials described the best management practices policy as being flexible to accommodate a wide range of site-specific conditions found across the areas where BLM oversees oil and gas development. Officials told us that BLM does not have a nationally approved list of best management practices but stated that suggested best management practices can be found in its *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* and on a BLM webpage discussing best management practices.<sup>28</sup>

During our site visits to the six BLM field offices, officials described and demonstrated a variety of best management practices that they frequently consider for inclusion as permit requirements, including the following.

- **Segregation of topsoil.** Retaining topsoil (the outermost layer of soil) separately from the lower levels of soil when clearing an area for development can preserve the quality of the soil until reclamation activities occur. Topsoil generally contains the highest concentration of organic matter and is critical for successful plant growth.
- **Erosion control.** Various erosion control methods, such as putting stones in culverts or straw matting on steep slopes, can help prevent soil erosion.

<sup>28</sup>Bureau of Land Management, *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* (Denver, CO: 2007).

- **Bird cones.** Installing wire mesh cones over exhaust pipes can prevent birds from nesting or becoming trapped in the pipes.
- **Centralized liquid gathering.** Using liquid gathering lines to move oil, gas, water, and condensate from well pads to centralized facilities placed offsite can reduce the need for truck traffic in areas of sensitive resources and habitat.
- **Avian protection on power lines.** Installing protective equipment on power lines can prevent birds from being electrocuted.
- **Protective grates over pits and tanks.** Covering production-related pits and tanks with nets or metal grates can prevent wildlife from drowning in contaminated water and other liquids.
- **Secondary containment to prevent damage from leaks.** Secondary containment around tanks on well pads can prevent damage to the environment in case of tank leakage.
- **Radio telemetry.** Placing radio telemetry equipment at wells and related production equipment to transmit data from the well site to an operator's remote monitoring facility can reduce the number of maintenance and inspection trips made during critical periods for wildlife and result in less wildlife disturbance.

Figure 2 illustrates a selection of best management practices we observed at drilling sites located on lands managed by the BLM field offices we visited.

**Figure 2: Examples of Bureau of Land Management’s Best Management Practices**



**Erosion control**



**Protective grate**



**Secondary containment**



**Radio telemetry**

Source: GAO. | GAO-17-307

BLM field office officials generally stated that there is not a formal process for how a practice becomes a best management practice. According to officials, new practices can be identified and recommended by industry or BLM headquarters staff. Additionally, according to BLM field office officials, some field offices have developed their own best management practices. BLM officials told us that more recently issued resource management plans typically include an appendix listing best management practices. In examining the most recently issued resource management plans for the field offices we visited, we found that four of six field offices had plans that included a best management practices appendix. The other two field offices are in the process of updating their resource management plans. In reviewing the plans that contained best management practices appendixes, we found that the amount of information they contained varied. For example, one plan included over 80 pages of suggested best management practices, while another plan included information on best management practices that totaled fewer than 20 pages.

BLM field office officials stated that the extent to which best management practices are attached as BLM permit requirements, or included in an operator's plan, varies. Officials told us that some companies are more proactive and include best management practices in their plans, whereas other companies rely on BLM to identify such practices. BLM staff from one field office stated that discussion about best management practices typically occurs when BLM officials visit a proposed drilling site. During such visits, BLM officials and the operator will discuss the proposed plan, and BLM staff will highlight practices they anticipate would be effective in mitigating environmental impacts. The operator may then elect to voluntarily include these practices in the proposed plan, or BLM may include them as permit requirements.

A representative from an association of oil and gas operators stated that BLM's best management practices policy is generally successful because the BLM field offices have the flexibility to determine which practices to require. Additionally, the representative told us that many best management practices are initially developed by operators. The representative stated that operators may try various approaches for mitigating environmental impacts of oil and gas development, and when they identify a practice that works, BLM will often adopt it as a best management practice and require other operators to implement it as well. The representative cautioned that the feasibility and effectiveness of practices greatly depends on the local topography and geology. For example, one best management practice is to bury temporary liquid gathering lines used to transport fluids away from a drill site, thereby reducing visual impacts to the landscape. However, in certain areas, this is not an effective approach to protecting the environment because the area has very little topsoil and would require digging through rocks to bury the lines. Such digging, according to the representative, could result in longer-term impacts to the environment than leaving the gathering lines on the surface.

Representatives from environmentally focused nongovernmental organizations offered a mixed view of best management practices. Some representatives stated that it was beneficial for operators to employ these practices. Another representative pointed out that the easier a best management practice is, the more likely it is to be implemented. For example, painting a storage tank to blend in with the environment is relatively easy and commonly implemented, whereas certain practices related to drilling—such as conducting horizontal or directional drilling to reduce surface disturbance—are more complex and may not be used as often. A representative from another environmental organization stated

that BLM applies best management practices in a sporadic and nonrigorous manner and that the bureau appears to treat these practices as a menu from which operators can select the ones they would like to implement. Another representative stated that operators tend to make economically driven decisions and implement best management practices only when required to do so.

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### BLM Has Not Consistently Documented Environmental Inspections Intended to Verify Required Best Management Practices Are Implemented

BLM has not consistently documented environmental inspections, which are conducted to verify that operators have implemented permit requirements, including best management practices. BLM's *Inspection and Enforcement Documentation and Strategy Development Handbook* states that documentation of all inspections must be clear, concise, and legible and provide an accurate description of what was inspected, including the findings. The handbook states that documentation should include, among other things, worksheets or checklists developed by field offices or other sources to document inspection results. According to the handbook, without clear and accurate documentation of existing conditions and activities, enforcement actions cannot be taken or decisions upheld if appealed by the operator.

We found that inspections were documented using different formats and that the inspection documents varied in the level of detail provided. During our file review, we examined 152 environmental inspection documents associated with our random sample of 109 files from the six field offices to determine whether the four key best management practices were verified during these inspections and found that 58 (38 percent) of the documents did not indicate that all four key practices were verified.<sup>29</sup> The two most commonly used documents we observed were a

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<sup>29</sup>The 152 environmental inspection documents were contained in the 109 randomly selected well files we reviewed. Our sample of files included ones for wells that had approved permits during fiscal years 2006 through 2015. In reviewing environmental inspection documents in the files, we did not exclude documentation of inspections that fell outside this time period. In assessing whether the four key practices were verified in environmental inspection documents, we excluded instances in which we determined a key practice was not applicable to the inspection. For example, because our sample included wells that were currently active, we considered the practice of final reclamation—which is conducted after a well is no longer active—to be not applicable unless otherwise indicated by the inspection documentation.

“Surface Inspection Form” and a “Production/Interim Reclamation Inspection/Monitoring–Environmental” form. The “Surface Inspection Form,” which is generally completed using AFMSS (BLM’s data system for oil and gas management), uses a narrative format. It includes fields for basic identifying information about the well and type of inspection and fields for general remarks about the inspection and follow-up remarks, if applicable. The “Production/Interim Reclamation Inspection/Monitoring–Environmental” form, which was created in 2007 by BLM’s Washington Office but is not an official agency form, uses a checklist format.

Our file review found that the narrative format, in some cases, resulted in inspection documents that did not contain sufficient detail to indicate whether permit requirements had been verified. For example, we observed some inspection documents using the narrative format that consisted of two lines of general remarks that did not identify whether implementation of the four key practices had been verified. In contrast, we found that the checklist format typically resulted in greater assurance that the four key practices were verified. For example, we found that the four key practices were verified in 64 of 65 (98 percent) inspection documents when the checklist format was used, versus 15 of 62 (24 percent) documents when only the narrative format was used.<sup>30</sup> In some cases, we observed a version of the checklist format that included an additional check to indicate whether all permit requirements were verified during the inspection. The use of this check provided assurance that the inspector had verified all permit requirements that applied to that well, rather than only the requirements listed on the checklist. Appendix II contains templates of the three formats.

BLM’s guidance for documenting inspections does not clearly indicate which forms are required to document environmental inspections. One part of the guidance identifies both the narrative and checklist formats in a list of forms that may be mandatory for completion, depending on the inspection type. However, at another point, the guidance states that only the narrative format must be used for environmental inspections.

During interviews with BLM officials responsible for conducting environmental inspections, we found that officials did not have a common

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<sup>30</sup>The use of one or both of these forms accounted for 84 percent of the inspection documents we reviewed. We also observed a smaller number of inspections documented using forms that were specific to a certain phase of development or that appeared to be specific to certain field offices.



understanding of the requirements for documenting inspections. For example, an official at one field office stated that, when conducting environmental inspections, he uses the narrative format and does not use the checklist format. Officials at another field office stated that they complete both formats but do not always print a copy of the narrative format for the hard copy file, which is BLM's official record. Officials at another field office stated they received conflicting instructions about which documentation format to use. According to the officials, at one point, the field office used a version of the checklist format and received guidance from BLM's Washington Office that they should instead be using the narrative format in AFMSS. However, the officials stated that the following year, they received instruction from the Washington Office stating that both formats are required to document environmental inspections. As a result of the conflicting instructions, at the time of our visit, officials said they were unsure of the requirements for documenting environmental inspections.

BLM is in the process of developing updates to its AFMSS database, which a BLM official stated will include more detailed forms for documenting environmental inspections and the ability to electronically document inspections from the field. Specifically, BLM officials stated that one planned update will replace the existing narrative format for documenting environmental inspections with a checklist format similar to the one described above. In addition, BLM is continuing its effort to develop a mobile computing solution as part of its AFMSS update.<sup>31</sup> The mobile computing solution would allow BLM employees to remotely document environmental inspections when in the field. According to BLM's lead point of contact for the development of these AFMSS updates, BLM is currently evaluating different devices to determine which one will best meet the agency's needs. BLM officials stated that the updates are projected to be implemented by the end of 2017.

We also found that some BLM field office employees may not have received training on how to document environmental inspections. BLM offers a limited number of voluntary classroom training courses but does

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<sup>31</sup>In March 2010, we found that BLM's efforts to implement a mobile computing solution were behind schedule, and we recommended that the Secretary of the Interior direct BLM to implement such technology ([GAO-10-313](#)). In May 2014, Interior officials stated that BLM had issued policies related to allowing BLM staff, including staff conducting inspections in the field, to wirelessly connect to BLM's information technology system via laptops when in the field.

not require training for BLM officials responsible for conducting environmental inspections.<sup>32</sup> Some officials responsible for conducting environmental inspections stated that they have been unable to attend the voluntary training because funding to travel to the training was not approved. Some BLM field office officials stated that, in the absence of required training or the necessary funds to attend voluntary training, they rely on on-the-job training. An official from one field office stated that new employees must rely on training received from a mentor, who may not have attended classroom training recently or at all. In our 2016 report on Interior's human capital challenges, we found that Interior's bureaus, including BLM, have not evaluated their oil and gas staff's training needs or the effectiveness of the training provided to key oil and gas staff, and we recommended that Interior annually evaluate its bureaus' training programs.<sup>33</sup> Interior partially agreed with the recommendation, and the recommendation remains unimplemented. *Standards for Internal Control in the Federal Government* states that operational success is possible only when the right personnel for the job are on board and provided the right training, tools, structure, incentives, and responsibilities.<sup>34</sup>

BLM is in the process of redesigning the training it offers to officials responsible for conducting environmental inspections. A BLM official responsible for training stated that BLM's redesigned training program would lead to a certification for officials conducting environmental inspections, similar to the training program BLM has in place to train those conducting other types of oil and gas inspections, including those related to drilling and measurement. Funding for the training is also under consideration. Currently, BLM headquarters funds training for the existing inspector certification courses, while funding for training those conducting environmental inspections is allocated by field office managers. The BLM official responsible for training stated that, as a result, funding challenges can impact the consistency of training across the agency. If BLM headquarters funded the new training, it could reduce the funding challenges field office managers currently face. The official further stated that if the training was successfully implemented, it should ensure greater

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<sup>32</sup>These courses include ones related to surface management for fluid minerals, construction and reclamation, and using and recording data in AFMSS.

<sup>33</sup>GAO, *Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training but Needs a More Evaluative and Collaborative Approach*, [GAO-16-742](#) (Washington, D.C.: Sept. 29, 2016).

<sup>34</sup>[GAO/AIMD-00-21.3.1](#)

consistency and thoroughness of environmental inspections. However, in December 2016, a BLM official stated that BLM does not have a policy that would require employees to attend the redesigned training. Instead BLM officials stated that they plan to start a training pilot project in the spring of 2017.

The steps BLM is taking to improve its training program and data system may help to improve the quality of environmental inspection documents, but these limitations in the agency's inspection documentation guidance and training policies may continue to present challenges. Without clear guidance regarding which forms are required to document environmental inspections, BLM employees may continue to document the inspections in a manner that does not always indicate whether all requirements were verified. In addition, without a policy requiring employees responsible for conducting environmental inspections to complete formal training, BLM may be unable to ensure that its employees receive the training. Ensuring that BLM staff responsible for conducting environmental inspections receive the guidance and training they need to conduct and document environmental inspections could enhance the ability of BLM to mitigate the impacts of oil and gas development and to carry out its responsibilities for proper stewardship of the environment.

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### **BLM Has Not Effectively Used Monitoring Inspection Data to Assess the Effectiveness of Its Best Management Practice Policy**

BLM field offices conduct monitoring inspections but have not effectively used data collected during these inspections to assess the effectiveness of mitigation activities, such as those carried out under BLM's best management practices policy. BLM requires field offices to conduct monitoring inspections; however, we found that field offices vary in their understanding of what qualifies as a monitoring inspection. In addition, not all field offices have been able to effectively use monitoring inspection data to assess the effectiveness of best management practices.

In fiscal year 2008, BLM conducted a self-assessment of its best management practices policy and found, among other things, that staff in field offices may not clearly understand how to monitor the effectiveness

of these practices.<sup>35</sup> As a result, a report on the self-assessment recommended that BLM update or issue policy about monitoring the effectiveness of best management practices. According to BLM officials, the agency implemented this recommendation by issuing a monitoring inspection policy in 2009.<sup>36</sup> The policy requires BLM field offices with oil and gas management responsibilities to conduct monitoring inspections in accordance with CEQ regulations.<sup>37</sup> BLM's policy states that monitoring is conducted to assess actual or potential environmental impacts, determine whether BLM standards are being met, and evaluate whether permit requirements (which could include best management practices) are effective to achieve their desired intent. To ensure the agency's compliance with the CEQ requirements, BLM's policy requires BLM field offices to report the number of completed monitoring inspections.

BLM officials from all of the six field offices we visited stated that their field office conducts some type of monitoring activities. However, during fiscal years 2010 through 2015, these activities were tracked in a variety of ways, and some field offices did not report the number of monitoring inspections completed, as required by BLM's 2009 policy. Because BLM's AFMSS database is unable to track monitoring inspections, the 2009 policy required officials to report the number of monitoring inspections in BLM's PMDS. We found that two of the field offices we visited did not report numbers of monitoring inspections in the PMDS from fiscal years 2010 through 2015. Officials from one of these field offices explained that they require operators to conduct monitoring through third-party contractors, and the officials did not believe the activities should be reported because the monitoring was not conducted by BLM employees. Officials from the other field office stated that they conducted monitoring inspections and tracked these inspections using their own internal spreadsheets.

BLM's 2009 monitoring policy includes an attachment that provides guidance on how to interpret and implement the policy. The attachment

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<sup>35</sup>Bureau of Land Management, *Director's Program Review—Implementation of Environmental Best Management Practices in the Fluid Minerals Surface Management Program, Self-Assessment* (Washington, D.C.: Fiscal Year 2008).

<sup>36</sup>BLM IM 2009-224.

<sup>37</sup>These regulations require a record of decision for environmental impact statements and provide that a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation." 40 C.F.R. § 1505.2 (c).

provides examples of the types of activities that could be considered monitoring inspections, including conducting wildlife surveys, conducting habitat restoration surveys, and determining the status of interim reclamation. The attachment also explains how a monitoring inspection differs from an environmental inspection. For example, in assessing interim reclamation, an environmental inspection would verify whether the operator seeded a disturbed area according to permit requirements, while a monitoring inspection would collect data to assess whether the seeding was successful. The attachment states that, in some cases, a visit to a particular inspection site could count as both an environmental inspection and a monitoring inspection, depending on the activities completed.

However, we found that despite this guidance, officials at the six field offices we visited varied in their approaches to conducting monitoring and did not share a common understanding of what types of activities constitute a monitoring inspection. For example, officials from one field office stated that they consider inspections related to air or water quality to be monitoring inspections, while officials from another field office stated that they consider inspections related to reclamation of plugged and abandoned wells to be monitoring inspections. Officials from a third field office stated that they plan to consider inspections of plugged and abandoned wells to be monitoring inspections, but in prior years, the field office had considered all environmental inspections as monitoring inspections. Some BLM field office officials stated they were unsure of the difference between a monitoring inspection and an environmental inspection. BLM employees responsible for conducting monitoring inspections are also responsible for conducting environmental inspections. As previously noted, BLM has only voluntary classroom training for these employees, and some employees have had only on-the-job training because of barriers to attending the voluntary training that BLM currently offers.

We also found that BLM field offices generally do not use the data collected from monitoring inspections to assess the effectiveness of lease and permit requirements, including best management practices, at mitigating environmental impacts. Although BLM's 2009 monitoring policy requires that field offices track the number of monitoring inspections completed, it does not provide guidance on how data collected during monitoring inspections should be tracked or used. As a result, according to BLM officials, monitoring inspection data are captured in a variety of formats, including monitoring reports submitted by operators, agency databases, and spreadsheets. In addition, although officials from five of the six BLM field offices we visited stated that their field office has access

to monitoring data, officials from four of the field offices stated they generally have not used the data to assess the effectiveness of mitigation measures. Officials at one field office stated that collecting and maintaining monitoring data is at the discretion of individual BLM employees, while officials from another field office stated that they were unaware of any efforts to use monitoring data to assess the effectiveness of mitigation. Officials from two field offices stated that while they have access to monitoring data, they are unable to analyze the data because of its format or the office's system for tracking the data. Both of the two field offices where officials described using monitoring data described mechanisms for tracking the data, which included databases and a series of electronic spreadsheets. In particular, one of the two offices was using a database to track interim and final reclamation efforts and was able to generate reports based on a variety of criteria to assess the status of reclamation.

Representatives from environmentally focused nongovernmental organizations and an association of oil and gas operators stated that, from their perspective, BLM may not fully assess the effectiveness of best management practices. For example, a representative from one nongovernmental organization stated that the analysis of the effectiveness of the best management practices is sometimes conducted by operators, so the quality of the data and the conclusions are questionable. In addition, he stated that he was unaware of any analysis comparing the environmental impact of projects that use best management practices with the impact of projects that do not. Another representative stated that from his perspective monitoring seemed to be a low priority for BLM. A representative from an association of oil and gas operators stated that in some instances BLM requires operators to conduct surveys and provide the agency with survey data, but the agency does not always use the data provided to assess the effectiveness of best management practices.

When BLM field offices are unable to effectively use data collected during monitoring inspections, the agency cannot leverage these inspections to assess the effectiveness of its mitigation efforts, including its best management practices policy, in accordance with the purpose of its 2009 monitoring policy. Providing guidance to the field offices on how monitoring data should be used could enhance BLM's ability to assess the effectiveness of its mitigation activities across the bureau. In addition, as previously discussed, although BLM is redesigning its training for employees responsible for conducting inspections, it does not currently have a policy that would require employees to take the redesigned

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training. Ensuring that staff have training could potentially improve BLM employees' understanding of what types of activities should be included as part of the agency's monitoring inspection program and improve the consistency of reporting and documenting inspections. Improving BLM's monitoring inspection program could allow the agency to better assess environmental impacts of oil and gas development and the effectiveness of efforts to mitigate such impacts.

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## Conclusions

BLM is responsible for managing oil and gas development on federal lands while also mitigating the environmental impacts of such development. BLM mitigates the impacts primarily through the requirements that it places on the leases and permits it issues to operators. It has also developed a best management practices policy, and best management practices may be included as lease and permit requirements. Operators can request exceptions to these requirements, and BLM can decide to approve requests if certain criteria are met.

However, BLM field offices have not tracked exception data consistently, making it difficult to determine the extent to which they have approved exception requests. Additionally, BLM staff across field offices are not using a consistent process for considering and clearly documenting exception decisions. Although BLM issued a policy in November 2007 stating that exception decisions should be fully documented, it does not have documented procedures to ensure that field office decisions are consistently and clearly documented. BLM could better quantify the extent to which exceptions are approved and better ensure that such decisions are consistent with its responsibilities under NEPA if it tracked exception requests and had documented procedures for consistently considering and clearly documenting exception decisions across its field offices.

In addition, BLM does not currently require field offices to make the results of its exception decisions available to the public. Without access to this information, the public may not be able to provide substantive input into BLM's future land use planning processes.

Moreover, BLM field offices have generally implemented BLM's best management practices policy but have not consistently documented environmental inspections to verify that operators have implemented the practices as required, in part because the guidance for documenting inspections is unclear. Without consistently documenting that all permit

requirements are verified as implemented when conducting environmental inspections, BLM field offices cannot provide assurance that activities designed to mitigate environmental impacts have been carried out by operators as required. In addition, documentation of environmental inspections that is not sufficiently clear and accurate could limit BLM's ability to take and uphold enforcement actions when needed.

Further, BLM field offices have not effectively used monitoring inspection data to assess the effectiveness of best management practices to mitigate environmental impacts of oil and gas development. Consequently, the agency may be limited in its ability to understand and demonstrate the extent to which its lease and permit requirements have successfully mitigated the environmental impacts of oil and gas development. The agency is in the process of implementing training for employees responsible for conducting environmental and monitoring inspections, but it has not established a policy requiring employees to complete this training. Without such a requirement, BLM cannot ensure that employees understand how to carry out monitoring inspections, that environmental inspection documents will be prepared consistently by field office staff, or that the data will be used to assess the effectiveness of best management practices.

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## Recommendations for Executive Action

The Director of the Bureau of Land Management should take the following six actions.

1. Develop a policy to ensure that field offices consistently track exception data.
2. Develop bureau-wide written procedures for consistently considering and clearly documenting the information and processes used to make exception decisions.
3. Direct field offices to make the results of exception request decisions available to the public, such as on BLM's public website.
4. Clarify guidance related to documentation of environmental inspections to ensure that inspections are documented in a manner that indicates whether all permit requirements were checked as part of the inspection.
5. Provide additional guidance to field offices on how to collect and use data collected during monitoring inspections and, in doing so,



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determine and implement an approach for using the data to assess the effectiveness of the agency's mitigation efforts, including its best management practices.

6. Establish a policy requiring staff responsible for conducting environmental and monitoring inspections to take standardized training.

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## Agency Comments and Our Response

We provided a draft of this report to Interior for review and comment. Interior concurred with five of our recommendations and partially concurred with one recommendation. Agency comments are reproduced in appendix III, and key areas are discussed below.

Interior partially concurred with our recommendation that it direct field offices to make the results of exception request decisions available to the public, such as on BLM's public website. According to an attachment to BLM's 2007 policy on exceptions, it is to fully document exception decisions in the case file with the appropriate level of environmental review. Interior stated that it is required to document exception decisions in case files and that these files can be made available to the public upon request. Interior further stated that database upgrades will improve exception tracking and public posting in the future. In our review, we found that BLM offices did not always document exception decisions. We further found that these offices did not consistently track exception decisions. As a result, the public may not be aware of the extent to which exceptions are approved or the reasons for doing so. Because the public is an important stakeholder in the land use planning process, we believe that BLM should strive to make this information available to the public to enhance its ability to participate as BLM develops new land use planning documents.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Secretary of the Interior, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or [ruscof@gao.gov](mailto:ruscof@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

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Letter

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Sincerely yours,

A handwritten signature in black ink that reads "Frank Rusco". The signature is written in a cursive style with a long, sweeping horizontal line extending to the right from the end of the name.

Frank Rusco  
Director, Natural Resources and Environment

## Appendix I: Objectives, Scope, and Methodology

This appendix details the methods we used to assess the Department of the Interior's Bureau of Land Management's (BLM) efforts to mitigate environmental impacts from oil and gas activities. Specifically, this report examines the extent to which BLM (1) approved requests for exceptions from lease and permit requirements intended to mitigate environmental impacts, and how these decisions were made and documented; (2) involved the public in the development of lease and permit requirements and in the approval of exception requests; and (3) implemented its best management practices policy and assessed its effectiveness in mitigating environmental impacts. Because of availability of data and the issuance of policies, the time frames varied for each of the objectives.

To conduct our work, for all three objectives, we reviewed relevant laws, regulations, and BLM guidance. We also interviewed officials in BLM headquarters and officials from a nongeneralizable sample of eight BLM field offices (two of which were for scoping purposes to help formulate our audit approach and not included in our file reviews) and the corresponding four BLM state offices.<sup>1</sup> We selected field offices based primarily on (1) geographic variability and (2) oil and gas leasing and permitting activity. Specifically, we visited and interviewed officials in two BLM state offices (Colorado and Wyoming) and interviewed officials by telephone in two additional offices (Utah and New Mexico). We also visited and interviewed officials in seven BLM field offices (Carlsbad and Farmington in New Mexico, Buffalo and Pinedale in Wyoming, White River and Colorado River Valley in Colorado, and Vernal in Utah) and interviewed an official by telephone in one additional office (Royal Gorge in Colorado).<sup>2</sup> In fiscal year 2014, the four states we selected accounted for approximately 75 percent of producing federal leases and 85 percent of approved drilling permits.

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<sup>1</sup>Because this was a nongeneralizable sample, observations from interviews with these offices, taken alone, do not support generalizations about other offices. However, such observations provide illustrative examples of the types of challenges BLM faces in managing its permitting workload and mitigating the environmental impact of oil and gas development.

<sup>2</sup>We interviewed officials at the White River and Royal Gorge field offices in Colorado as part of our scoping work.

To obtain additional perspectives on our three objectives, we interviewed by telephone representatives from an oil and gas association representing industry perspectives, seven environmentally related nongovernmental organizations, and four state wildlife agencies corresponding with the BLM state and field offices we visited.

To learn about available BLM data and BLM's decision making related to exceptions, waivers, and modifications, we conducted a survey, interviewed agency officials, and completed a file review of a nongeneralizable sample of exception decisions. We electronically surveyed BLM officials responsible for 52 BLM offices with oil and gas activity to determine the extent to which BLM approved requests for exceptions to lease and permit requirements, and how these decisions were made and documented for fiscal years 2005 through 2015. We sent the questionnaire by e-mail in an attached Microsoft Word form that respondents could return electronically after marking checkboxes or entering responses in blank spaces. In an e-mail in advance of the questionnaire, we asked the official at each land unit if he or she was the correct respondent, and, if not, we asked for a referral to the official who was. We sent the questionnaire with a cover letter on March 1, 2016. We telephoned all respondents who had not returned the questionnaire after approximately 2 weeks and again after 4 weeks and asked them to participate. We received completed responses from officials responsible for 42 BLM offices in the field, which constituted an 81-percent response rate. The survey asked about available data on exceptions, waivers, and modifications from lease stipulations and drilling permit conditions of approval. In instances in which field offices had the data, we requested that they be e-mailed to us. Because the data were tracked inconsistently and BLM officials made statements indicating uncertainty about the completeness of the data, we determined the data were not sufficiently reliable for use to generate summary statistics on exception decisions across the bureau.

Additionally, to learn about the exception process, we used a semistructured interview guide to interview BLM officials in four state offices (Colorado, Wyoming, Utah, and New Mexico) and BLM officials in six field offices (Carlsbad and Farmington in New Mexico; Buffalo and Pinedale in Wyoming; Colorado River Valley in Colorado, and Vernal in Utah). To complete our file review, we used exception data provided by field offices to select a nongeneralizable sample of well files that included exception decisions. Specifically, at the six field offices included in our file review (Carlsbad and Farmington in New Mexico, Buffalo and Pinedale in Wyoming, Colorado River Valley in Colorado, and Vernal in Utah), we

selected a nongeneralizable sample of approximately 10 files per office using the exception data field offices had sent to us as part of our survey. We selected these files based on fiscal year and the operator making the request to obtain a range of requests over time. Four of the six offices provided us data, while the remaining two were unable to do so. At the four offices that provided us data, we selected a nongeneralizable sample of 44 files from fiscal years 2009 through 2015. These 44 files included 54 exception requests. We then examined the files to see whether the decision was reasonably documented. This included examining (1) how the request was made; (2) who at BLM reviewed the request; (3) what the applicable BLM criteria were, if any; (4) whether BLM provided an explanation of its decision; and (5) how BLM communicated the decision to the operator. In many instances, the well files were not complete. The initial assessment on the reasonableness of the documentation was made by one analyst and subsequently reviewed and verified by a separate analyst. When a discrepancy occurred, source documents were examined, and the assessment was discussed. We determined that the process of assessing the reasonableness of the documentation of BLM's exception decisions based on the available source documentation in the well file rendered the findings of the review to be sufficiently reliable for our purposes. Because we examined this issue at six field offices, our findings are not representative of all BLM field offices.

To examine the extent to which BLM involved the public in the development of lease and permit requirements and associated exception requests, we analyzed lease sale documents, conducted follow-up on our semistructured interviews with BLM field office officials, reviewed relevant BLM policies and guidance, and interviewed BLM's program contact for its ePlanning initiative. Specifically, we reviewed environmental assessments and other lease sale documents obtained from BLM's public website that were associated with lease sales held during calendar years 2012 through 2015 by the six field offices included our review.<sup>3</sup> We reviewed the environmental assessments to determine whether public comments had been solicited and if any provided comments related to proposed lease requirements. We reviewed available documentation—for example, protest letters from the public or BLM's responses to such

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<sup>3</sup>During this time frame, the Carlsbad, NM, field office held 11 lease sales; the Farmington, NM, field office held 9 lease sales; the Buffalo, WY, field office held 8 lease sales; the Pinedale, WY, field office held 4 lease sales; and the Vernal, UT, field office held 3 lease sales. The Colorado River Valley, CO, field office did not hold any lease sales from 2012 through 2015.

letters—to determine whether an opportunity for public protest had been made available. To assess the reliability of the lease sale data used for this analysis, we confirmed with BLM state office officials the number of lease sales held by each office during the scope of our review. We determined the data were sufficiently reliable for our purposes. In addition, we conducted follow-up with BLM field office officials to clarify semistructured interview responses related to opportunities for public involvement at various stages of the development of permit requirements. To examine the extent to which the public was involved in BLM's decisions to grant exceptions to lease or permit requirements, we interviewed BLM officials at the six BLM field offices we visited using our semistructured interview guide. We also asked questions related to this during our interviews with representatives from an oil and gas association, environmentally related nongovernmental organizations, and state wildlife agencies.

To examine the extent to which BLM implemented its best management practices policy and assessed its effectiveness to mitigate environmental impacts, we interviewed key program contacts regarding their roles in overseeing BLM's oil and gas program, best management practices, and ongoing initiatives related to the Automated Fluid Minerals Support System (AFMSS) and employee training.<sup>4</sup> We also used a semistructured interview guide to interview BLM officials in the selected four state offices and six field offices. We also conducted a file review at the six field offices we visited and reviewed monitoring inspection data from BLM's Performance Management Data System (PMDS), both described in detail below. In addition, we reviewed relevant BLM policies and guidance. The purpose of our file review for this objective was to identify the extent to which selected BLM well files included best management practices as permit requirements and contained documentation that BLM had verified operators' implementation of the requirements when conducting environmental inspections.

To design the methodology for our file review, we (1) identified best practices to include in the scope of our review, (2) developed a data collection instrument, and (3) identified a random sample of well files. Because many best management practices are site-specific, we chose to

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<sup>4</sup>We also reviewed documentation of interviews conducted for a separate review that evaluated, among other things, Interior's efforts to address its training needs for key oil and gas staff. The interviews we reviewed were conducted with three of the six BLM field offices we visited for this review.

limit our review to four key practices, described in our report, that BLM policy states should be considered in nearly all circumstances. To develop a data collection instrument, we developed a hard copy form to be used when reviewing each file. This form included fields to document whether the team was able to review the file, whether the four key practices were identified as permit requirements, and whether the four key practices were verified as part of the environmental inspections documented in the file. Following our initial implementation of the file review during our first field office site visit, we confirmed that the data collection instrument functioned as designed. To identify a random sample of well files, we used data from BLM's AFMSS on approved permits from fiscal year 2006 through 2015. To assess the reliability of the AFMSS data, we interviewed BLM officials and found that the data were sufficiently reliable for our purposes. Using these criteria, we generated a random sample of well files for each of the six BLM field offices included in our review. At each field office, we worked down the randomly ordered list of sampled files to review as many files as possible within the available time. In total, we reviewed 109 files, which included 152 inspection documents. Although this sample is not generalizable to BLM field offices as a whole, it is a statistically unbiased picture of the six field offices we visited.

When conducting the file review at each office, two team members reviewed the files, using the prepared data collection instrument, for the allotted period of time. Next, the team members exchanged the files and completed data collection instruments to review the completed forms against the source material. To the extent that discrepancies were noted, the analysts consulted the source documentation onsite and came to agreement regarding the most accurate coding for that circumstance. In some cases, the underlying documentation was limited. For example, in some cases documentation of environmental inspections consisted of a short narrative, and the analysts were required to interpret the narrative to determine whether the four key best management practices were reviewed as part of the inspection. Consequently, there may have been some instances in which another person might have interpreted the source documentation to come to a different conclusion. While this is noted as a limitation, we determined that the process of verifying the file review data collection instruments against the source documentation rendered the findings of the file review to be sufficiently reliable for our purposes.

We also reviewed data from BLM's PMDS related to monitoring inspections. We asked BLM headquarters to provide us with PMDS

monitoring data for fiscal years 2010 through 2015. We chose this time frame to coincide with BLM's monitoring policy, which was implemented in fiscal year 2010. The data indicated the number of monitoring inspections reported by BLM cost centers. BLM cost centers represent organizational units, such as field or district offices. We reviewed the PMDS data to determine whether the six field offices included in our review had reported monitoring inspections in fiscal years 2010 through 2015. In completing this review, we identified certain cost centers that were identified as a program division rather than a field or district office. As a result, it was unclear whether the inspections reported by such cost centers could potentially be associated with one of the offices included in our review. In order to ensure the accuracy of our analysis of the data, we conducted follow-up with officials from each of the six BLM field offices. We provided the PMDS data for all cost centers in the state appropriate for the field office and identified which lines of data we identified as having been reported by the field office. We asked the officials to confirm whether our interpretation of the data was accurate. Officials from four of the offices confirmed that our interpretation was accurate. Officials from one field office identified data reported by their office that we had not identified during our analysis. An official from the remaining office thought that the office had reported monitoring inspections during fiscal years 2010 through 2015 but could not identify inspections associated with the office in the provided data. On the basis of our analysis, we found the data to be sufficiently reliable for our purposes.

We conducted this performance audit from June 2015 to April 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence we obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.





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**Figure 4: Environmental Inspection Form Using Checklist Format**

**Appendix II: Bureau of Land Management  
Environmental Inspection Forms**

<b>Production/Interim Reclamation Inspection/Monitoring - Environmental</b>				
Case #: Lease #: Operator: Present : Yes <input type="checkbox"/> No <input type="checkbox"/>		Multi-Well Location Yes <input type="checkbox"/> No <input type="checkbox"/> No. Wells:	Well Name: Well #: API #: Well Status: Well Completion Date:	
Twn: Sec: N/S Foot:	Rng: Qtr: E/W Foot:	County: State: Lat.:      Long.:	Facility ID: Facility Name: H2S: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Surface Owner: Present: Yes <input type="checkbox"/> No <input type="checkbox"/>		Inspection Activity: ES-- Choose an item.		
Office Time:	Travel Time:	Inspection Time:	Trips:	
Inspection Open Date: <a href="#">Click here to enter a date.</a>	Inspection Close Date: <a href="#">Click here to enter a date.</a>	Inspector:		
Inspected: Well/Facility Location <input type="checkbox"/> ; Road <input type="checkbox"/> ; Pipeline <input type="checkbox"/> ; Power Line <input type="checkbox"/> ; Other <input type="checkbox"/>				
Inspection Items	Met	Not Met	N/A	Order/ INC
<b>Interim Reclamation</b>				
1. Facilities Clustered and Sited to Maximize Interim Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Rock Surfacing Removed from Areas to be Interim Reclaimed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Pit Contents Buried <input type="checkbox"/> Removed <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Compacted Areas to be Vegetated have been Ripped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Recontouring of Areas Not Needed for Production Activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Topsoil Redistributed on Majority of the Disturbed Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Seeded Method: Drilled <input type="checkbox"/> Broadcast <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Interim Revegetation Close to the Wellhead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Interim Revegetation Close to Road Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
10. Revegetation Success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
11. Erosion and Stormwater Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
12. Mulch Type:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
13. Free of Noxious & Invasive Weeds Weed Type(s):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
14. Well Cellar Properly Covered to Exclude Wildlife & Livestock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
15. Rat and Mouse Holes Closed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
<b>Interim Reclamation Meets Standards Yes <input type="checkbox"/> No <input type="checkbox"/> Work Needed</b>				<input type="checkbox"/> <input type="checkbox"/>
<b>Roads</b>				
16. Drainage – Installed and Functioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
17. Culverts and Waterdips – Installed and Functioning Type/Size:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
18. Surface Material – Installed and Functioning Type:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
19. Gates – Installed and Functioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
20. Cattleguards – Installed and Functioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
21. Maintenance Needs:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
<b>Utility Corridors</b>				
22. Final Reclamation Standards (Recontouring, Vegetation, Excluding Removal of Facilities) Initiated <input type="checkbox"/> Meets Standards Yes <input type="checkbox"/> No <input type="checkbox"/>				<input type="checkbox"/> <input type="checkbox"/>
23. Power Lines Exclude Raptors Surface <input type="checkbox"/> Buried <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
<b>Production Facilities:</b>				
05-09-2011				

Source: Bureau of Land Management. | GAO-17-307

**Appendix II: Bureau of Land Management  
Environmental Inspection Forms**

24. Color/Screening: Painted to Blend with the Vegetated Background	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Tanks & Other Production Facilities: Labeled, Maintained, and Adequate Secondary Containment Capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Exhaust Stacks: Constructed to Prevent Bird/Bat Mortality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Emission Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Housekeeping, Management of Hazardous Materials and Wastes, and Spill Management</b>				
28. Free of Spills or Leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Hazardous Material Storage/Secondary Containment/Labels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Drip Pans Exclude Wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. General Housekeeping - Free of Trash and Unnecessary Equipment & Materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pits and Ponds</b>				
32. Pits and Ponds: Number <input type="checkbox"/> Authorized <input type="checkbox"/> Unauthorized <input type="checkbox"/> Type(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Adequate Freeboard - 2 feet or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Lined & Good Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Leak Detection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Free of Oil, Trash, Wildlife, and Livestock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Pits or Location Adequately Fenced and/or Netted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Pit(s) Closure Date <a href="#">Click here to enter a date.</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other</b>				
39. Location properly signed: (43 CFR 3162.6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. No Unauthorized Disturbance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Other: (Describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments, Inspection/Monitoring Results, and Additional Actions Necessary:				
Original Disturbance Acres/Well: (including location, roads, and pipelines)		Meets Final Reclamation Standards Acres/Well:	Meets Interim Reclamation Standards Acres/Well:	
Follow-up Requirements: Choose an item.	Correct problem by: <a href="#">Click here to enter a date.</a>	Next Inspection date: <a href="#">Click here to enter a date.</a>	Date AFMSS updated: <a href="#">Click here to enter a date.</a>	
Order/INC No.				
<p>The Privacy Act of 1974 and the regulations in 43 CFR 2.48(d) require that you be furnished the following information.</p> <p><b>Authority:</b> 30 U.S.C. 181 et seq.; 43 CFR 3160; Onshore Oil and Gas Order No. 1.</p> <p><b>Purpose:</b> The BLM uses this information to document and track operator compliance with the terms of a Federal permit for the development oil and natural gas and to contact the permit holder and other affected parties.</p> <p><b>Routine uses:</b> In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, all or a portion of the information collected may be disclosed as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows: (1) Document and track compliance with permit conditions. (2) Gather contact information for permittees and parties affected by the permit. (3) Track monitoring data. (4) Information from the record and/or the record will be transferred to appropriate Federal, State, or local agencies when relevant to civil, criminal, or regulatory investigations or prosecutions.</p> <p><b>Effect of not providing information:</b> Disclosure of the information is voluntary; however, failure to provide the requested information may impede individual participation.</p>				
05-09-2011				

Source: Bureau of Land Management. | GAO-17-307

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**Figure 5: Environmental Inspection Form Using Checklist Format with Additional Check**

**Appendix II: Bureau of Land Management  
Environmental Inspection Forms**

<b>Production/Interim Reclamation Inspection/Monitoring - Environmental</b>					
Case #: Lease #:			Multi-Well Pad Yes No	Well Name: Well #: API #:	
Operator: Present: Yes No			County: *SEE ATTACHED		Facility ID:
Twn:	Rng:	Sec:	Qtr:	State:	Facility Name:
N/S Foot:	E/W Foot:	Lat.:	Long.:	H2S: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Surface Owner:			Present: Yes No	Inspection Activity: ES-- Choose an item.	
Office Time:		Travel Time:		Inspection Time:	Trips:
Inspection Open Date: <a href="#">Click here to enter a date.</a>			Inspection Close Date: <a href="#">Click here to enter a date.</a>		Inspector:
Inspection Items					
	Met	Not Met	N/A	Order/INC	
Constructed in conformance with the approved APD and Sundry Notices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Unauthorized Disturbance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interim Reclamation: Pads and Roads					
1. Facilities Clustered and Sited to Maximize Interim Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Compacted Areas to be Vegetated have been Ripped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil Redistributed on Majority of the Disturbed Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Seeded Yes No Method:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Reveg. Close to the Wellhead (Teardrop travel space left around Wellhead)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Reveg. Close to Road Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Revegetation Success? Desirable Species Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Erosion and Runoff Controlled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Mulch? Yes No Type: Fertilized? Yes No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Free of Noxious & Invasive Weeds? Yes No If no, list species:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Interim Reclamation Approved? Yes No Work Needed-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads on Lease:					
1. Proper Drainage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Culverts Type:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Surface Material Type:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Gates -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Cattleguards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pipeline and Power Line Corridors on Lease:					
1. Erosion and Runoff Controlled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Final Reclamation (Refer to Final Reclamation Inspection Form) Initiated <input type="checkbox"/> Approved Yes <input type="checkbox"/> No <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Power Lines Exclude Raptors Surface <input type="checkbox"/> Buried <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Production Facilities:					
1. Color/Screening: Painted to Blend with the Vegetated Background	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
01-14-2011					

Source: Bureau of Land Management. | GAO-17-307

**Appendix II: Bureau of Land Management  
Environmental Inspection Forms**

2. Tank Berm: Maintained and Adequate Capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Exhaust Stacks: Constructed to Prevent Bird/Bat Mortality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Number and Types of Facilities: (Tanks: Diameter, Height, Volume, and # & Berms: Length, Width, and Height)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Management of Wastes and Spills:</b>				
1. Spills or leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Storage Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Drip Pans Exclude Wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. General Housekeeping-- Free of trash and Unnecessary Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pits and Ponds:</b>				
Number and Types of Pits and Ponds:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Adequate Freeboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Lined & Good Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Leak Detection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Free of Oil & Trash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Pits or Location Adequately Fenced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments, Inspection/Monitoring Results, and Additional Actions Necessary:</b>				
Follow-up Requirements: Choose an item.	Correct problem by: Click here to enter a date.	Next Inspection date: Click here to enter a date.		
01-14-2011				

Source: Bureau of Land Management. | GAO-17-307

## Appendix III: Comments from the Department of the Interior



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
Washington, D.C. 20240  
<http://www.blm.gov>



APR 07 2017

Mr. Frank Rusco  
Director, Natural Resources and Environment  
U.S. Government Accountability Office  
441 G Street NW  
Washington, DC 20548

Dear Mr. Rusco:

Thank you for the opportunity to review and comment on the Government Accountability Office (GAO) draft report entitled, *Oil and Gas Development: Improved Collection and Use of Data Could Enhance BLM's Ability to Assess and Mitigate Environmental Impacts* (GAO-17-307). We appreciate GAO's review of the Bureau of Land Management's (BLM) efforts to mitigate environmental impacts from oil and gas development.

The GAO issued BLM six recommendations to address its findings. The BLM concurs with recommendations 1, 2, 4, 5, and 6 in the report and plans to take actions addressing these recommendations. BLM is committed to managing oil and gas development on Federal lands and agrees that there are additional opportunities for tracking and documenting exceptions and for clarifying guidance on the collection and use of data related to permit requirements. The agency is currently updating its Automated Fluid Minerals Support System (AFMSS II) to provide for greater transparency and accountability, ensure consistent data quality, standardize the permit process, and provide the vehicle for addressing specific shortcomings identified in the report. To complement that effort, BLM intends to clarify policy and guidance consistent with the report's recommendations. Additionally, BLM will provide training for those responsible for implementing the policies.

The BLM partially concurs with the recommendation suggesting that BLM's field offices make the results of exception request decisions available to the public. Exception requests are required to be documented in the appropriate case file; these files can be made available to the public upon request. However, making exception decisions available to the public does not necessarily mean that the public can participate in the exceptions decision-making process. This would require a rule change, which the BLM is not in a position to execute at this time. Currently, the public is provided an opportunity to review and comment on land use planning, programmatic and certain site-specific National Environmental Policy Act (NEPA) documents in which exception requests are addressed. AFMSS II will be designed to better track waivers, modification, and exceptions. In addition, mechanisms will be designed to improve public



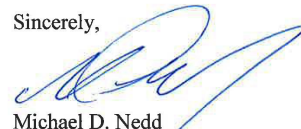
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**Appendix III: Comments from the Department  
of the Interior**

posting; however due to the current state of the databases being completely redesigned this recommendation will take time to implement.

If you have any questions about this response, please contact Steve Wells, Division Chief, Fluid Minerals, at 202-912-7143, or Tiya Samuels, Division Chief, Evaluations and Management Services, at 202-912-7090.

Sincerely,



Michael D. Nedd  
Acting Director  
Bureau of Land Management

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## Appendix IV: GAO Contact and Staff Acknowledgments

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### GAO Contact

Frank Rusco, (202) 512-3841 or [ruscof@gao.gov](mailto:ruscof@gao.gov)

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### Staff Acknowledgments

In addition to the individual named above, Christine Kehr (Assistant Director), Richard Burkard, Mark Braza, Serena Epstein, Gustavo Fernandez, Glenn C. Fischer, Ellen Fried, and Sara Sullivan made key contributions to this report.

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## Appendix V: Accessible Data

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### Data Tables

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#### Data for Figure 1: Bureau of Land Management's (BLM) Process for Overseeing Federal Oil and Gas Resource Development

**Best management practices** are intended to prevent or reduce adverse environmental or social impacts from oil and gas development. BLM identifies practices to apply to oil and gas development during the land use planning phase and incorporates them in lease and permit requirements during the leasing and permitting phases.

**Land use planning** is BLM's method for ensuring public lands are managed under the principles of multiple use (e.g., contributing to the nation's energy supply while mitigating environmental impacts). As part of this phase, BLM typically prepares a National Environmental Policy Act (NEPA) environmental impact statement to identify the potential impacts of development and actions to mitigate such impacts. The public has multiple opportunities to review and comment during this phase.

**Leasing** for oil and gas development is carried out through lease sales. As part of this phase, BLM identifies parcels of land to offer for lease, conducts a NEPA environmental assessment to identify potential environmental impacts, and can attach to leases requirements that are intended to mitigate such impacts. The public has multiple opportunities to review and comment during this phase.

**Permitting** for oil and gas development begins when a leaseholder applies for a drilling permit for a lease. In reviewing a drilling permit application, BLM typically prepares an environmental impact statement or environmental assessment to identify potential environmental impacts and can attach requirements to the permit that are intended to mitigate such impacts. BLM field offices notify the public upon receipt of a drilling permit application. In addition, BLM is in the process of implementing a website called ePlanning through which the public can access BLM's NEPA documents, including environmental impact statements and environmental assessments. However, the public may not have an opportunity to comment on environmental assessments before they are final.

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**Exceptions** to lease and permit requirements are to be granted to operators under certain conditions. Criteria for granting exceptions are developed as part of land use planning and are to be included, as appropriate, in leases and permits.

**Environmental inspections** are conducted to verify operators' compliance with certain lease and permit requirements.

**Monitoring inspections** are conducted to assess the effectiveness of lease and permit requirements in mitigating environmental impacts of development.

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## Agency Comment Letter

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Text of Appendix III: Comments from the Department of the Interior

Page 1

APR 7, 2017

Mr. Frank Rusco

Director, Natural Resources and Environment

U.S. Government Accountability Office 441 G Street NW

Washington, DC 20548

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## Page 2

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Michael D. Nedd Acting Director

Bureau of Land Management

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