



New York State Office of the State Comptroller
Thomas P. DiNapoli

Division of State Government Accountability

Food Safety Monitoring

Department of Agriculture and Markets



Report 2013-S-27

January 2014

Executive Summary

Purpose

To determine whether the Department of Agriculture and Markets (Department) adequately monitors the processing, distribution and sale of food products in New York State. The audit covers the period April 1, 2011 to September 18, 2013.

Background

The Department's Division of Food Safety and Inspection (Division) is responsible for enforcing State laws and Department regulations related to food safety. The Division's objective is to ensure a safe and properly labeled food supply - from the producer to the retailer to the consumer. Major activities include conducting unannounced sanitary inspections of both current and new food production/preparation establishments, obtaining and analyzing food samples in support of its food safety/recall program, and investigating consumer complaints. As of June 4, 2013, the Division was responsible for inspecting 31,401 establishments. From April 1, 2011 through June 4, 2013, it received 5,724 consumer complaints for investigation, and inspectors obtained 3,894 food samples for testing to identify potential violations of food safety.

Key Findings

- The Division has been unable to meet the demands of its inspection frequency schedule. As of June 4, 2013, inspections were past due for almost 5,000 establishments. Another 439 new establishments did not yet have a required initial inspection done prior to preparing food.
- Our random sample of 45 of these new establishments found, on average, that license applications had been on file for almost six months. Our visits found 19 (42 percent) were already preparing food without the required inspection.
- The Division's staff of 82 inspectors is 27 to 37 percent below the level recommended by the U.S. Food and Drug Administration. We identified several opportunities to more effectively deploy existing resources that could significantly address existing backlogs.
- Most consumer complaints are investigated timely and the Department's food sampling program is a nationally recognized leader in the field. However, all programs could benefit from performance measurement systems that provide managers and supervisors with access to relevant data and provide appropriate training in data analysis to program management.

Key Recommendations

- Establish performance measures for food inspection activities, including Department-wide policy governing such things as work scheduling and time allowances for local travel.
- Establish procedures to further prioritize and ensure timely completion of inspections of new establishments.
- Increase efforts to provide coordinated real-time access to data among divisions and obtain training on how to use that data to perform necessary analytics to monitor performance, including activities such as inspections and complaint response.

Other Related Audits/Reports of Interest

[Department of Agriculture and Markets: Uncollected Penalties \(2012-S-69\)](#)

[Department of Agriculture and Markets: Food Safety Program \(1998-S-15\)](#)

**State of New York
Office of the State Comptroller**

Division of State Government Accountability

January 30, 2014

James B. Bays
Acting Commissioner
Department of Agriculture and Markets
10B Airline Drive
Albany, NY 12235

Dear Commissioner Bays:

The Office of the State Comptroller is committed to helping State agencies, public authorities and local government agencies manage government resources efficiently and effectively and, by so doing, providing accountability for tax dollars spent to support government operations. The Comptroller oversees the fiscal affairs of State agencies, public authorities and local government agencies, as well as their compliance with relevant statutes and their observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving operations. Audits can also identify strategies for reducing costs and strengthening controls that are intended to safeguard assets.

Following is a report of our audit entitled *Food Safety Monitoring*. The audit was performed pursuant to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

This audit's results and recommendations are resources for you to use in effectively managing your operations and in meeting the expectations of taxpayers. If you have any questions about this report, please feel free to contact us.

Respectfully submitted,

*Office of the State Comptroller
Division of State Government Accountability*

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Background

The mission of the Department of Agriculture and Markets (Department) is to foster a competitive food and agriculture industry that benefits producers and consumers, while promoting public health and safety. The Department's Division of Food Safety and Inspection (Division) is responsible for enforcing State laws and Department regulations related to food safety, which is a critical factor in maintaining the health and well-being of the people of New York State. The Division's objective is to ensure a safe and properly labeled food supply - from the producer to the retailer to the consumer.

The Division fosters cooperative working relationships with other food safety agencies and organizations. In New York State, no single State agency has authority over the entire food inspection process. For example, the Division is responsible for inspections at markets and processing facilities, while the Department of Health (DOH) oversees restaurant inspections and the Department of Environmental Conservation (DEC) is responsible for inspections of shellfish. The Division divides its major responsibilities into two units: Food Safety Inspection and Farm Products and Grading. Our audit focused on the Food Safety Inspection Unit (Unit), which manages its responsibilities with a staff of about 82 inspectors. Major activities of the Unit include:

- Performing unannounced sanitary inspections of food manufacturers, wholesale bakeries, beverage processors, food warehouses, refrigerated warehouses, retail food stores (ranging from large supermarkets to small convenience stores), slaughterhouses, fish processors, rendering/disposal plants, and food transportation services;
- Taking samples of food products to identify potential food safety violations;
- Investigating consumer complaints;
- Licensing food operators of various types of establishments;
- Consulting with industry groups;
- Seizing unfit or adulterated foods;
- Carrying out enforcement activities, such as imposing civil penalties;
- Training outside organizations on food safety practices.

Audit Findings and Recommendations

As of June 4, 2013, Department records show inspections were past due for almost 5,000 (16 percent) of the 31,401 existing establishments under the Division's jurisdiction. In addition, more than 400 new businesses were awaiting an initial inspection, many of which had been waiting for six months or longer. Our tests showed that in the interim some had already begun preparing food in violation of regulatory requirements. Part of this backlog can be attributed to the number of food inspectors assigned to the Division, which is 27 to 37 percent below the staffing contingent recommended by the U.S. Food and Drug Administration. Even so, we also noted several ways that the Division could reduce its backlog by more effectively deploying its existing resources. Furthermore, we found the Division's ability to monitor inspection activity, as well as its response to consumer complaints, could be improved by instituting performance measurement systems that provide managers and supervisors with access to relevant data and appropriate training in data analysis.

Food Safety Inspection Backlogs

As of June 4, 2013, Department records show inspections were past due for 4,946 (16 percent) of the more than 31,000 existing food establishments under the Division's jurisdiction. In addition, more than 400 new establishments were awaiting a required initial inspection. Our random test of 45 of these businesses found a six-month backlog was common and, even more significantly, that many had already begun preparing food.

Existing Establishment Inspection Backlog

The Division uses a risk-based approach to determine the nature and frequency of necessary recurring inspections. The system is based on each establishment's Indicators of Potential Hazard (IPH) type rating, which defines the level of risk that potential food safety deficiencies could pose to public health. The attached Exhibit details the various IPH type categories, their scheduled inspection/re-inspection frequencies, and the number of establishments in each category.

Our analysis demonstrated that to meet the inspection requirements dictated by the IPH ratings for existing establishments, inspectors would need to conduct about 36,000 inspections annually including re-inspections, or about 2.2 inspections per day by each inspector. However, between April 1, 2011 and June 4, 2013, inspectors completed an average of only 1.7 inspections per day each, with individual averages ranging from .95 to 2.67 inspections.

New Establishment Inspection Backlog

New establishments require an initial inspection before they can produce or prepare food. We identified 439 new establishments that did not have the required initial inspection performed for operation as of June 4, 2013. We selected a random sample of 45 of these establishments and found, on average, that license applications had been on file for 176 days. We visited these 45 establishments and found 19 (42 percent) were preparing food without having the required

inspection performed.

There is no formal process for scheduling inspections of new establishments. Even though inspectors should be aware these establishments have applied for licensing and may be opened, the inspectors are highly reliant on the establishment to inform them when inspections are needed.

Opportunities for Increased Efficiency

We acknowledge the Division faces a challenge in meeting its inspection requirements given the number of inspectors on staff. Officials pointed out that guidelines published by the U.S. Food and Drug Administration recommend a staffing contingent of one inspector for every 280 to 320 inspections, which would equate to between 113 and 130 inspectors based on the Division's workload. The current staffing level of 82 inspectors is 27 to 37 percent below these recommended levels. By adjusting schedules and work practices for greater efficiency, more time could be allocated to conducting inspections, thereby bringing the Division closer to achieving its goals.

The Division does not have any established performance standards for the number of inspections that should be completed, the average time to complete an inspection or the amount of administrative or travel time that is allowed. However, it does require inspectors to maintain logs of their daily activities documenting time spent at their official station, traveling and performing inspections and various other activities. We used computer assisted audit techniques to analyze data from the inspectors' daily activity logs for the period September 4, 2012 through June 4, 2013. Our analysis revealed a significant amount of time is often spent on activities other than performing on-site inspections. In fact, the data shows that on average inspectors spent over four hours, or more than half of their time, working at their official station or traveling.

For most inspectors, their official station is their home, and their 8-hour workday generally starts there before they leave for their first inspection. We identified one inspector who averaged over 5.3 hours per day working at the official station and traveling, leaving less than three hours for actual inspection work. When questioned specifically about this inspector's unusually high "official station" hours, Division management stated that zone supervisors are responsible for reviewing and approving each inspector's activity log. They indicated this inspector's zone was without a supervisor for our entire review period and surmised that this lack of supervision may have contributed to the excessive time spent at the official station.

The Department also does not have any policies covering time allowances for local travel, which State travel guidelines generally define as being within 35 miles of an employee's home and official station. Our analysis showed almost all of the establishments that inspectors visit (about 97 percent) are within 35 miles of their official station. As previously noted, inspectors generally start their workday at their official station and then travel to their first inspection on work time. Agencies can establish policies and procedures that require staff to start or end the workday at a field location within the local area. For example, to the extent that an employee's first inspection site is within 35 miles of his/her home, the employee can be required to begin their workday at

the first inspection site. If inspectors were required to begin their day at their first inspection site and limit work at their official station to the end of the day, traveling on work time could be significantly reduced, allowing more time for inspections and potentially reducing the backlog.

Officials stated neither they nor the supervisors have routine access to aggregate data from inspectors' activity logs or inspections in a format that could be used for data analytics. Presently, they are only able to review individual transactions, not perform analytics on the entire data set. Without this access and capability, overall monitoring is diminished. Officials also stated they would welcome training on how to use the data to perform the necessary analytics.

Consumer Complaints

Our audit confirmed the Division's commitment to the investigation of consumer complaints. Officials see this component of oversight as key to fulfilling their responsibility to protect consumer health and safety. According to Division officials, consumer complaints are a Division priority, and procedures are in place to ensure proper investigation, based on a "triage-type" prioritization that responds more quickly to more serious risks. The Division does not have specific time frames for investigating consumer complaints. However, complaints involving a food-related illness are to be investigated immediately; those identified as critical deficiencies, which would result in a failed inspection, are to be investigated as soon as possible; and less serious complaints involving general deficiencies should still be investigated promptly.

For purposes of the audit and based on Division guidelines, we considered timely investigation of a complaint to be completed within two weeks (14 days or less) of the date the complaint was received. For the period April 1, 2011 through June 4, 2013, the Division received 5,724 consumer complaints; of these, more than two-thirds (3,867) were addressed within 14 days. Another 1,457 (one-quarter) took from two weeks to a month to investigate, and only about 8 percent (444) took longer than a month. The Division's triage efforts appear effective, since less than one-quarter of the complaints that took longer than two weeks to investigate resulted in a failed inspection of the establishment where a critical deficiency was noted.

Once again, management does not monitor overall timeliness of complaint response on a regional or State-wide basis because they lack routine access to complaint data in a format that is useful for analysis. Also, officials stated they experienced a gap in monitoring due to the attrition of staff who performed quality assurance functions in the Division, but have now assigned these additional duties to an employee on a part-time basis.

Food Sampling

One place where the Division is already taking steps to use data analytics to improve operations is in the food sampling area. Our audit showed Division efforts in this area are noteworthy. The Division provided evidence to show that it is nationally recognized for both its Food Recall program and its Imported Foods initiative. In fact, data shows that in 2008 the Division initiated as many recalls in New York as did the U.S. Food and Drug Administration for the entire United

States.

To help ensure a safe and properly labeled food supply and to contribute to the orderly marketing of food products in New York State, Division inspectors collect and submit sample food products for analysis by the Department's food laboratory. Food samples are analyzed to identify hazards (e.g., bacteria), fraudulent labeling practices (e.g., undeclared colors), and other harmful factors such as filth, insect fragments, and rodent excreta. During the period April 1, 2011 through June 4, 2013, the food laboratory analyzed 3,894 food samples for the Division and was able to make a safety determination for 3,153 of them: 2,397 samples were satisfactory and 756 were in violation (e.g., salmonella bacteria present in ready-to-eat food).

Twice in 2011 Division management met to review the data from the Department's food laboratory and apply their findings to modify its sampling approach. For example, on the basis of the data, they were able to streamline the sampling schedule where feasible (e.g., removing those samples with high compliance rates, low risk) in order to increase their focus on commodity-specific sampling and to identify inspectors who had comparably low-frequency sampling rates. The Division is to be commended for their efforts.

We noted that access to real-time food sampling data, rather than just periodic analyses, could further aid the Division in ensuring both public health and safety. Officials responded that they had also recognized this need and had recently applied for and been awarded a three-year \$900,000 grant to establish a rapid-response team. A key tool covered under this grant is a Laboratory Information Management System, which will make real-time sampling information available to all divisions.

Recommendations

1. Establish performance measures for food inspection activities, including Department-wide policy governing such things as work scheduling and time allowances for local travel.
2. Establish procedures to further prioritize and ensure timely completion of inspections of new establishments.
3. Increase efforts to provide coordinated real-time access to data among divisions and obtain training on how to use that data to perform necessary analytics to monitor performance, including activities such as inspections and complaint response.

Audit Scope and Methodology

The objective of our audit was to determine whether the Department adequately monitors the processing, distribution, and sale of food products in New York State. The audit covers the period April 1, 2011 through September 18, 2013.

To accomplish our objective, we interviewed Department officials, examined Department inspection records, visited establishments, and reviewed the Department's policies and procedures. We familiarized ourselves with the internal controls related to food safety and assessed their adequacy related to our testing, and analyzed Department data to assess frequency and timeliness of sanitary inspections, inspectors' activities, response to consumer complaints, and food sampling data for the period April 1, 2011 through June 4, 2013. Specifically, we calculated the number of inspections needed using the establishment totals by type and the inspection rates the Division established. We estimated the number of inspections needed with re-inspections based on a re-inspection rate of 20 percent provided by Division officials. We used mapping software to map approximately 28,000 of the 32,000 establishments the Division is responsible for inspecting against inspectors' home addresses. About 4,000 of the locations could not be mapped because they had addresses that were incompatible with our mapping software. We selected a random sample of 45 of 439 new establishments that had applied for licenses and were required to have an initial inspection but had not had one as of June 4, 2013.

We performed data reliability testing on four of the Department's data systems that contained data pertinent to our audit objective. We determined the sanitary inspection and food sampling databases were reliable and complete. We found the consumer complaint database to be reliable for our audit purposes; however, we could not test for completeness of the data. The inspector's daily activity log data was of undetermined reliability. We utilized only the portion of the inspector's daily activity log data for the period September 4, 2012 through June 4, 2013, which was determined to be the most reliable for testing.

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

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State. These include operating the State's accounting system; preparing the State's financial statements; and approving State contracts, refunds, and other payments. In addition, the Comptroller appoints members to certain boards, commissions and public authorities, some of whom have minority voting rights.

These duties may be considered management functions for purposes of evaluating organizational independence under generally accepted government auditing standards. In our opinion, these functions do not affect our ability to conduct independent audits of program performance.

Authority

The audit was performed pursuant to the State Comptroller's authority under Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

Reporting Requirements

We provided a draft copy of this report to Department of Agriculture and Markets officials for their review and comment. Their comments were considered in preparing this report and are attached at the end of this report.

Officials agreed with our recommendations and reported in some cases having taken steps to implement them.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Commissioner of the Department of Agriculture and Markets shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and if the recommendations were not implemented, the reasons why.

Contributors to This Report

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Vision

A team of accountability experts respected for providing information that decision makers value.

Mission

To improve government operations by conducting independent audits, reviews and evaluations of New York State and New York City taxpayer financed programs.

Exhibit

Department of Agriculture and Markets Explanation of Indicators of Potential Hazard (IPH) Types as of June 4, 2013				
IPH Type	Example of Establishments	Scheduled Inspection Frequency	Re-inspection Frequency (1)	Number of Establishments (2)
Type I	Food processors and manufacturers that have great potential health impact	Three times per year	30 days	115
Type II	Large retail food establishments such as supermarkets that have significant potential health impact	Two times per year	30 days	333
Type III	Retail food stores handling potentially hazardous food, grocery stores and delicatessens handling exposed food as well as large food warehouses that pose moderate potential health hazards	One time per year	60 days	27,751
Type IV	Lower volume warehouses and grocery stores not handling potentially hazardous foods	One time every two years	90 days	2,087
Type V	Poultry and small animal slaughterhouses and disposal plants	One time per year (3)	60 days	141
Type VI	Food banks, farmers' markets and home food processors which pose little or no threat to public health	On a complaint basis	90 days	974
			Total	31,401
Notes: (1) If establishments do not pass inspections, they are subject to limited re-inspections at intervals of between 30 and 90 days. (2) There are an additional 691 establishments (from all six IPH groups) not included in the chart above that are "new" or have not received an initial inspection as of June 4, 2013. Not all of the 691 require an initial inspection. (3) Type V establishments are inspected 12 times per year in the New York City area.				

Agency Comments



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December 16, 2013

Mr. John Buyce
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110 State Street, 11th Floor
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Re: Response to Draft Audit Report: Food Safety Monitoring (Report 2013-S-27)

Dear Mr. Buyce:

Protecting New York's food supply is critical and we are always looking to implement new approaches and protocols that will help us to better protect the public's health. The Department appreciates your suggestions as well as your recognition of our food sampling, recall programs, imported foods initiative and the timeliness of our responses to consumer complaints.

The following are our responses to your recommendations:

Recommendation 1: *Establish performance measures for food inspection activities, including Department-wide policy governing such things as work scheduling and time allowances for local travel.*

The Department recognizes the importance of establishing performance measures for food inspection activities. We are currently in the process of formalizing and documenting these performance measures so managers and supervisors will be able to better track our inspection activities.

We intend to review how best to manage work schedules and travel time throughout the Department, but remain cautious related to being able to achieve substantial across the board efficiencies. The Department's decision to designate inspectors' homes as their official work

stations arose out of the realization that the Department could obtain both better coverage of the assigned territories and more work because the regional offices are generally not centrally located in the inspectors' territories. A substantial amount of an inspector's work is devoted to administrative functions, such as documenting deficiencies, seizures, and sampling, and preparation of daily and State Financial System reports. This administrative work is an integral part of an inspector's job and is appropriately performed at his or her work station -- in this case, the inspector's home.

It is also difficult to generalize about our inspectors' work days or predict the impact of changes over the diverse inspection territories. Due to territorial coverage requirements, some of our inspectors are responsible for between 400 – 600 establishments. Some inspectors cover multiple counties and are required to travel hundreds of miles to inspection sites. Moreover, because of limited staffing, supervisors also have field responsibilities. Moreover, the nature of the establishments we inspect are quite diverse. While a small establishment may take approximately an hour to inspect, some large establishments can take a full day. The reason for the inspection will also affect the amount of time required.

For these reasons, the development of appropriate performance measures addressing the specific field variables is essential. Careful analysis and measurement of the work output through better data collection and tracking should assist us in determining how a possible change in work rules may impact the overall productivity of the inspectors.¹

We are confident we can improve productivity through the establishment of performance measures, but are less optimistic that productivity gains will be able to achieve the number of daily inspections recommended by OSC in the draft audit report. In this regard, the 2011 U.S. Food and Drug Administration Food Code recommends between 280 – 320 annual inspections per inspector, and a range of 1.39 – 1.59 inspections a day. Using your office's estimates, the Department is between 27 to 37 percent below the staffing recommended by FDA; and our inspectors, on the average, are assigned 383 establishments. Indeed, even with current staffing levels, our inspectors averaged 1.7 inspections a day, which is above FDA recommendations and suggests that it may be difficult to achieve a daily inspection of 2.2 establishments² and maintain the same quality of work.

Regardless, we plan to develop, formalize and document performance measures for food inspection activities and will report to OSC on progress within 90 days.

¹ Consideration must be given to whether these work rule changes are possible under the Labor Law and the current collective bargaining agreement.

² Depending on the circumstances, the number of inspections that may be required in any given year may be up to 15% higher than the approximate 36,000 inspections used by the auditors.

Recommendation 2: *Establish procedures to further prioritize and ensure timely completion of inspections of new establishments.*

Due to the transition to a new electronic licensing program, the Department currently has a backlog in the processing of food licenses and entering these new establishments into the Division of Food Safety and Inspection's data base. This, in turn, delays the initial inspection of these establishments. However, in the coming weeks, the Department will be initiating recommendations from the Governor's SAGE Commission and applying the LEAN Management protocols to our license processing. The Department hopes to achieve similar reductions in processing time realized by the pilot Agencies, enabling the inspectors to identify and inspect the new establishments far more quickly.

The Division is also developing a centralized notification and tracking system to improve response time for inspection of new establishments. Inspectors will be notified by management upon entry into the licensing database of a new establishment and instructed to conduct an initial inspection within a given time frame. In cases where establishments may not yet be ready to open, the inspector will communicate that information back to management. Corrective actions will be implemented should there be a failure of inspectors to meet established time frames.

Recommendation 3: *Increase efforts to provide coordinated real-time access to data among divisions and obtain training on how to use that data to perform necessary analytics to monitor performance, including activities such as inspections and complaint response.*

The Department acknowledges the importance of access to real-time data and has initiated an auditing process to ensure continuous improvement. The Division of Food Safety and Inspection is also coordinating with Licensing and Information Technology Services to ensure direct access to all available establishment data in order to improve its ability to monitor field activities. Corrective actions will be implemented, as needed.

In conclusion, the Department appreciates the audit work of OSC and the resulting recommendations. We believe the implementation of the report's recommendations can be incorporated into the Division of Food Safety and Inspection's existing quality management system; and that together with the actions already taken by the Department, we will be better able to monitor and protect New York's food supply.

Very truly yours,

A handwritten signature in black ink that reads "James B. Bays" followed by a stylized set of initials "SJR".

James B. Bays
Acting Commissioner