December 2005

LIVESTOCK MARKET REPORTING

USDA Has Taken Some Steps to Ensure Quality, but Additional Efforts Are Needed
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While the U.S. Department of Agriculture (USDA) took important actions to produce quality livestock market news reports, GAO found that USDA could improve the reports' transparency. Although packers with large plants must report all of their livestock transactions to USDA, GAO found that USDA market news reporters regularly excluded some transactions as they prepared USDA’s reports. For example, GAO’s analysis showed that from April through June 2005, USDA reporters excluded about 9 percent of the cattle transactions that packers had reported. When USDA excluded transactions, this sometimes changed the low, high, and average prices that USDA would have otherwise reported. However, USDA has not informed its readers of the extent of this practice. Moreover, USDA’s instructions for guiding its market news reporters as they prepared their reports lacked clarity, leading to inconsistency in their reporting decisions.

In addition, GAO found the accuracy of USDA’s livestock market news reports is not fully assured. About 64 percent of 844 USDA audits of packers—conducted over 36 months ending in April 2005—identified packers’ transactions that were inaccurately reported, unsupported by documentation, or omitted from packers’ reports. Moreover, some packers have not promptly corrected problems. Since 2002, USDA has sent 11 packers 21 letters urging the packers to correct longstanding problems and warning them of the consequences of delay. Twice USDA has levied $10,000 fines on packers, but suspended the fines when these packers agreed to comply. As of September 2005, USDA had continuing issues with 2 of the 11 packers. USDA officials noted that packers’ errors are relatively few compared to the large volumes of data that packers report daily. However, USDA has not (1) assessed the overall quality of packers’ data, (2) used its audit results to help focus future audit efforts, and (3) ensured that follow-up promptly resolves problems.

Two USDA agencies have addressed competition in livestock markets—the Agricultural Marketing Service (AMS) and the Grain Inspection, Packers and Stockyards Administration (GIPSA). GAO found the coordination between these agencies to be limited, primarily due to the legal authority within which each operates. AMS has implemented the Livestock Mandatory Reporting Act. That act did not provide authority for AMS to share individual packer transaction data within USDA except for enforcement purposes. In two investigations, AMS provided packers’ data to GIPSA. On the other hand, GIPSA enforces the Packers and Stockyards Act and is responsible for addressing unfair and anti-competitive practices in the marketing of livestock. Furthermore, GAO found that GIPSA monitors cattle and hog markets by analyzing publicly available livestock market news reports—an approach that has limitations because it lacks the company-specific information that would be useful for detecting anti-competitive behavior.
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Abbreviations

AMS Agricultural Marketing Service
ARC Agricultural Marketing Service, Audit, Review, and Compliance Branch
GIPSA Grain Inspection, Packers and Stockyards Administration
USDA U.S. Department of Agriculture

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December 9, 2005

The Honorable Tom Harkin
Ranking Democratic Member
Committee on Agriculture, Nutrition, and Forestry
United States Senate

The Honorable Charles Grassley
United States Senate

Livestock producers’ sales of cattle, hogs, and sheep to meatpackers are a significant component of the U.S. agricultural industry. In 2004, producers’ gross income from these livestock totaled about $63 billion. For producers to be well prepared to negotiate a fair price for their livestock, they need to be able to track changes in livestock prices. For many years, producers have relied on the U.S. Department of Agriculture’s (USDA) livestock market news reports, which until 2001, were based on livestock sales information obtained voluntarily from producers, packers, feedlot operators, and others. However, over the past several decades, producers and packers increasingly have made livestock sales through contracts that were not covered in USDA’s livestock market news reports. By 1999, about 35 percent of cattle and 60 percent of hogs were sold through such contracts. Because of these gaps in the coverage of USDA’s livestock market news reports, many producers believed that they could no longer effectively assess livestock prices, negotiate with packers, or obtain a competitive price when they sold livestock. Some producers have been concerned that there have been “sweetheart” deals between packers and certain cattle feeders, that unreported livestock sales among packers have lowered livestock prices, and that reduced competition in the packing industry has adversely affected their livelihood. In 1999, Congress enacted the Livestock Mandatory Reporting Act to provide livestock market information that could be readily understood by producers, packers, and other market participants and to encourage competition in the marketplace for livestock and livestock products. Under the act and USDA regulations, packers with large packing plants were required to report to USDA all of their purchases of cattle, lamb, and hogs, as well as their sales of beef and

1Under the act and AMS regulations, packers who slaughter an average of at least 125,000 cattle, 100,000 hogs, or 75,000 lambs per year over the last 5 years were required to provide market information to USDA. Packers were required to electronically report their livestock purchases and sales one to three times each business day depending on the species.
lamb meat. Based on packers’ reports of their transactions, USDA publishes about 100 various livestock market news reports, which are available over the Internet.²

In December 2004, when it was due to terminate, the Livestock Mandatory Reporting Act was extended until September 30, 2005. As of September 30, 2005, USDA has continued the program as a voluntary, instead of mandatory, reporting program. Congress, as of December 2005, is considering proposed legislation to extend the mandatory program.³

USDA’s Agricultural Marketing Service (AMS) administered the Livestock Mandatory Reporting Act and produced the livestock mandatory market news reports, among other market reports.⁴ Specifically, about 20 AMS market news reporters located in Des Moines, Iowa and St. Joseph, Missouri, reviewed the packers’ livestock purchases and meat sales transaction data each day and completed AMS’s reports. In addition, AMS staff visited packers’ facilities several times a year to audit the accuracy of information that packers reported to AMS. Another USDA agency—the Grain Inspection, Packers and Stockyards Administration (GIPSA)—has a related responsibility. GIPSA is responsible, under the Packers and Stockyards Act, for addressing unfair and anti-competitive practices in the marketing of livestock. Among other things, GIPSA monitors competition in livestock markets and investigates complaints of unfair and anti-competitive practices under the act.

In the context of the ongoing congressional discussions about the Livestock Mandatory Reporting Act and the quality of information in the reports it provides to producers, we reviewed (1) AMS efforts to ensure the quality of its livestock mandatory market news reports, and (2) the extent to which AMS and GIPSA coordinate their efforts to promote competition in livestock markets.

²See http://www.ams.usda.gov/marketnews.htm


⁴AMS also provides market reports about fruits, vegetables, and specialty crops; milk and other dairy products; cotton and tobacco; grain and hay; poultry and eggs. AMS reports include information on prices, volume, quality, and condition for specific markets and marketing areas. These data are disseminated within hours of collection via the Internet, and made available through electronic means, in printed reports, by telephone recordings, and through the news media.
To review AMS's efforts to ensure the quality of its livestock mandatory market news reports, among other things, we observed AMS's Market News Branch (Market News) reporters as they checked packers' transaction data prior to publication and prepared livestock mandatory market news reports for cattle, hogs, lamb, beef, and lamb meat. We reviewed AMS reporters' instructions for preparing livestock mandatory market news reports and assessed how AMS reporters used their instructions for cattle, hogs, lamb, beef, and lamb meat. We evaluated AMS's efforts to audit packers' records to ensure that packers were accurately reporting their transactions to AMS. In addition, we reviewed AMS's computer system documentation and conducted some limited tests of its performance. We found AMS computer-processed data to be sufficiently reliable for our purposes. To determine the extent of coordination between GIPSA and AMS, we reviewed their legislative authority, identified activities and investigations involving both agencies, reviewed investigation case file information, and discussed them with GIPSA and AMS officials. Our review focused on the livestock mandatory reporting program that terminated on September 30, 2005. Appendix I provides additional details on our objectives, scope, and methodology. We conducted our review between February and November 2005 in accordance with generally accepted government auditing standards.

Results in Brief

AMS took several steps for producing quality livestock mandatory market news reports. Among other things, AMS developed a near real-time Web-based reporting system with automated and manual screening of packers' transaction data, and established an audit surveillance program to ensure that packers report accurately. While important steps have been taken, AMS has not yet fully assured the transparency and accuracy of these reports. Concerning transparency, AMS has not informed readers of livestock mandatory market news reports that it regularly excluded certain transactions in an effort to present prevailing market conditions. Our analysis of AMS market news data shows, for example, that from April through June 2005, AMS reporters excluded about 9 percent of the cattle transactions that packers reported to AMS. AMS officials explained that, in general, AMS excluded transactions that were outside the prevailing market price ranges to avoid reporting price ranges that would be too broad to be useful to market participants. They also said that AMS market news reports were intended to convey overall market conditions rather than precise statistics. According to our interviews with some agricultural economists, they and other readers of AMS market news reports were unaware of the extent of this practice and the effect this practice has on the
prices that AMS reports. In addition, we found that AMS's instructions to reporters for excluding transactions lacked clarity and precision, and differed for cattle, hogs, lamb, beef, and lamb meat. AMS officials said that as a result of the information that we brought to their attention, they started improving AMS's instructions to reporters. AMS officials also said they would consider providing market news report readers with additional information about AMS's reporting practices.

Concerning accuracy, the quality of AMS reports depends on the extent to which packers submit correct transaction information. However, AMS audits have frequently identified instances when packers incorrectly reported transactions. Of 844 AMS audits of packers, which were conducted over the 36 months ending in April 2005, 540—64 percent—identified instances when packers did not report data to AMS correctly. AMS officials said that packers' reporting errors were of concern, but that considering the hundreds of thousands of pieces of transaction data that packers report each day, the errors identified by AMS audits were proportionately few. Nevertheless, a closer look at 86 AMS audits from June through September 2004 shows that AMS identified 46 instances when 22 packers submitted incorrect transaction data that AMS classified as possibly affecting the accuracy of AMS reports. Moreover, some packers did not promptly correct the problems that AMS identified. Between 2002 and September 2005, AMS sent 11 packers 21 warning letters because these packers delayed making corrections in their reporting of transactions. Eight of these warning letters were sent to six packers from January 2004 through September 2005; six letters involved cattle and two involved hogs. AMS twice levied $10,000 fines on packers, but suspended these fines provided the packers went a year without additional violations. Despite this record, AMS officials said that they have seen improvement in packers' reporting of transactions over the past 4 years, and that they believed that most packer transactions were accurately reported to AMS. However, AMS has not developed a method for evaluating the overall accuracy of the transaction data. To lend greater reliability to the reports, AMS officials said they would consider (1) auditing a statistical sample of transactions as a basis for assessing the overall quality of the transaction data, and (2) further assessing their audit results to develop strategies for improving packers' reporting of transactions.

Coordination between GIPSA and AMS has been limited, primarily due to the legal authority within which each operates. AMS implemented and enforced the Livestock Mandatory Reporting Act while GIPSA implements and enforces the Packers and Stockyards Act. The Livestock Mandatory
The Livestock Mandatory Reporting Act of 1999 amended the Agricultural Marketing Act of 1946. The act established a livestock marketing information program to (1) provide producers, packers and other industry participants with market information that can be readily understood; (2) improve USDA price and supply reporting services; and (3) encourage more competition in these markets. Under the act, packers were required to report livestock market information that had previously been voluntarily reported and new information not previously reported to the public—such as information about contract livestock purchases. Under the voluntary program, USDA employees, referred to as reporters, gathered information daily by talking directly with producers, packers, feedlot operators, retailers, and other industry participants; by attending public livestock

AMS continues to collect and report much livestock market information on a voluntary basis.
auctions, visiting feedlots and packing plants; and taking other actions. Under the Livestock Mandatory Reporting Act, packers were instead required to report on their cattle and hog purchases, and their sales of beef. The act also authorized USDA to require that packers report on lambs.

USDA implemented the Livestock Mandatory Reporting Act by establishing a livestock mandatory reporting program to collect packers’ marketing information and disseminate it to the public through daily, weekly, monthly, and annual reports. Packers were required to electronically report hog purchases three times each day, cattle purchases twice each day, lamb purchases once daily, domestic and export sales of beef cuts twice daily, and sales of lamb carcasses and lamb cuts once daily. As of June 2005, 116 packers and importers were required to provide information under the Livestock Mandatory Reporting Act.

Two branches of USDA’s AMS administered the livestock mandatory reporting program—Market News and the Audit, Review, and Compliance Branch (ARC). Market News was responsible for collecting and generating market news reports from information supplied by packers. Market News reporters gathered and reviewed this data, contacted packers to resolve any questions they had, and prepared reports. Reporters were required to ensure that they did not breach the confidentiality of packers by providing information that would allow the public to identify an individual packer. In addition to preparing reports, Market News personnel interacted with any packers that AMS believed needed to make changes in reporting to comply with the Livestock Mandatory Reporting Act.

To identify compliance problems, ARC personnel audited the transaction data of packing plants three times a year. When ARC found packers that were reporting incorrectly, ARC notified the Market News reporters, who were responsible for notifying and following up with packers until the packers reported correctly. The Secretary of Agriculture was authorized to assess a civil penalty of up to $10,000 a day per violation on a packer that violated the act.

The act did not require packers to report on sales of pork products.
AMS designed its livestock mandatory market news reporting program with elements intended to ensure the quality of its news reports. USDA officials, for example, developed a Web-based reporting system with automated and manual screening of packer transaction data and established an audit surveillance program to ensure packers reported accurately. However, we found that while AMS had made progress, its livestock market news program fell short of ensuring reliability because AMS reporting was not fully transparent, and AMS audits of packers revealed some problems with the quality of packers’ transaction data.

AMS hired two contractors to assist in developing a rapid and reliable reporting system: Computer & Hi-Tech Management, Inc. was hired to assess the capability of the packing companies to provide electronic data; and PEC Solutions developed the computer software processes upon which the mandatory livestock reporting system is now based. AMS and PEC Solutions developed a software system that allows packers to provide their transaction data on web-based forms or to upload completed files into the reporting system database. PEC Solutions prepared an industry guide to give packers instructions for correctly submitting transaction data.

AMS further tested the system using simulated production data, because packers had not started reporting actual data. As a further validation step, AMS staff manually calculated data for several reports and compared that data with data generated by the system.

AMS established computer based data security controls and computerized screening of packer transaction data to ensure it is being correctly reported.

AMS established an audit function to periodically test the accuracy of transaction data that packers submit to AMS by visiting packer facilities,
checking documentation in support of reported transactions and testing the completeness of packers’ reports.

In addition, in May 2001, the Secretary of Agriculture appointed a top level USDA team—the Livestock Mandatory Price Reporting Review Team\(^7\)—to review problems in its calculations of certain boxed-beef prices.\(^8\) In addition to reviewing that problem and making related recommendations, most of which AMS adopted, the team assessed the overall integrity and accuracy of the program. This team found that for the most part, AMS had succeeded in gathering and reporting accurate data in a timely fashion. The team’s major criticism was that AMS had not adequately tested its system to ensure it was accurately calculating data that packers had reported. Subsequently, AMS initiated further testing to ensure the accuracy of its reports. The team also found that AMS’s plan for audit surveillance of packers was behind schedule due to difficulties in hiring qualified auditors. At that time AMS had conducted audits at only 19 of the 119 packer facilities it planned to reach. Since then, AMS has overcome these problems and conducted over 1,100 audits at packers’ facilities.

### Extent of Transactions Excluded from AMS Reports Is Not Transparent

The Livestock Mandatory Reporting Act was intended to provide producers with readily understandable market information on a significant portion of livestock industry transactions. The quality of this information is especially important because livestock transactions negotiated each day may be influenced by AMS reported prices, and some contracts between packers and producers rely on the weighted average prices that AMS reports. AMS was authorized to make reasonable adjustments in information reported by packers to reflect price aberrations or other unusual or unique occurrences that the Secretary determined would distort the published information to

\(^7\)This team included, among others, USDA’s Chief Economist, the Associate Administrator of the National Agricultural Statistics Service, USDA’s Associate Chief Information Officer, and the Chairperson, Interagency Livestock Estimates Committee. See U.S. Department of Agriculture, *Livestock Mandatory Price Reporting System Report to the Secretary of Agriculture* (Washington, D.C., July 2001). This report contained recommendations on data entry, data analysis, audit performance, and the confidentiality of proprietary company information. In addition, in 2004 USDA’s Inspector General also recommended improvements in AMS’s computer system controls; see USDA, *Audit Report - Agricultural Marketing Service Livestock Mandatory Price Reporting System - Application Controls* (Washington, D.C., Dec. 2004).

\(^8\)Among other things, this team reviewed USDA’s erroneous reporting of cutout values for choice and select boxed beef carcasses and the major components of carcasses.
the detriment of producers, packers, or other market participants. In addition, AMS should have adhered to the Office of Management and Budget and USDA guidelines for disseminating influential statistical and financial information with a high degree of transparency about the data sources and methods, while maintaining the confidentiality of the underlying information. In addition, AMS has recognized the usefulness of providing the public with information about the preparation of its market reports.

We found that AMS reporters adjusted the transaction data that packers report in an effort to report market conditions, but this practice has not been made transparent. We observed that AMS reporters sometimes eliminated small numbers of apparent erroneous transactions, as would be expected. Significantly, however, we found that AMS reporters eliminated numerous low- and some high-priced transactions that they believed did not reflect market conditions, particularly when reporting on cattle. Our analysis shows that from April through June 2005, when livestock prices were declining somewhat, AMS reporters excluded about 9 percent of the cattle transactions that packers had reported to AMS, about 3 percent of the reported beef transactions, and 0.2 percent of the reported hog transactions. Excluding small percentages of livestock or meat transactions may have had a small effect on the range of prices that AMS reported and a negligible effect on weighted average prices. However, as the percent of transactions excluded increased, so too did the possibility that AMS weighted average prices would be changed from what AMS would otherwise report. Table 1 provides more details about the transactions excluded during this period.

7 U.S.C. § 1636(e).

Office of Management and Budget (OMB), Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies (Washington, D.C.: Feb. 22, 2002). USDA's guidelines were issued in response to OMB's guidelines. Both call for agencies to maximize the quality, objectivity, utility and integrity of information, including statistical information that they disseminate to the public. Also, both OMB and USDA guidelines recognize that transparency does not override other compelling interests such as confidentiality protections.
Concerning hogs, during a period of rising prices between October 2003 and March 2004, we found that 0.1 percent of hog transactions were excluded from AMS reports. Because AMS reports excluded significantly more cattle transactions, we performed further analyses on them. Tables 2 and 3 show (1) information about the cattle transactions that AMS excluded from certain livestock mandatory market news reports from May through October 2003, and (2) examples of 12 days from this period showing the effects of the transactions that AMS excluded on the reported price ranges, and weighted average prices. During the period, AMS reporters’ decisions to exclude transactions had some effect on the cattle data we analyzed in AMS reports on about one third of the days and almost no effects on the others.

11According to AMS reporters’ log notes, cattle were excluded for various reasons such as price, low price, high price, base price, or lot size.
Table 2: Cattle Transactions Excluded From AMS Reports, May through October, 2003

<table>
<thead>
<tr>
<th>Transactions</th>
<th>Cattle Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported by packers</td>
<td>399,471</td>
<td></td>
</tr>
<tr>
<td>Excluded by AMS</td>
<td>90,998</td>
<td>22.8</td>
</tr>
</tbody>
</table>

Head count

<table>
<thead>
<tr>
<th>Transactions</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported by packers</td>
<td>15,792,982</td>
<td></td>
</tr>
<tr>
<td>Excluded by AMS</td>
<td>2,921,956</td>
<td>18.5</td>
</tr>
</tbody>
</table>

Source: GAO analysis of all AMS cattle data reported by packers on the Live Cattle Daily Report (Current Established Prices).

Table 3: Examples of Changes in Cattle Prices AMS Reported, May through October, 2003

<table>
<thead>
<tr>
<th>Date</th>
<th>AMS reported price ranges</th>
<th>GAO price ranges with transactions excluded by AMS</th>
<th>AMS reported weighted average price</th>
<th>GAO weighted average price with transactions excluded by AMS</th>
<th>Change in weighted average price reported by AMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 5</td>
<td>$123 - $126</td>
<td>$122 - $126</td>
<td>$123.30</td>
<td>$123.25</td>
<td>$0.05</td>
</tr>
<tr>
<td>May 16</td>
<td>124 - 125</td>
<td>105 - 125</td>
<td>124.63</td>
<td>123.12</td>
<td>1.50</td>
</tr>
<tr>
<td>May 19</td>
<td>125 - 128</td>
<td>124 - 128</td>
<td>126.16</td>
<td>125.86</td>
<td>0.30</td>
</tr>
<tr>
<td>June 12</td>
<td>121 - 125</td>
<td>113 - 125</td>
<td>123.37</td>
<td>123.32</td>
<td>0.05</td>
</tr>
<tr>
<td>July 11</td>
<td>116.50 - 120</td>
<td>115 - 120</td>
<td>119.05</td>
<td>118.98</td>
<td>0.07</td>
</tr>
<tr>
<td>August 1</td>
<td>127 - 127</td>
<td>122.50 - 127</td>
<td>127.00</td>
<td>125.21</td>
<td>1.79</td>
</tr>
<tr>
<td>August 11</td>
<td>125 - 128</td>
<td>123 - 128</td>
<td>126.28</td>
<td>125.65</td>
<td>0.63</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>135 - 145</td>
<td>131 - 145</td>
<td>141.63</td>
<td>141.37</td>
<td>0.26</td>
</tr>
<tr>
<td>Sept. 29</td>
<td>140 - 141</td>
<td>138 - 141</td>
<td>140.25</td>
<td>138.84</td>
<td>1.41</td>
</tr>
<tr>
<td>Oct. 14</td>
<td>170 - 182.75</td>
<td>150 - 182.75</td>
<td>176.30</td>
<td>175.83</td>
<td>0.47</td>
</tr>
<tr>
<td>Oct. 15</td>
<td>175 - 187</td>
<td>167 - 187</td>
<td>180.48</td>
<td>180.04</td>
<td>0.44</td>
</tr>
<tr>
<td>Oct. 29</td>
<td>155 - 158</td>
<td>155 - 180</td>
<td>157.52</td>
<td>160.27</td>
<td>(2.75)</td>
</tr>
</tbody>
</table>

Source: Selected dates from AMS’s Five Area Daily Weighted Average Direct Slaughter Cattle Report, Negotiated; and GAO analysis of AMS data for 35 – 65 percent choice steers, dressed weight as reported by packers on the Live Cattle Daily Report (Current Established Prices).

*GAO replicated these AMS-reported average prices, ensuring that our calculations using AMS data produced similar results. For our calculations of average weighted price and price ranges, we included those transactions that AMS had excluded for market reasons, such as high or low price, or size of lots, but we did not include those transactions that AMS had removed because they thought them to be base prices.
Further details of our analyses are discussed in appendix I and shown in appendix II.

AMS guidance for its reporters on eliminating transactions is limited, lacking clarity and precision. These instructions advise AMS reporters to review transactions which packers have reported each day, and to eliminate certain low- and high-priced transactions. AMS’s varying instructions for reporters are described in table 4.

<table>
<thead>
<tr>
<th>Table 4: AMS Market News Reporters’ Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
</tr>
<tr>
<td>• Narrow up price spreads, if possible, depending on how trade took place the previous week. Keep price ranges within $5 of the bulk of the trade and narrower, if possible.</td>
</tr>
<tr>
<td>• Remove weights that are unusually high or low for an animal.</td>
</tr>
<tr>
<td>• For cattle sold on formula, a market news reader should not see the lowest or highest cattle prices packers’ reported. The lower prices should be the lower end of marketable cattle prices within explainable limits; and on the high side, the best price that would be reasonable and obtainable by marketing desirable type cattle. (GAO note: “explainable limits,” “reasonable,” and “desirable type” are not defined.)</td>
</tr>
<tr>
<td>Beef</td>
</tr>
<tr>
<td>• Scan reports to determine whether prices fell in the expected range and eliminate small trades that are outside the expected price range for each item. Contact packers when large quantities of beef fall outside expected price range.</td>
</tr>
<tr>
<td>• The expected price range for a beef item is to be based on historical and current price ranges for the item, current market conditions for the item, and overall beef market conditions.</td>
</tr>
<tr>
<td>• Consider excluding trades when prices are not within close proximity of another packer.</td>
</tr>
<tr>
<td>Hogs</td>
</tr>
<tr>
<td>• If there are problems with prices for barrows, gilts, or sows, contact the packer to verify the information.</td>
</tr>
<tr>
<td>Lamb (live)</td>
</tr>
<tr>
<td>• Review the data to determine if there are any high, low or questionable prices that need to be removed.</td>
</tr>
<tr>
<td>• Separate the outliers.</td>
</tr>
<tr>
<td>Lamb (meat)</td>
</tr>
<tr>
<td>• Edit extremes for all price ranges in question.</td>
</tr>
<tr>
<td>• Review the report and check any price ranges that appear out of line. (GAO note: “out of line” is not defined.)</td>
</tr>
</tbody>
</table>

Source: AMS guidance for reporters.

Senior AMS supervisors review reporters’ decisions to eliminate transactions, and AMS headquarters officials monitor the number of—and reasons why—transactions are being excluded by reporters. AMS officials explained, in general, their reviews and adjustments are intended to exclude transactions that are outside the prevailing market price ranges, and to avoid reporting ranges of prices that appear overly broad. Furthermore, Market News officials explained that this process is conducted because they believe that livestock market reports are intended to convey overall market conditions rather than precise statistics. Also, an AMS official noted that AMS Market News reporters mostly exclude low-price transactions involving small quantities, because those transactions often are lower quality animals or products. Concerning hogs, AMS’s reporters of hog transactions said that they were verbally instructed to...
exclude few hog transactions by headquarters officials soon after the start of the program. AMS headquarters officials said that these verbal instructions were provided after one or more large packers complained that it appeared AMS was excluding transactions because of price alone.\(^\text{12}\)

Given that AMS reporters’ decisions to exclude transactions modified the prices they reported, AMS has not well-explained this practice to readers of AMS livestock market news. AMS’s Web site does not address the subject, and AMS livestock mandatory market news reports are unqualified. Some agricultural economists who study the livestock market and other industry experts we interviewed said that they were not aware of the extent of adjustments that AMS made. An AMS official explained that AMS has not previously provided public information on this process because it would be difficult to capture the nuances of AMS’s report preparation in a public document. Nevertheless, AMS previously acknowledged that it may be useful to provide information to the public about types of adjustments that it makes to its livestock mandatory market news reports.\(^\text{13}\) AMS officials also recognized that it would be desirable for AMS to improve its instructions for reporters and disclose more about its reporting practices to livestock market news report readers. Our review of AMS’s database indicates that further analyses could provide AMS with more information about the reasons why reporters eliminate transactions, the consistency of reporting, as well as the extent of changes in AMS’s presentation of prices. AMS’s Livestock and Seed Program Deputy Administrator said that, as a result of the information we brought to his attention, he had started to improve the reporters’ instructions.

Since AMS reports help provide the industry with signals about when, where, and at what price to buy and sell livestock and meats, some industry participants may have been guided to somewhat different decisions on certain days if they had a greater understanding of AMS report content. In addition, the lack of transparency over the content and preparation of the livestock mandatory market reports may have also limited the confidence that some readers place in AMS reports.

\(^{12}\)AMS officials said that they did not have correspondence or documentation about these complaints or their instructions to staff that report on hogs.

\(^{13}\)65 Fed. Reg. 75,464, 75,479 (Dec 1, 2000).
ARC Audits Identified Instances When Packers Reported to AMS Inaccurately

ARC regularly audited packers to provide assurance that the packers reported all of their transactions accurately and in compliance with AMS's regulations. The quality of AMS reports depends on packers submitting correct transaction information. Once every 4 months, ARC auditors visited each of the 116 packers' plants, or associated company headquarters, to review livestock transaction data. These audits usually included: (1) a test of the completeness of the packer's reports, and (2) a detailed review of a sample of transactions to determine that each transaction in the sample was reported accurately and was supported by appropriate documentation. ARC has conducted over 1,100 audits at packers' facilities since 2001. Detailed information was available for 844 of these audits conducted over the 36 months ending in April 2005. Table 5 contains additional information about the content of ARC audits.

Table 5: Content of ARC Audits of Packers

<table>
<thead>
<tr>
<th>Type of audit</th>
<th>Review of a full day of packer transactions</th>
<th>Review of a sample of packer transactions reported to AMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS's audit goal</td>
<td>To ensure packers report complete information to AMS</td>
<td>To ensure packers report accurate information to AMS in a timely manner</td>
</tr>
<tr>
<td>Information reviewed</td>
<td>• Plant slaughter records</td>
<td>• Plant slaughter records</td>
</tr>
<tr>
<td></td>
<td>• Food Safety and Inspection Service slaughter records</td>
<td>• Sales invoices</td>
</tr>
<tr>
<td></td>
<td>• Sales invoices</td>
<td>• Bills of lading</td>
</tr>
<tr>
<td></td>
<td>• Bills of lading</td>
<td>• Original contracts, agreements, and receipts</td>
</tr>
<tr>
<td></td>
<td>• Documentation about why transactions not reported to AMS are not subject to the Livestock Mandatory Reporting Act</td>
<td>• Other records relating to the purchase, sale, pricing, transportation, delivery, weighing, slaughter, or carcass characteristics of livestock</td>
</tr>
<tr>
<td>Frequency of review</td>
<td>• Three times a year for plants whose records are reviewed at the plant</td>
<td>Three times a year</td>
</tr>
<tr>
<td></td>
<td>• Once a year for plants whose records are reviewed at company headquarters</td>
<td></td>
</tr>
</tbody>
</table>

Source: AMS records.

14AMS officials told us that since September 2005, their auditors have continued to visit packer facilities to monitor the quality of livestock data.

15ARC auditors review records at packers' plants or company headquarters, depending on the location of records and officials that can answer auditors' questions. During an audit, AMS may review more than one plant's records at a time.

16AMS did not retain documentation on about 260 audits conducted prior to March 2002 due to a computer system failure that deleted ARC audit information.
Of the 844 AMS audits for which data were available, 540—64 percent—identified one or more instances when it appeared that packers did not meet AMS reporting standards. The other 304 audits, or about 36 percent, did not identify any such instances. AMS audits detected a wide variety of packer reporting inaccuracies such as the omission of livestock slaughtered, underreporting of purchases, delayed reporting of livestock purchases and meat sales, price inaccuracies, and the misclassification of transactions. While noting the frequency of AMS audit findings, AMS officials commented that packers’ reporting errors were of concern. AMS officials also said that its audit results should be considered in the context of the volume of transactions that AMS reports—compared to the hundreds of thousands of pieces of transaction data that packers reported daily, the errors identified by AMS audits were relatively few. However, our review shows that AMS findings are based on audits of a small portion of packers’ transactions, and it is likely that there have also been errors in packers’ unaudited transactions. Furthermore, a closer look at 86 AMS audits completed from June through September 2004 shows that AMS identified 46 instances when 22 packers submitted incorrect transaction data that AMS classified as possibly affecting the accuracy of AMS reports. Table 6 provides examples of AMS audit findings.\footnote{ARC also conducted a few investigative audits at the request of Market News. In one, for example, ARC determined that several packers did not have a process for ensuring the timely reporting of livestock trades, and did not have documentation that trades occurred at the time they were reported. All but one of the packers corrected this problem within in a few months, but the other took almost a year.}
AMS officials said many ARC audit findings were minor and usually had little effect, if any, on the accuracy of AMS reports. In addition, they also said that since 2001, packers had clearly improved their reporting of transactions. AMS officials said that because of the overall improvement in packers’ reporting of transactions, they reduced the frequency of audits at each packer from four to three times a year. Our review provides some support for AMS officials’ view that packers were reporting better than at the outset of the program. From May 2002 through April 2005, the number of AMS audits with findings as a percent of total audits decreased each year, from 76 percent in 2002 to 55 percent in 2005. In addition, the average number of audit findings per audit decreased from 1.8 to 1.4 over that period. Moreover, in the first quarter of 2005, AMS audits did not identify any problems that rose to its highest level of concern. Nevertheless, AMS classified 22 percent of the problems it identified in the first quarter of 2005 as possibly having some adverse effect on the accuracy of its reports. In addition, follow-up was sometimes lengthy on problems ARC auditors identified. Our analysis of follow-up efforts by AMS on the 86 audits it conducted between June through September 2004, showed that, on

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Table 6: Examples of ARC Audit Findings

<table>
<thead>
<tr>
<th></th>
<th>Example of ARC Audit Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A packer incorrectly reported the weekly premiums it paid for its hogs on a live weight basis instead of a carcass weight basis. As a result, the weekly premium report was not accurate. An AMS reporter said this finding was significant at the time because only a small number of packers were reporting this weekly data and because the error could occur repeatedly.</td>
</tr>
<tr>
<td>2.</td>
<td>A packer did not report the purchase of 5 lots of cattle, totaling 117 head. The packer explained that some of the cattle were unscheduled purchases from local producers but could not provide an explanation for the remainder. An AMS reporter said that unscheduled cattle purchases can present reporting difficulties for packers. AMS verified that the packer was reporting all its cattle purchases about 2 months after the audit was completed.</td>
</tr>
<tr>
<td>3.</td>
<td>A packer did not report slaughter information on 780 hogs that had been purchased on a live weight basis.</td>
</tr>
<tr>
<td>4.</td>
<td>A packer did not report two large loads of beef totaling 83,000 pounds. An AMS reporter explained that this beef product—boneless beef trimmings—was sold in high volume, so that this omission was relatively insignificant provided that it rarely occurred.</td>
</tr>
<tr>
<td>5.</td>
<td>A packer was submitting its weekly data on slaughtered cattle early—on Thursday or Friday—instead of the following Monday as required, thereby not reporting the data in a manner consistent with other packers.</td>
</tr>
<tr>
<td>6.</td>
<td>A packer could not provide supporting documentation to verify the time that the price was established for its hog purchases.</td>
</tr>
</tbody>
</table>

Source: GAO review of ARC audit reports and interviews with AMS staff.

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AMS's highest level of concern involved packers not submitting information or submitting incorrect information that likely would affect the accuracy of AMS reports. AMS's second level of concern involved packers making inadvertent omissions or inaccuracies that could affect the accuracy of AMS reports. AMS had three other levels of concern relating to lesser potential infractions that were unlikely to affect AMS's reports.
average, about 85 days\textsuperscript{19} elapsed between the date of an AMS audit and the date AMS recorded that the packer had made the needed corrections.\textsuperscript{20}

AMS reporters frequently contacted packers to convey information about the correct way for packers to report. Their outreach was prompted both by audit findings and by reporters’ reviews of the packers’ data. When recurring reporting problems arose, headquarters officials issued internal guidance to clarify proper reporting procedures for both auditors and reporters. On at least two occasions, AMS reporters provided information from this internal guidance to packers to clarify proper reporting procedures.\textsuperscript{21}

However, some packers, including three of the largest packers, did not promptly correct reporting problems that AMS identified. Since 2002, AMS sent 11 packers 21 letters to call to the packers’ attention apparent delays in correcting reporting issues and warning the packers that penalties might be applied should there be further delays in addressing these issues. Of these, AMS sent 8 letters to 6 packers between January 2004 and September 2005, with 6 letters involving cattle and 2 involving hogs. In addition, twice AMS levied fines on packers of $10,000, although these fines were suspended provided these packers went a year without additional violations of the Livestock Mandatory Reporting Act. As of September 2005, AMS had continuing issues with 2 of 11 the packers that received AMS warning letters. Appendix III contains additional information on the issues leading to AMS warning letters to packers.

While AMS audit reports identified many problems in packers’ reporting of transactions, there are two reasons why the reports do not provide a clear basis for assessing the overall accuracy of packers’ data which underlie AMS livestock mandatory market news reports. First, AMS did not select transactions for audit in a manner that would enable AMS to project the overall accuracy of packers’ data. Second, AMS did not develop

\textsuperscript{19}The calculation of 85 days did not include data related to follow-up on five unresolved compliance issues.

\textsuperscript{20}The Livestock Mandatory Reporting Act terminated in October of 2004 and was subsequently reauthorized in December 2004. This lapse in authority likely had some effect on AMS and packers’ efforts to address reporting issues.

\textsuperscript{21}For example, shortly after mandatory reporting started, packers often incorrectly reported freight costs and premium payments. AMS developed internal guidance about how these costs should be reported and provided this guidance to packers.
analyses that demonstrate the overall accuracy of information in its reports. We explored two approaches with AMS officials to (1) obtain better indications of the overall accuracy of packers’ transaction data, and (2) better direct future AMS audits.

- First, AMS audits did not provide a basis for projecting the overall accuracy of packers’ transaction data. Another approach, in which AMS would periodically audit a statistical sample of transactions, might provide a basis for projecting the overall accuracy of the transactions.

- Second, AMS could analyze its audit results, focusing on findings of consequence and its follow-up efforts to address those findings. Such analyses could be useful for identifying the relative frequency of concerns with packers’ transaction data, the types of recurring errors, the timeliness and consistency of auditor and market news follow-up on packer’s actions to address reporting issues, and the overall effectiveness of AMS efforts to quickly resolve reporting issues.

AMS officials indicated that these suggestions appeared to be reasonable and that they would consider taking both steps.

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**Packers Sometimes Reported to AMS After Deadlines**

AMS data show that from April through June 2005, 4 percent, 5 percent and 7 percent of selected cattle, beef and hog data, respectively, were received from packers by AMS after the deadlines set by the Livestock Mandatory Reporting Act. Nevertheless, AMS officials said that while some packers missed the reporting deadlines, most usually submitted their transaction data within minutes thereafter—giving AMS reporters enough time to include almost all transaction data in market news reports. In addition, AMS officials said that if some reporting deadlines and publication times set in the Livestock Mandatory Reporting Act were changed, this would help packers working on the west coast meet the reporting schedule and help AMS meet changing market conditions.

**GIPSA and AMS Coordination Has Been Limited**

GIPSA and AMS coordination has been limited, primarily due to the legal authority within which each operates.

- AMS implemented and enforced the Livestock Mandatory Reporting Act. While the Livestock Mandatory Reporting Act called for the establishment of a mandatory reporting program, it required
information be made available to the public in a manner that ensured the confidentiality of the identity of persons and proprietary business information. Such information could not be disclosed except (1) to USDA agents or employees in the course of their duties under the Livestock Mandatory Reporting Act, (2) as directed by the Secretary or the Attorney General for enforcement purposes, or (3) by a court. AMS officials said that they have shared packer transaction data with GIPSA when requested for specific investigations.

- GIPSA implements and enforces the Packers and Stockyards Act. GIPSA monitors livestock markets and investigates when it has reason to believe there have been violations of the act.22

Since 1999 when the Livestock Mandatory Reporting Act was adopted, there have been two cases where GIPSA formally requested access to a packer's transaction data from AMS for specific investigations. AMS provided access as GIPSA requested. One investigation involved hogs, and the other, lamb. In one case, opened in October 2002, GIPSA investigated whether a packer was manipulating reported prices in AMS's livestock mandatory reporting program to reduce its procurement costs. GIPSA did not identify a violation of the Packers and Stockyards Act, and closed this investigation in 2005. However, GIPSA identified instances in which the packer's reports of negotiated livestock purchases met the documentation standards of the Packers and Stockyards Act, but may not have met the standards of the Livestock Mandatory Reporting Act.23 In September 2005, GIPSA officials briefed AMS officials on their investigation, and suggested that AMS consider whether the packer was complying with the Livestock Mandatory Reporting Act. In response to our further questions about this case, officials of AMS and GIPSA said that they would consider additional inquiry or investigation under both statutes to determine if there have been repeated transactions reported to AMS for which the packer lacks certain

22GIPSA is responsible for addressing unfair and anti-competitive practices in the marketing of livestock. Among other things, the act prohibits packers from engaging in or using any unfair, unjustly discriminatory or deceptive practice or device, or making or giving any undue or unreasonable preference or advantage to a person or locality. See GAO, Packers and Stockyards Programs: Actions Needed to Improve Investigations of Competitive Practices, GAO/RCED-00-242 (Washington, D.C.: Sept. 21, 2000).

23In some instances, GIPSA found that the packer's negotiated purchases were of small lots that had set the low price AMS reported. As expected, the livestock in these transactions were of lower quality than most on the market, and also of lesser quality than the packer's large volume purchases.
documentation. In the second case, GIPSA investigated the possibility that a packer paid less for livestock as a result of providing undue preference to a select group of producers. GIPSA initiated this case in May 2002 and closed this case in September 2005.

GIPSA officials said that individual packer transaction data held by AMS would be useful for monitoring competitive behavior in livestock markets. However, because GIPSA could not obtain that confidential information unless the Attorney General or the Secretary directed disclosure of the information for enforcement purposes, GIPSA is making due with the publicly available AMS livestock market report data. This monitoring effort is limited because AMS reports do not include the company-specific transaction data that might reveal anti-competitive behavior. More specifically, GIPSA uses publicly available AMS report data in cattle and hog price monitoring programs to forecast market prices for comparison with actual prices. If there are notable differences, GIPSA officials attempt to assess whether economic conditions could be responsible. Should GIPSA find that a difference was not readily explained by economic conditions, then GIPSA would further investigate to determine if anti-competitive behavior of individual firms were involved. At such a point, GIPSA may request that AMS provide company specific livestock transaction data for GIPSA's investigation. GIPSA officials said that while this monitoring effort is less informative than one that would rely on company specific transaction data, their monitoring programs are relatively new and they have not identified better alternatives at this point.

Conclusions

AMS has not achieved the level of transparency needed for establishing the reliability of its livestock market news reports—a level that would more fully disclose to market participants and observers its practices in reviewing packers’ transactions, and the effects on AMS reports. Without further disclosure of its reporting practices, market participants are less informed than they should be about (1) AMS reporters’ reviews, (2) AMS decisions on presenting prevailing prices, and (3) the results of AMS audits of packers’ transactions. Also, the lack of precision and clarity in AMS’s varying instructions for its reporters has led to inconsistent reporting approaches, which could adversely affect readers’ confidence in AMS reports. AMS market news readers should have information that enables them to understand AMS’s approach to reporting prices, and to have confidence that the approaches are based on sound statistical, economic, and reporting guidance. In addition, the problems which AMS audits identified in packers’ transaction information warrant continued vigilance.
if the mandatory reporting program is renewed. Unless AMS takes some additional steps, it will not have information to (1) assess the overall accuracy of packers’ transaction data, (2) focus its audit efforts on recurring significant problems, and (3) ensure that prompt and consistent action on audit findings is being taken. Concerning the GIPSA investigation in which GIPSA raised questions about a packer’s documentation of its transactions, unless AMS and GIPSA complete further investigative work, neither agency can have assurance of the accuracy and propriety of the packers’ transactions.

**Recommendations**

Should Congress extend the Livestock Mandatory Reporting Act, we recommend that the Secretary of Agriculture direct the Administrator, Agricultural Marketing Service to:

- Increase transparency by (1) reporting to market news readers on its reporters’ instructions for making reporting decisions that reflect prevailing market conditions, (2) periodically reporting on the effects of reporters’ decisions on AMS reported prices, and (3) reporting the results of its audit efforts.

- Clarify AMS reporter’s instructions to make them more specific and consistent by (1) consulting with packers, producers, agricultural economists, and other interested stakeholders, and (2) undertaking revisions that consider economic analyses of past reporting trends, livestock and meat market variations, and federal statistical and information reporting guidance.

- Develop information about the overall accuracy of packers’ transaction data by auditing a statistical sample of packers’ transactions.

- Further develop AMS audit strategies to identify recurring significant problems.

- Address the timeliness and consistency of AMS reporters’ efforts to follow-up on audit findings.

We also recommend that the Secretary of Agriculture direct the Administrators of the Agricultural Marketing Service and the Grain, Inspection, and Packers and Stockyards Administration to further investigate the reporting practices of one packer’s low-price purchases of livestock.
Agency Comments and Our Evaluation

We provided USDA with a draft of this report for review and comment. In a memorandum dated November 18, 2005, we received formal comments from USDA’s Acting Under Secretary for Marketing and Regulatory Programs. These comments are reprinted in appendix IV. We also received oral technical comments from AMS and GIPSA officials, which we incorporated into the report as appropriate.

USDA generally agreed with our findings and recommendations, and discussed the actions it has taken, is taking, or plans to take to address our recommendations. Among other things, USDA stated that AMS would (1) prepare publicly available reports on the volume of transactions excluded by reporters and their effect on reported prices, and take steps to increase public awareness of reporting methods and processes; (2) clarify AMS reporters’ instructions while following federal and departmental statistical and information reporting guidance; (3) post quarterly audit information to its website and identify additional audit information to add in the future; (4) develop auditing methods to allow conclusions to be drawn about overall data accuracy; (5) review its auditing methods to increase the overall effectiveness of the compliance program; and (6) conduct further inquiry into the issues raised during one of GIPSA’s investigations.

Concerning the transactions that AMS excluded from its market news reports, USDA agreed that 22.8 percent of cattle transactions were excluded from May to October 2003. USDA added that AMS reporters excluded some transactions during that period because its computer system could not differentiate between the base and net prices for certain cattle sales. Our review indicates that AMS exclusions for that reason were part of the story. More specifically, AMS reporters’ log entries showed that of the transactions AMS excluded from May to October 2003, about 24 percent were excluded for reasons relating to base prices, while about 34 percent of the transactions were excluded to narrow the range of prices that AMS reported, and the remainder were excluded for a variety of other reasons such as small head count, small lots, low weight, mixed lots, or grade of cattle. In addition, AMS suggested that its programming change to differentiate base and net prices led to fewer exclusions—8.8 percent—during the April through June 2005 period. While we agree that is part of the explanation, we believe, if the livestock mandatory program is renewed, that AMS needs to focus on the bases and methods for excluding transactions, and especially the extent to which AMS will be excluding transactions when prices are again rapidly changing, such as they did in 2003.
AMS also stated that care should be exercised when drawing conclusions about packer compliance because packers' errors are relatively few compared to the 500,000 data elements packers may have submitted on some days. We believe insufficient information is available to assess the overall quality of packer data. AMS audits only focused on a small portion of the data submitted by packers, and it is likely that packers' unaudited transactions contain errors as well. We continue to believe that packer reporting problems that AMS identified warrant continued vigilance should the program be renewed and recommend that AMS develop auditing methods to allow conclusions to be drawn about overall accuracy of packer's data.

As agreed with your staffs, 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 of this report to interested congressional committees; the Secretary of Agriculture; the Under Secretary for Marketing and Regulatory Programs; the Administrators of the Agricultural Marketing Service and the Grain Inspection, Packers and Stockyards Administration; and other interested parties. We will also make copies available to others on request. In addition, the report will be available at no charge at GAO's Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or robinsonr@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.

Robert A. Robinson
Managing Director, Natural Resources and Environment
Our objectives were to review the extent to which (1) the U.S. Department of Agriculture’s (USDA) Agricultural Marketing Service (AMS) takes sufficient steps to ensure the quality of its livestock mandatory market news reports, and (2) AMS and the Grain Inspection, Packers and Stockyards Administration (GIPSA) coordinate efforts to encourage competition in livestock markets.

To review AMS's steps to ensure the quality of its reports, we visited the two Market News Branch (Market News) field offices in Des Moines, IA, and St. Joseph, MO, and spoke with AMS reporters about their responsibilities related to mandatory price reporting and observed them as they prepared livestock mandatory reports for cattle, beef, hogs, lamb and lamb meat. To test AMS's computerized reporting system, we obtained and analyzed unpublished data from AMS's livestock mandatory reporting database for beef, cattle, and swine. For this analysis, we used data reported by packers through the Live Cattle Daily Report (Current Established Prices) (LS-113), Swine Daily Report (LS-119), and Boxed Beef Daily Report (LS-126) contained in AMS's livestock mandatory reporting database. We reviewed USDA documents on the report preparation and data storage system and analyzed the flow of data into and through the system. We performed electronic testing and validation of system data developed for us from data available in the AMS system. We found the data were sufficiently reliable to support our analyses. We also replicated elements of certain reports—the Five Area Daily Weighted Average Direct Slaughter Cattle Report and the National Daily Direct Morning Hog Report—that livestock experts told us were important to livestock producers.

In addition, we examined transactions reporters excluded from AMS reports. First, we examined transactions made between April and June 2005. More specifically, we reviewed data packers submitted on the Live Cattle Daily Report (Current Established Prices) (LS-113), Swine Daily Report (LS-119), and Boxed Beef Daily Report (LS-126) and compared it with the reports published during this period. Second, we examined transactions AMS excluded from its reports during periods of rapidly rising cattle and hog prices—for cattle, transactions excluded by reporters for a key category of live and dressed cattle prices from May through October 2003; for hogs, those excluded from October 2003 to March 2004. To

1During this period, cattle prices were falling somewhat from a high plateau of the two previous years. Hog prices were also declining somewhat during this period.
determine which transactions were eliminated for market reasons, we reviewed the reporter log field in the database. The logs identify transactions eliminated for various reasons, such as price, low price, high price, or lot size. We analyzed data from all days reported for this time period in the 35 to 65 percent choice steer grade of the Five Area Weighted Average Direct Slaughter Cattle Report. We then calculated the weighted average prices with and without the excluded transactions and the difference between these prices. In addition, we performed a statistical test to determine whether the difference between the prices, as a group, was statistically significant.

We discussed how AMS performed audits to ensure packers were complying with the Livestock Mandatory Reporting Act provisions with AMS's Audit Review and Compliance (ARC) officials in USDA headquarters, and with auditors in both Des Moines and St. Joseph. As part of this effort, we obtained and reviewed the mandatory price reporting

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2For cattle, we focused this component of our analysis only on those transactions eliminated because of market reasons, excluding those reporters recorded as errors that were deleted as part of the AMS quality control process. For hogs, we examined the weighted average prices with and without transactions excluded by AMS reporters for all reasons.

3When market reporters exclude a transaction, they are to include the reason, their name, and the date and time in a data field called the “record log.” In order to screen out obvious price errors due to situations like decimal place errors, damaged animals, or live animals reported as dressed, etc., we set boundaries to screen out extremely high or low prices.

4Market News reports summary data such as price, volume, and price ranges that are sorted according to several key characteristics of livestock transactions. The transaction characteristics that represent reporting are class of cattle, selling basis, quality grade, and purchase type. Beef grades include higher quality grades such as Prime, Choice, Select, and lower categories such as Standard and Commercial. Packers report to AMS the percentage of cattle in a lot that they expect to grade at Choice or better, and these lots are assigned categories of 0-35 percent, 35-65 percent, 65-80 percent, and over 80 percent. According to a USDA report, the 35-65 percent Choice category is the most common quality class. For a small number of days, we could not precisely replicate the actual average weighted price with the one reported because of adjustments, rounding differences or the inclusion of data that was reported late. We did not include in our analysis those days where we could not closely replicate AMS prices.

5Each price is a weighted average price for that day where the weights are quantities of cattle in each transaction.

6In order to do this, we used the “Proc t-test,” a programming routine in the Statistical Analysis System (SAS) package to see if the difference between paired sets of data is statistically significant. In this case the paired sets of data that we examined are the weighted average prices with and without the adjustments to the data made for market reasons.
Appendix I
Objectives, Scope, and Methodology

audit reports that ARC conducted from May 2002 through April 2005. In particular, we used ARC's database of audit reports to analyze the number of audits conducted over the time period, the number of findings related to those audits, and other information. ARC officials and our analysis indicated that the number of audit reports in the database closely approximated the number of audits conducted. We found this database to be sufficiently reliable for this purpose. Because this database did not provide specifics on the reasons AMS believed some companies were out of compliance, we performed a detailed review of all audit reports during one 4-month audit cycle from June through September 2004. We also obtained information from AMS Headquarters officials regarding the formal warning letters they sent packers and the penalties they assessed.

We analyzed ARC's audit methodology for sampling transactions and the extent to which that sample of transactions could provide information on packer compliance and the accuracy of the reported prices. In addition, we reviewed ARC policy and procedures, the audit report database, and had discussions with ARC officials and auditors. Specifically, we interviewed ARC officials regarding their audit methodology with emphasis on their sampling methodology, and we reviewed their documentation on sample selection. Furthermore, to analyze the agency's sampling procedure, we compared the time between the audit field visit and the days selected for the audit of a full day's transactions, and the audit of a sample of transactions over the 4-month audit cycle from June through September 2004.

To determine the extent of coordination between GIPSA and AMS, we reviewed their legislative authority, identified activities and investigations involving both agencies, and reviewed GIPSA case file documentation from the competition-related investigations in which GIPSA obtained packers' transaction data from AMS. We met with USDA Headquarters officials from AMS and GIPSA. In Des Moines, we met with GIPSA's Packers and Stockyards Programs regional officials, and on separate occasions, spoke with GIPSA's Denver Regional Office officials regarding GIPSA and AMS coordination.

During the course of our review, we identified and obtained the views of several industry groups and associations representing packers and producers. We also interviewed several nationally recognized economic experts knowledgeable about mandatory price reporting and related market issues.
We conducted our review between February and November 2005 in accordance with generally accepted government auditing standards.
Overall, from April 2005 through June 2005, we found approximately 8.8 percent of cattle transactions, 0.2 percent of hog transactions, and 2.7 percent of boxed beef transactions were eliminated. From May 2003 to October 2003, a period of rapidly rising prices, we found that approximately 22.8 percent of all cattle transactions were excluded from AMS reports.\(^1\) Figure 1 shows that close to 95 percent of all excluded dressed weight cattle transactions from negotiated sales were smaller lots—groupings of cattle for sales purposes—of fewer than 25 cattle.\(^2\) However, as figure 2 shows, the proportion of negotiated live cattle transactions that were eliminated consisted of lots that were relatively larger than dressed cattle lots and more consistent in size; about 75 percent of lots were greater than the 0 to 25 lot category and over 10 percent were between 201 and 400 head of cattle. Information on the size distribution of excluded lots is relevant because excluding large lots could have a relatively greater impact on weighted average prices reported by AMS than smaller lots. Also, the effects of excluding large lots could be greater in daily reports when trade volume is light, and an accumulation of excluded large lots could affect weekly and monthly reports.

\(^1\)Cattle are either sold live or dressed weight. Cattle sold live (live weight) are weighed immediately before slaughter, and dressed carcass (dressed weight) cattle are weighed after slaughter.

\(^2\)For figures 1 and 2—representing the distributions of cattle excluded—we used the categories of steers, heifers, and mixed steer/heifer lots for both live and dressed weight cattle. Lots of steers and heifers bring much higher prices than cows and other dairy herds and are major categories of the CT100, the cattle market report that we examined.
Figure 1: Percent of Negotiated Cattle Transactions Excluded by Size of Lot, Dressed Basis, May through October, 2003

Percent

<table>
<thead>
<tr>
<th>0-25</th>
<th>26-50</th>
<th>51-100</th>
<th>101-200</th>
<th>201-400</th>
<th>401-600</th>
<th>601-800</th>
<th>801-1000</th>
<th>1001-1500</th>
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<tr>
<td>94.66</td>
<td>2.78</td>
<td>1.17</td>
<td>1.03</td>
<td>.28</td>
<td>.06</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
</tr>
</tbody>
</table>

Head count

Source: GAO analysis of USDA data.
Market News reporters of hog trade eliminated significantly fewer transactions than the cattle reporters early on in the livestock mandatory reporting program. For hogs, from October 2003 to March 2004, we found that approximately 0.1 percent of transactions were excluded, which was less than 0.1 percent of all hogs. Figure 3 shows that, for negotiated sales, while nearly 40 percent of excluded transactions were smaller lots of 50 hogs or less, the largest category of slaughtered swine excluded—over 35 percent—were somewhat larger lots, in the 151–200 head lot category.
Effects of Eliminating Transactions

During a sample period of rapidly rising prices, our analysis of cattle and hog livestock data shows that the elimination of transactions from Market News reports narrowed price ranges while having a limited, but frequently positive, effect on the average reported price. To illustrate this process, figures 4 and 5 show the differences in the distributions of cattle prices for dressed steers from May through July 2003 and how reporters' exclusion of cattle transactions eliminated outlying prices and narrowed the range of prices. During this same time period, reporters' exclusions decreased the number of packer transactions from 4066 to 3334. Excluding these transactions narrowed the associated price range—the difference between the minimum and maximum price—from $117.95 to $16.50 per hundredweight.

Source: GAO analysis of USDA data.

\(^3\)Our analysis focused on a period of rapidly rising prices; the impact of eliminating transactions in a declining market may differ.
Figure 4: Distribution of Cattle Prices Before Exclusions, Dressed Steers, May through July, 2003

<table>
<thead>
<tr>
<th>Percent</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
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<td>30</td>
<td>4066</td>
<td>120.75</td>
<td>147.95</td>
<td>117.95</td>
<td>123</td>
<td>128</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Price in dollars per hundredweight.

Note: The mean price or average price in the insert of the figure, unlike the other averages in this appendix, is not a weighted mean, or adjusted for head count.

These prices are not weighted average prices as calculated for the mandatory livestock reports, but represent all actual transaction prices as reported by the packers. Each figure is a description of the percentage that each reported price category represents during this period. While figure 4 displays all transaction prices before any exclusions, figure 5 displays the distribution for the same period after all exclusions by market reporters had been made for all reasons.
Figure 5: Distribution of Cattle Prices After All Exclusions, Dressed Steers, May through July, 2003

Price in dollars per hundredweight.

Market News reporters’ elimination of data for market reasons from reports between May and October 2003 had the effect of narrowing price spreads or ranges on a daily basis.\(^5\) For dressed steers, figure 6 shows the narrowing of the range of prices over this period before and after all excluded transactions, most of which were excluded for market reasons. As shown in the figure, price ranges before any excluded transactions during this period were from $2 to $20 per hundredweight while, after all market exclusions were made, the range decreased to between $0 and $12 per hundredweight. Market News reporters are instructed to exclude prices that are $5 above or below the market to narrow the range of reported prices and AMS record logs indicate that they do so. However,

\(^5\)These price ranges were taken from the data provided by packers on the *Live Cattle Daily Report (Current Established Prices)* (LS-113) for selected days from each week, May through October 2003 for dressed weight steers (35-65% Choice).
when prices are rising or falling rapidly, this practice may exclude some transactions that should reasonably be presented as reflecting the day-to-day variations in the market. Also, since these are national daily reports, price spreads tend to be larger since they encompass the full range of prices for all regions.

Figure 6: Range of Cattle Prices Before and After Excluded Transactions, Dressed Steers, May through October, 2003

During May to October 2003, a period of rapidly rising cattle prices, we estimate that the effect of eliminating transactions for market reasons was negligible about two-thirds of the time, while for the remaining third the reported average prices were generally higher than they would have been had these transactions not been eliminated. For live cattle sales, figure 7 displays the differences between the average weighted daily prices after AMS exclusions (as reported in Market News reports) and the average weighted prices based on including the transactions that AMS had excluded for market reasons for 35–65 percent choice steers from May through October 2003. The average weighted prices published by AMS for
these dates were the same about 67 percent of the time, higher 31 percent of the time, and lower 2 percent of the time over this period. This suggests, and Market News record logs confirm, that during this period when Market News reporters were excluding transactions, they were predominantly excluding transactions for reasons of lower price rather than high price. We found that over twice as many transactions were excluded for low price as for high price during this period.

For 35 to 65 percent choice steers, dressed weight, figure 8 shows the differences between the daily weighted average prices reported by AMS, and the average prices that AMS would have reported if AMS reporters had not eliminated transactions for market reasons. These differences display a trend similar to the one we identified for live cattle prices. When we compared our calculations of the weighted average prices with those AMS reported, about 32 percent of the price differences were higher than those AMS would have reported; about 67 percent were the same or about the same, and 1 percent were lower. This result indicates that market reporters of livestock were excluding a higher proportion of low prices during this period. AMS reporters may have excluded low prices more frequently.

Source: GAO analysis of USDA data.
during the period because prices were rising. What a reporter considered
to be a high price during one week may have appeared to be a much lower
price by the following week. Also, at the low end of the price ranges,
transactions may have been excluded because the prices represented low-
quality animals.\textsuperscript{5}

\textbf{Figure 8: Difference in Weighted Average Prices With and Without Transactions Excluded for Market Reasons, Dressed Weight\linebreak Cattle, May through October, 2003}

The effect of an excluded transaction on any particular day is determined
by how large that transaction is compared to the size and number of
transactions that took place on that day or that week, and how far it is from
the range of reported prices. While each transaction alone may be
considered a small lot, the total effect of a number of excluded transactions
for this reason can cumulatively have a large effect on the weighted
average price.

\textsuperscript{5}Some agricultural economists suggested that it would be helpful if there were information in AMS reports about the distribution of livestock price ranges, and one commented that it would be helpful if AMS were to provide additional details about the quality of livestock being traded.
To determine if there was an overall statistical difference between our replications of AMS prices and the prices we determined would have been reported had reporters not eliminated transactions for market reasons, we tested the two average weighted price series for both live and dressed cattle. We found that for both live and dressed weight cattle, there was a statistically significant difference in the weighted averages between reported AMS prices and the prices that would have been reported if exclusions had not been made for market reasons.\(^7\)

Our analysis of data from AMS's daily hog reports from October 2003 to March 2004 showed that, for the reports that we examined, reporters frequently eliminated transactions that they believed to be errors that would potentially widen price ranges.\(^8\) However, unlike cattle, there were very few transactions eliminated from reports for market reasons. As a result, for hogs, price ranges with and without exclusions by market news reporters were more similar than for cattle. As illustrated in figure 9, the difference between prices reported by AMS and prices that would have been reported by Market News was notable on only 7 days for the **National Daily Direct Morning Hog Report** from October 2003 through March 2004. A similar analysis of the afternoon hog report shows the same pattern.

\(^7\)The "t-test" determined that the differences in the means between the two price series for live weight and dressed cattle were statistically significant at the 0.01 and 0.10 levels, respectively.

\(^8\)We examined the **National Daily Direct Morning Hog Report** (HG 202) and the **National Daily Direct Afternoon Hog Report** (HG 203), and calculated the difference between the weighted average price for hogs with and without exclusions by market reporters for all reasons.
Figure 9: National Daily Direct Morning Hog Report: Differences of Weighted Average Prices With and Without Transactions Excluded, October 2003 through March 2004

Price ($/hundredweight)

Source: GAO analysis of USDA data.
## Appendix III

### Additional Information Concerning AMS Warning Letters to 11 Packers through September 2005

<table>
<thead>
<tr>
<th>Packer Number</th>
<th>ARC Audits and warning letters</th>
<th>Issues</th>
<th>Actions</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ARC Audits 8/13/02, and 12/17/02</td>
<td>• Daily lamb meat and carcass livestock sales not reported when prices were established&lt;br&gt;• Incorrectly rounded report sale prices to the nearest whole dollar&lt;br&gt;• Did not report all sales required by Livestock Mandatory Reporting Act&lt;br&gt;• Did not report weekly sales of imported boxed lamb products on the first reporting day of the week</td>
<td>7/28/03—$10,000 fine assessed in a settlement agreement with AMS; fine suspended provided packer did not violate the Livestock Mandatory Reporting Act for 1 year</td>
<td>Subsequent audits showed the packer to be in compliance</td>
</tr>
<tr>
<td></td>
<td>1/21/03—Letter from Market News Branch Chief</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/18/03—Letter from Deputy Administrator (in response to 2/10/03 letter from packer)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5/13/03—Letter from USDA Office of General Counsel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ARC Audits 11/19/02, 3/25/03, 6/17/03, and 12/1/03</td>
<td>• Did not report daily lamb sales on the day they occurred&lt;br&gt;• Reported frozen boxed product as fresh&lt;br&gt;• Deducted average freight cost instead of actual freight cost</td>
<td>5/17/04—$10,000 fine assessed in a Consent Decision and Order; fine suspended provided packer did not violate the Livestock Mandatory Reporting Act for 1 year</td>
<td>Subsequent audits showed the packer to be in compliance</td>
</tr>
<tr>
<td></td>
<td>1/29/03, 4/4/03, and 8/7/03—Letters from Market News Branch Chief</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ARC Audits 7/9/02, 10/1/02, and 4/9/03</td>
<td>• Did not report information for committed cattle&lt;br&gt;• Did not correctly report the actual weight of the animal with the lowest and highest weight in each lot&lt;br&gt;• Incorrectly combined and reported cattle of similar class and classification as single lots</td>
<td>Corrections completed by 6/12/03</td>
<td></td>
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<tr>
<td></td>
<td>2/13/03—Letter from Market News Branch Chief</td>
<td></td>
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<tr>
<td></td>
<td>4/24/03—Letter from Deputy Administrator</td>
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<tr>
<td>4a</td>
<td>ARC Audits 8/28/02, and 10/17/02</td>
<td>• Submitted average net price data on a live weight basis rather than a carcass basis for prior day hog report&lt;br&gt;• Incorrectly reported prices for daily hog report&lt;br&gt;• Did not submit base price on a plant delivered basis for buying station purchases&lt;br&gt;• Incorrectly reported base prices—some hogs purchased on a live weight basis were converted to a carcass weight basis</td>
<td>Corrections completed by 7/29/03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/11/03, and 7/1/03—Letters from Market News Branch Chief</td>
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</tbody>
</table>
### Appendix III
Additional Information Concerning AMS
Warning Letters to 11 Packers through September 2005

(Continued From Previous Page)

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<th>Issues</th>
<th>Actions</th>
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</thead>
<tbody>
<tr>
<td>4b</td>
<td>ARC Audits 3/2/05, and 6/15/05</td>
<td>• Reported incorrect base price for 3 of 8 randomly selected hog lots</td>
<td>Corrections completed by 8/11/05</td>
</tr>
<tr>
<td></td>
<td>7/12/05—Letter from Market News Branch Chief</td>
<td>• Incorrectly deducted from the reported price money placed in escrow for repayment to the producer at a later time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incorrectly reported some daily purchase data as prior day purchases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incorrectly submitted some morning daily purchase data as afternoon purchases</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Incorrectly submitted price data on packer-owned hogs with prior day slaughter data</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Incorrectly reported live weight data on hog carcass purchases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did not report purchase data for two lots of hogs</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>ARC Audits 12/5/02, 3/12/03, 6/10/03, 8/18/03, and 11/5/03</td>
<td>• Did not report yield grade data for weekly packer-owned lamb report</td>
<td>Corrections completed by 2/17/04</td>
</tr>
<tr>
<td></td>
<td>12/30/03—Letter from Market News Branch Chief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4/26/04—Letter from Market News Branch Chief</td>
<td>• Did not submit daily hog data to AMS beginning in September 2002</td>
<td>Corrections completed by 6/2/04</td>
</tr>
<tr>
<td>7</td>
<td>ARC Audits 12/4/02, and 2/25/04</td>
<td>• Did not report live cattle purchases due to computer system problems with two reporting fields</td>
<td>Corrections completed by 6/2/04</td>
</tr>
<tr>
<td></td>
<td>4/26/04—Letter from Market News Branch Chief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>ARC Audits 6/12/02</td>
<td>• Incorrectly submitted base price for hogs purchased on a live weight basis</td>
<td>Corrections completed by 3/11/04</td>
</tr>
<tr>
<td></td>
<td>7/24/02, and 9/4/02—Letters from Market News Branch Chief</td>
<td>• Incorrectly reported the net price for formula cattle</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incorrectly reported cattle premiums and discounts for daily and weekly formula purchase reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Submitted estimates for grade, dressing percent, and weight when actual information was available</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improperly reported premiums as negative and discounts as positive for weekly cattle report</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Submitted cattle base prices instead of net prices on weekly report due to error in recordkeeping system not accounting for premiums and discounts</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>ARC Audits 4/8/03, and 9/14/04</td>
<td>• Did not report the quantity of cattle committed and delivered</td>
<td>Issue pending.</td>
</tr>
<tr>
<td></td>
<td>8/20/04, and 3/8/05—Letters from Market News Branch Chief</td>
<td>• Did not report the quantity of cattle delivered in a timely manner</td>
<td>Market News reviewing results from 9/15/05 audit and will determine if further action is warranted.</td>
</tr>
<tr>
<td></td>
<td>6/30/05—Letter from USDA Office of General Counsel</td>
<td>• Did not maintain purchase records that show evidence of cattle and beef purchase times</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did not correctly report all cattle information twice each day—provided incorrect cattle classification codes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did not report total beef sales twice each day</td>
<td></td>
</tr>
</tbody>
</table>
Appendix III  
Additional Information Concerning AMS  
Warning Letters to 11 Packers through September 2005

(Continued From Previous Page)

<table>
<thead>
<tr>
<th>Packer Number</th>
<th>ARC audits and warning letters</th>
<th>Issues</th>
<th>Actions</th>
</tr>
</thead>
</table>
| 10            | ARC Audits 1/12/05, and 5/18/05 | • Did not report delivered cattle at time of delivery  
• Did not include all deductions in cattle carcass prices  
• All cattle incorrectly reported as dairy bred  
• Incorrectly submitted feedlot live weight instead of total carcass weight for a weekly cattle report | Issue pending.  
Market News reviewing current information provided by packer. |
| 10            | 6/29/05—Letter from Market News Branch Chief |  
|               | 11 ARC Audit 3/31/04, and 4/1/04 | • Committed cattle from local producers not reported at correct time  
• Did not report all required committed cattle data | Corrections completed by 2/16/05 |
|               | 2/1/05—Letter from Market News Branch Chief |  

Source: GAO analysis of USDA warning letters and legal agreements with packers.
EXECUTIVE TRANSMITTAL MEMORANDUM

TO: Mr. Robert A. Robinson
Managing Director, Natural Resources and Environment
Government Accountability Office

THROUGH: Chuck Lambert
Acting Under Secretary
Marketing and Regulatory Programs

FROM: Kenneth C. Clayton
Associate Administrator
Agricultural Marketing Service

SUBJECT: Response to GAO Audit Report

Attached is the Marketing and Regulatory Program’s response to the draft report titled, “Livestock Market Reporting: USDA Has Taken Some Steps To Ensure Quality, But Additional Efforts Are Needed.” Thank you for the opportunity to provide comments. If you have any questions, please contact Frank Woods at 202-720-8836.

Attachment
Appendix IV
Comments from the Department of Agriculture

U.S. Department of Agriculture
Statement of Action on the
U.S. Government Accountability Office Draft Report GAO-06-202,
“Livestock Market Reporting: USDA Has Taken Some Steps To
Ensure Quality, But Additional Efforts Are Needed”

November 17, 2005

In 1999 the Livestock Mandatory Reporting Act (Act) was passed to substantially increase the volume of industry sales transactions covered by USDA’s market news reports. Livestock producers, with gross income of $63 billion in 2004, rely on USDA’s livestock market news reports to provide them, and others in the industry, with livestock and meat price and volume information. This information is used in negotiating sales of cattle, hogs, lamb, and meat products. Packers also use the average prices in these reports as a basis for paying some producers with whom the packers have contracts. In this review, GAO has examined USDA’s efforts to ensure the quality of its livestock market news reports and has developed six recommendations for strengthening the program.

General Comments

AMS generally agrees with the findings and recommendations made by GAO. AMS officials believe that the program has resulted in the release of comprehensive information on pricing, purchasing, and supply and demand conditions, which in turn has improved the transparency of the marketplace. Significant improvements have been made to the program since its inception and revisions will continue to be made as necessary to improve the value of the information.

GAO Recommendation 1

To improve the livestock mandatory market news program, AMS should increase transparency by (1) reporting to market news readers on its reporters’ instructions for making reporting decisions that reflect prevailing market conditions, (2) periodically reporting on the effects of reporters’ decisions on AMS reported prices, and (3) reporting the results of its audit efforts.

USDA Response

It has been longstanding AMS policy to make the market news reporting process as transparent as possible. To further improve the transparency surrounding the Livestock Mandatory Price Reporting (LMR) program, AMS will take several steps to further educate market news readers about the general guidelines followed by AMS reporters in making reporting decisions. AMS will prepare and make public periodic reports on the volume of submitted transactions that are excluded by reporters and the effect that such exclusions had on net price distributions on all reported commodities. AMS will expand awareness of LMR reporting methods and processes by posting additional information on
the AMS website, through presentations at key industry meetings, as well as meetings of agricultural economists and other industry analysts.

In the earlier years of the LMR program AMS discovered that its electronic reporting system did not provide for adequate differentiation between base and net prices in packer cattle formula and forward contract submissions. The LMR statute requires that packers report a base price when it is established as well as a final net price that incorporates all premiums and discounts for formula and forward contract transactions. As originally designed, AMS’s electronic reporting program was incapable of distinguishing between such base and net prices. Consequently, reporters excluded base price information to eliminate likely double reporting. As GAO has properly noted, some 22.8 percent of cattle transactions were excluded by reporters from published reports during the May through October 2003 period in many cases to guard against double reporting. In February 2004, programming was completed on AMS’s electronic reporting system that allowed AMS to electronically separate base and net price information. The transaction exclusion rate immediately dropped and was at a level of 8.8 percent during the April through June 2005 period when GAO conducted its review.

During the April through June 2005 period, 87.4 percent of the transactions that were still being excluded involved 5 head or less; 56.8 percent of the transactions excluded contained only 1 head. Total volume excluded by reporters during this same period was 1.5 percent of the total volume reported by packers.

With respect to reporting the results of LMR audit efforts, AMS has already taken steps to provide additional information to the public. For example, in July 2005, a document was posted on the AMS website that describes audit procedures, provides information about the number of audits that were conducted during the first quarter of 2005, and cites examples of the types of noncompliances that were found. AMS will continue posting quarterly audit information on the website and identify additional information regarding the audit activity that can be added in the future.

**GAO Recommendation 2**

AMS should clarify reporter’s instructions to make them more specific and consistent by (1) consulting with packers, producers, agricultural economists, and other interested stakeholders, and (2) undertake revisions that consider economic analyses of past reporting trends, livestock and meat market variations, and federal statistical and information reporting guidance.

**USDA Response**

AMS has already begun the process of clarifying AMS reporter’s instructions to make them more specific and consistent and will continue these efforts in consultation with economists and other interested stakeholders as appropriate. AMS will also review and follow Federal and Departmental statistical and information reporting guidance to the
extent that they are applicable to the information that is published under the LMR program.

**GAO Recommendation 3**

AMS should develop information about the overall accuracy of packers’ transaction data by auditing a statistical sample of packers’ transactions.

**USDA Response**

AMS believes that the current compliance program has played an integral role in improving packers’ compliance with the Act, which is the main purpose of the LMR compliance program audits. While the report indicates that for a 36-month period ending in April 2005, 64 percent of packer audits identified instances in which a noncompliance of some type was documented, AMS believes it is important to recognize the relative significance of each of those noncompliances. Moreover, AMS believes a better context for viewing noncompliances would be against the number of submitted data elements for which a noncompliance might occur -- approximately 500,000 each day. AMS also would suggest that with the LMR program having been operational for less than five years, during which time additional system modifications had to be made, some care should be exercised in drawing broad conclusions about overall packer compliance.

AMS does agree that developing information about the overall accuracy of the data submitted by packers would be useful. Additional or modified auditing methods will be developed and applied to allow conclusions to be better drawn about overall data accuracy.

**GAO Recommendation 4**

AMS should further develop audit strategies to identify recurring significant problems.

**USDA Response**

As part of the current audit process, AMS auditors review historical audit information and look for any patterns that may surface within a given packer’s submissions. To better identify recurring reporting problems, AMS agrees to review its auditing methods to increase the overall effectiveness of the LMR compliance program. This may entail revising the method by which audit samples are selected, undertaking additional audits at plants that demonstrate a higher number of noncompliances, and conducting additional analyses with the information that is obtained during the audit process to identify any widespread reporting problems.

**GAO Recommendation 5**

AMS should take further steps to address the timeliness and consistency of AMS reporter’s efforts to follow up on audit findings.
Appendix IV
Comments from the Department of
Agriculture

USDA Response

In January 2005, AMS developed new procedures for following up on audit findings, which the Agency believes has greatly improved the audit process. These procedures include the establishment of timeframes by which noncompliances should be corrected and specified severity levels for designating the significance of noncompliances. These changes have already allowed AMS to better focus resources on the most significant noncompliances so that they can be addressed as quickly as possible.

AMS notes GAO’s finding that for audits conducted between June and September 2004, an average of some 85 days elapsed between the date of an AMS audit and the date AMS recorded that the packer made the needed changes. With the procedures already implemented, AMS believes the timeframe for making changes has and will continue to decline. Even so, it remains important to recognize that the time needed for a packer to make a correction greatly depends on the complexity of the issue and whether the packer has appropriate in-house IT personnel to make the necessary changes or whether that service must be contracted out. In addition, at times it may be necessary for AMS to first make a change to the LMR system so that packers can then make their needed changes.

GAO Recommendation 6

The Administrators of AMS and GIPSA should further investigate the reporting practices of one packer’s low-price purchases of livestock.

USDA Response

AMS and GIPSA concur with GAO’s recommendation to conduct further inquiry into issues raised by GIPSA’s investigation. GIPSA’s investigation examined documentation obtained directly from the packer relative to transactions submitted to AMS under the requirements of LMR. During the period of time investigated, GIPSA examined all transactions for which the packer’s documentation did not match prices reported to AMS under LMR. GIPSA did not find supporting documentation in the packer’s records for a limited number of low price transactions submitted under LMR. However, GIPSA did not find a pattern of low price transactions associated with the documentation discrepancies that would support finding a violation of the Packers and Stockyards Act. AMS will take additional steps in the LMR audit process to evaluate submissions that have transactions at the low end of the market. GIPSA will review the current practices of the packer discussed in the GAO report to determine if its current buying practices are in compliance with the Packers and Stockyards Act.
GAO Contact and Staff Acknowledgments

**GAO Contact**

Robert A. Robinson, (202) 512-3841

**Acknowledgements**

In addition to the individual above Charles Adams, Assistant Director, Aldo Davila, Barbara El Osta, Paige Gilbreath, Kirk Menard, Lynn Musser, Karen O’Conor, Alison O’Neill, Vanessa Taylor and Amy Webbink made key contributions to this report.
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