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March 7, 2016

REPORT #: 2016-05

Roubik Golanian, Director Public Works Department

Dear Roubik,

Enclosed is the final audit report for the Fats, Oils & Grease (FOG) Control Program. Internal Audit would like to thank you and your staff for the support and assistance provided to us during the audit.

Should you have any questions, please feel free to contact Natalie Minami-Valdivia or myself.

Thank you,

Eileen Donahue, Internal Audit Manager

Enclosure

cc: Yasmin Beers, Assistant City Manager

Robert Elliot, Director of Finance

Michele Flynn, Assistant Director of Finance

Dan Hardgrove, Deputy Director

John Hicks, Wastewater Maintenance Superintendent

Scott Ochoa, City Manager

City Council

**Audit Committee** 



# Fats, Oils & Grease Control Program Audit March 7, 2016

# **Background**

In accordance with Internal Audit's fiscal year 2015-16 annual work plan, Internal Audit performed an audit of the City of Glendale's Fats, Oils & Grease (FOG) Control Program which is administered by the Public Works Department, Maintenance Services Division.

The FOG Control Program addresses a state law (Order No.2006-0003) requirement in an effort to reduce sanitary sewer overflows in the sewage collection systems resulting from excess grease in city sewer lines. As established in Glendale Municipal Code (GMC)13.34, the FOG Control Program includes the following major provisions:

- 1. Grants Public Works staff the legal authority to inspect food service establishments and requires food establishment owners to operate and maintain accessible facilities for monitoring.
- 2. Establishes requirements for the installation of grease removal devices at food service establishments that meet certain criteria.
- Requires proper cleaning and maintenance of the grease removal devices at the food service establishments.

Approximately 700 food services establishments are inspected annually by Public Works staff to verify compliance with the FOG Control Program. In addition, these FOG inspections satisfy the industrial waste permit

inspections for food service establishments under a separate program managed by the Fire Department.

## Objective, Scope and Methodology

The primary objective of this audit was to assess the effectiveness of the FOG Control Program and to identify areas where efficiencies could be gained to improve operations of the program. In addition, we were asked to determine if it would be cost effective to combine the FOG Control Program at Public Works with the Industrial Waste function at Fire Department.

The audit was performed on the FOG Control Program operations over the period June 2015 through October 2015 with detailed review of the available inspections records at the Maintenance Services Division location.

In order to accomplish the audit objectives, Internal Audit performed the following:

- Reviewed the State Water Resources Control Board Order No. 2206-0003-DWQ, the City of Glendale Sewer System Management Plan updated April 2014 and the GMC 13.34, relating to the prevention and reduction of FOG.
- Conducted interviews with key Public Works, Fire, and Community Development department personnel.
- Observed the performance of FOG inspections at nine food service establishments by participating in ride-a-longs on two occasions in August 2015.

 Performed completeness and existence test work on the documentation maintained by Public Works on the results of FOG inspections at food service establishments.

# **Summary of Results**

We gathered and evaluated information on the City's FOG Control Program. Through the test work completed, we found that the Public Works Department has an established FOG Control Program that includes annual inspections at food service establishments to ensure procedures are in place to prevent sanitary sewer overflows resulting from FOG introduction to the sanitary sewers from these facilities.

Through inquiry we learned during the plan review and approval process for new construction or remodeled food service establishments the grease removal device is evaluated for compliance with the plumbing code which may allow for a pretreatment device other than a grease interceptor.

We found that Public Works has established a comprehensive list of food service establishments subject to FOG inspections with the initial listing developed from data obtained from the Los Angeles County Health Department, restaurants listed in the phone directory, and updated regularly through information provided from the Community Development Department on new businesses, the issuance of construction permits for food service establishments, and restaurants visually identified while

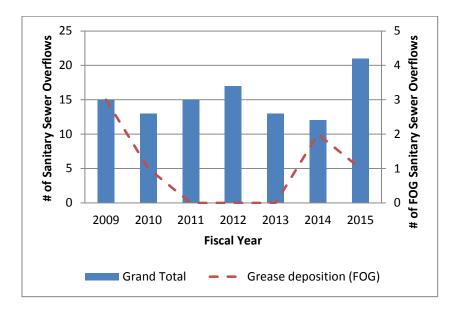
performing annual FOG inspections.

We found that almost all of the FOG inspections are conducted by one employee at Public Works with another individual being cross-trained to assist with the inspection load as necessary.

The FOG inspections are documented on a food service facility inspection form that provides a checklist of activities to indicate if the food service establishment is conforming to the requirements of the FOG Control Program which is signed and dated by the food service establishment representative and the inspector from Public Works.

During our observation of the FOG inspection process we found that the inspector examines the FOG disposal method of the food service establishments and verifies that the records for waste disposal are completed indicating proper disposal of cooking oils and maintenance of grease interceptors. As well, the inspector performs a walkthrough of the food service establishment to ensure that there are no signs of inappropriate discharge into the sanitary sewer system.

Through inquiry we were informed that the majority of sanitary sewer overflows in the City are the result of root intrusion. In a review of the report on sanitary sewer overflows since 2009, we found that very few have resulted from FOG in the sewer system as reflected in the graph on the following page.



In evaluating the practicality of combining the FOG Control Program at Public Works with the Industrial Waste function at the Fire Department to save costs we learned that inspection efforts are not being duplicated between the departments. Those performed by Public Works are specifically focused on FOG control aspects which also encompass the requirements of industrial waste disposal. The Fire Department is responsible for administering the industrial waste permit and monitoring function for the City which includes the processing of permit applications, collection of fees and monitoring of facilities through inspection and sampling.

Although the FOG Control Program is considered linked to industrial waste disposal monitoring, there is no sharing of revenues or separate tracking of costs for the inspections performed. Given the limited personnel resources at both

the Fire Department and Public Works Department and the focus on maintenance of sewer operations and prevention of sanitary sewer overflows at Public Works the information obtained through inquiries suggests that it is more beneficial to retain the FOG Control Program under the Public Works Department.

#### Conclusion

Overall, we found that sanitary sewer overflows resulting from FOG in the sewer system are infrequent. Public Works has established an effective FOG Control Program that includes annual inspections of food service establishments which is complemented by other efforts in the Maintenance Services Division to detect and prevent sanitary sewer overflows within the city.

Although there is a connection between the inspections for the FOG Control Program and the monitoring of food service establishments for industrial waste disposal there is no clear benefit at this time to combine operations under one department.

As well, through the test work performed we identified areas for improvement in the effectiveness and efficiency of operations reviewed. These observations are summarized by risk rating in the chart that follows and are included in the Observation, Recommendation, and Management Response Section of this report.

### **Priority 1**

Critical control weakness that exposes the City to a high degree of combined risks.

None noted.

#### **Priority 2**

Less than critical control weakness that exposes the City to a moderate degree of combined risks.

- General controls are lacking.
- o Inspection process could be more effective.
- Inspection records are not complete.
- FOG and industrial waste permit inspection relationship has some shortcomings.
- o GMC 13.34.040 is not enforced.
- Grease interceptor variances are not documented.

## **Priority 3**

Opportunity for good or better practice for improved efficiency or reduce exposure to combined risks.

 Performance metrics have not been established or documented.

	Item	Observation	Recommendation	Management Response
Priority 2	1.	<ul> <li>The following general control aspects of the FOG Control Program were found to be lacking:</li> <li>Uniform policies and procedures and the method of inspecting food service establishments are not documented and available to train employees or to maintain consistency for FOG inspections of the food service establishments.</li> <li>There has been no standard monitoring or independent review, for quality control purposes, performed on the FOG inspections completed.</li> <li>The Food Service Facility FOG Inspection form does not easily facilitate documentation of the more important FOG Control Program elements.</li> </ul>	It is recommended that policies and procedures be developed for the FOG Control Program operations to include the following, at a minimum:  • Line by line instructions on how to properly complete the standard inspection form; including details on what needs to be inspected (i.e. maintenance records for pretreatment devices) and when responses "Yes", "No", and/or "N/A" should be used.  • Responses that result in a reinspection being scheduled.  • Procedure for independent review and approval of inspection forms and the practice to routinely monitor inspection activities through ride-a-longs or spot inspections at food service establishments  • Procedure to track follow-up inspections or follow-up on items missing on the inspection checklist.	Management agrees with the recommendation and will develop and document policies and procedures for the FOG Control Program with specific practices for the inspection process that will include an independent review component.  Further management will reevaluate the inspection form and make modifications to improve the layout to maintain effectiveness.  The anticipated completion date is September 30, 2016.

Item	Observation	Recommendation	Management Response
		Checklist of items to be brought on each inspection.	
		<ul> <li>Procedure for addressing noncompliance of an inspection item.</li> </ul>	
		<ul> <li>Practice to clearly document on the inspection form for any alternative pretreatment device allowed in place of a grease interceptor.</li> </ul>	
		<ul> <li>Documentation of total time spent on an inspection.</li> </ul>	
		Finally, the FOG inspection form should be modified to allow clear documentation and layout of each FOG compliance item which includes adequate indication on compliance with the FOG program.	

Item	n Observation	Recommendation	Management Response
Priority 2	<ul> <li>While observing nine FOG inspections performed over a two day period Internal Audit noted the following:</li> <li>Measurement equipment was not used to verify that the combined FOG and solids accumulation did not exceed the maximum per code for the grease interceptor.</li> <li>No food service establishments inspected were required to have a re-inspection, although, 2 could not provide documentation for cooking oil disposal and/or pretreatment device maintenance, 2 had records with maintenance deficiencies, and four were non-compliant with the general housekeeping requirements included within the inspection form.</li> <li>Two inspection forms were not complete with a response to the question regarding – grease/oil storage containers and no signs of overflowing observed.</li> </ul>	It is recommended that the Public Works management consider making improvements to the inspection process to increase effectiveness by:  • Equipping the inspector with appropriate tools and equipment for proper measurement and sampling.  • Educating the food service establishment representatives on code requirements such as the employee training program documentation and locations to wash floor mats.  • In combination with Observation #1, develop a method or guideline to:  • Thoroughly document required responses on the inspection form.  • Define the conditions that require re-inspection and a notice of noncompliance, including follow up actions.  • Indicate the FOG compliance or noncompliance for each inspection.	Public Works management agrees with the recommendation and will perform an evaluation of the inspection process to implement the suggested items.  The anticipated completion date is June 30, 2016.

	Item	Observation	Recommendation	Management Response
Priority 2	3.	<ul> <li>Through non-statistical sampling we selected 35 food service establishments to test for the existence and completeness of FY 2014-15 FOG inspection records. Based upon the test work, we noted the following:</li> <li>The completed inspection records for 19 (54%) of our test sample could not be located.</li> <li>For 15 (43%) of the inspection records examined it was found that response fields were left blank and in 7 of these instances, critical data fields were left blank.</li> <li>Deficiencies were noted in 7 (20%) of the inspection forms viewed, however there was no evidence on the form that a reinspection was scheduled and/or a description of the required follow-up action for the deficiencies.</li> <li>One inspection was completed on an outdated form.</li> </ul>	It is recommended that the Public Works Maintenance Services management improve the process for managing and logging completed inspection forms performed for FOG inspections at food service establishments. At a minimum a regular verification should be occurring to reconcile the electronic record of the completed inspections to the hard copy files to ensure the existence of records is maintained.  In addition, as reflected in Observation #1, an independent review process should be implemented and a policy established for follow-up on deficiencies.	Public Works Management agrees with the recommendation and will implement improvements to ensure the existence and completeness of inspection records.  The anticipated completion date is June 30, 2016.

lten	n Observation	Recommendation	Management Response
Priority 2	<ul> <li>The practice of relying on the FOG inspection to satisfy the industrial waste permit inspection at food service establishments has some shortcomings as follows:</li> <li>The Fire Department does not provide Public Works with a listing of food service establishments to inspect for industrial waste discharge. As a result, there are no controls in place to ensure that all food service establishments with an Industrial Waste Permit are inspected or that all food service establishments inspected for FOG have an Industrial Waste Permit.</li> <li>Revenues for Industrial Waste Permit Inspection Fees from food service establishments are not allocated from the Fire Department to the Public Works Department. These revenues are recorded in the Hazardous Disposal Fund, a special revenue fund, while the costs of performing the inspections by Public Works staff are charged</li> </ul>	It is recommended that the management of the FOG program and the Industrial Waste program work together to reconcile their listings of food service establishments in need of inspection under each program in order to identify and resolve any differences.  Further, Public Works management and Fire Department management should reevaluate the recording of revenues and expenses for Industrial Waste Permit inspections associated with food service establishments to ensure the fees and services charged to customers are computed appropriately.	<ul> <li>Management agrees with the recommendation and will work with the Fire Department to perform the following:         <ul> <li>Establish a procedure to ensure that all food service establishments in need of an industrial waste permit inspection are appropriately included on the listing of establishments receiving an annual FOG inspection.</li> </ul> </li> <li>Identify and document the relationship between the Industrial Waste Permit and the FOG Inspection and determine a means to properly match the Industrial Waste Permit fee revenues collected by the Fire Department to the Industrial Waste Permit Inspection/FOG Inspection expenses incurred by the Public Works Department.</li> <li>The anticipated completion date is December 31, 2016.</li> </ul>

	ltem	Observation	Recommendation	Management Response
		to the Sewer Fund, an enterprise fund. Thus, a mismatch of revenues and expenses is occurring which may impact rate calculations for industrial waste permit inspection fees and charges for services of the Sewer Fund.		
Priority 2	5.	Public Works does not require food service establishments to install a grease interceptor and/or obtain a grease interceptor variance in accordance with the FOG pretreatment requirement of GMC 13.34.040 (B) & (C).	It is recommended that the Public Works management evaluate the FOG pretreatment code requirements and either enforce the code or seek modification to allow alternative pretreatment devices that do not require a variance but meet the minimum standards of the plumbing code.	Management agrees with the recommendation and will submit proposed updates to the FOG pretreatment code requirements to City Council for review and approval. Upon approval of the code revision, communications will occur with individuals responsible for plan review at the Building & Safety Section to ensure requirements are enforced.  Additionally, guidelines will be established to document the criterion used by the City to determine the pretreatment device required to be installed in a consistent manner.
				The anticipated completion date is December 31, 2016.

	Item	Observation	Recommendation	Management Response
Priority 2	6.	Public Works does not maintain a listing of the grease interceptor variances granted to food service establishments.  Lack of a documented record of the grease interceptor variances granted prevents the FOG Inspector from fully knowing whether or not the alternative device viewed during an inspection was formally authorized or should be noted as a deficiency and addressed as a non-compliance issue.	It is recommended that the Public Works management identify and document all food service establishments that do not have a grease interceptor installed per the requirements of GMC 13.34.040. This document will assist the inspector in identifying instances of noncompliance.	<ul> <li>Management agrees with the recommendation and will perform the following:</li> <li>Identify and document all food service establishments that do not have a grease interceptor installed during the annual FOG inspection process.</li> <li>Establish a procedure to document any approved variances to the FOG pretreatment device requirements.</li> <li>The anticipated completion date is September 30, 2016.</li> </ul>
Priority 3	7.	No performance metrics have been established or documented to measure the effectiveness of the FOG Control Program at preventing and reducing FOG discharges by food service establishments into the City's sanitary sewer system.	It is recommended that the Public Works management establish performance metrics to measure the success of the FOG program at preventing and reducing FOG discharges by food service establishments into the City's sanitary sewer system.	Management agrees with the recommendation and will establish and document performance metrics.  The anticipated completion date is June 30, 2016.