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November 3, 2016

To Whom It May Concern:

Please be advised that, pursuant to the Michigan Fireworks Safety Act (MCL 28.451 et seq.), the Bureau of Fire Services (BFS) will be suspending all consumer fireworks delegation authority granted by BFS Procedure 08-01 (September 16, 2015), and MCL 28.469 for Fiscal Year 17 (FY17). A new software system that will be used by all field inspectors is scheduled to go live in January 2017, and as a result, fireworks delegation will be impractical at this time. The suspension is currently for one year and the matter will be re-visited for FY18.

For your information I have attached a copy of the FY16 Consumer Fireworks Delegation Program Overview report. This overview will also be posted on the BFS website. If you have any questions, please do not hesitate to contact me.

Respectfully,

A handwritten signature in black ink, appearing to read "Julie Secontine".

Julie Secontine
State Fire Marshal

Consumer Fireworks Delegation Program Overview

September 23, 2016

Prepared for:

Julie Secontine, State Fire Marshal

Licensing and Regulatory Affairs



RICK SNYDER
GOVERNOR



SHELLY EDGERTON
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Fireworks Inspection Delegation Program Overview

Overview and Summary

This report provides an overview of the technical issues relating to the Fireworks Inspection Delegation report submission and processing.

Fiscal Year 2016 is the third year that the Bureau of Fire Services (BFS) has tracked data with firework inspection delegation report submission and processing. In FY14, a number of errors were identified through the review of firework inspection delegation reports submitted. Those issues lead to additional training provided for all delegated department in February of 2015 as well as specific focus areas during the training based upon observed deficiencies during inspections. This lead to a significant reduction in the errors for reports submitted for review. For FY16, departments that had participated in FY15 were not required to attend an in-person training session. 11 new departments participated in FY16 and attended a training session in Okemos. The new departments as well as the remaining departments each received a DVD with a 20-minute multimedia presentation with updates and reminders for the 2016 fireworks season that reinforced key areas of the program and previous year's report deficiencies.

In FY16 all reports were again reviewed by Region 4 Fire Safety Supervisor, Jim Elenbaas, to ensure consistency and accuracy for the delegation report criteria.

Statistics for the 2016 Fireworks Inspection Delegation season showed that 21.3% of the delegation inspection reports were returned for correction and that percentage would have been around 66% if BFS staff did not make the remaining corrections for the delegated departments. All of the errors noted were related to specific directives that the delegates received through the in-person or video training materials. Written directives outlining the specific procedures were also provided to each delegated department as well as all necessary documents needed to conduct inspections for FY2016. In two (2) of the error categories, more than 50% of all departments failed to meet the program expectations. In four (4) of the error categories, the rate of error was much greater than the prior year.

Purpose

The statistical information included in this report is to assist in the overall evaluation of the Fireworks Inspection Delegation Program. The information from each prior year is used in developing additional training materials and tools for the delegates to reduce the error rate. The noted deficiencies on the delegated inspection reports highlight only a portion of the effectiveness and accuracy of the delegate inspections. At this time, BFS does not have a standard system to verify the accuracy of the inspections themselves.

Fireworks Inspection Delegation Program Overview

Basic Statistics

Below are the basic statistics from FY2016 with the corresponding numbers from prior years for comparison:

	2016	2015	2014
Reports Submitted:	304	296	288
Reports Returned:	65	97	130
Return Rate:	21.3%	32.8%	45.1%
Reports Corrected by BFS:	136	38	90
Overall Error Rate:	66.1%	45.6%	76.4%

The reports submitted include: initial inspections with deficiencies, initial inspection with full approval, and recheck inspections.

Some reports were returned multiple times noting that corrections required in the prior submittal, had not been corrected. For FY2016, five (5) departments (7.8%) had at least one report returned for correction more than once. Two (2) departments each had a report returned for correction 3 times with an overall average of being returned 1.12 times. The number of reports returned for correction did decline overall in FY2016, but these numbers would have been greater if BFS did not make some of the corrections for the delegates. Some reports that were returned for correction *still* required correction by BFS upon resubmittal. The overall error rate significantly increased for FY2016 after showing improvement in FY2015.

Of the 64 departments participating in FY2016, 7 (11%) submitted reports that did not require any corrections. The total number of reports submitted from those departments was 18 or 5.9% of all reports.

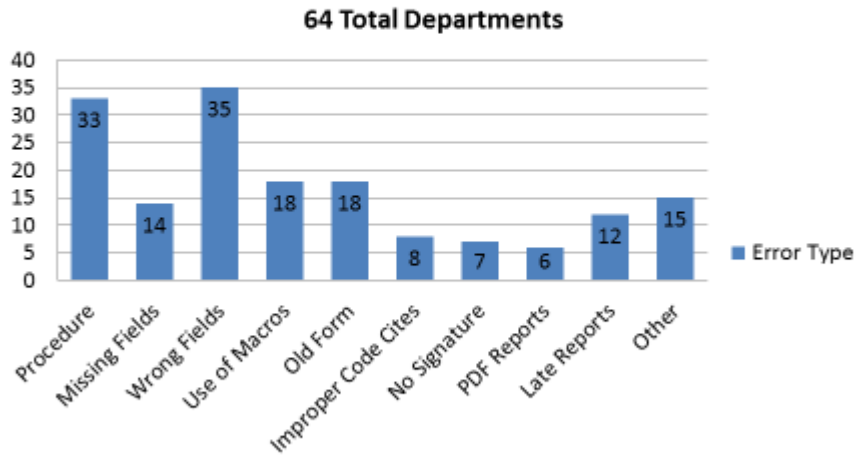
Types of Errors

Below is a graph of the types of errors that were found during the delegation report review process. The errors have been categorized to emphasize the types of errors that were found. Nearly every category showed a greater number of errors for 2016 over 2015.

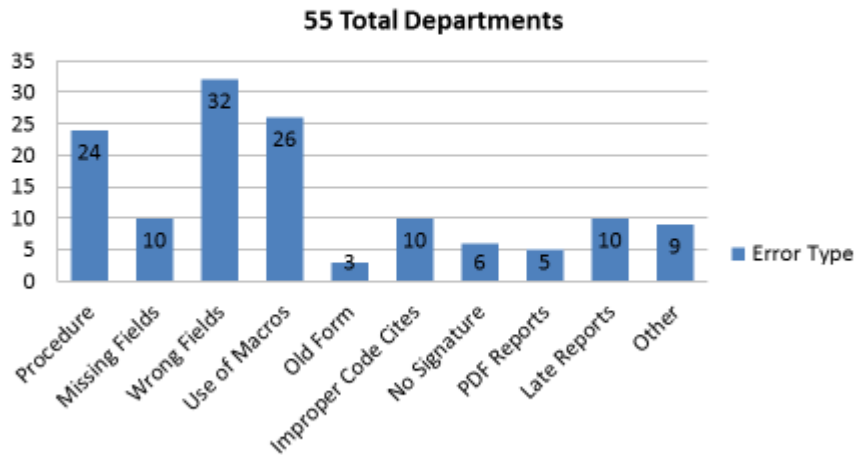
A definition and report of error for each category is provided after the graph. **Please note:** the errors are based on the number of delegated departments that made that category of error, not the total number of times that category of error occurred. That information is included with the definitions section following.

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Delegate Report Errors 2016

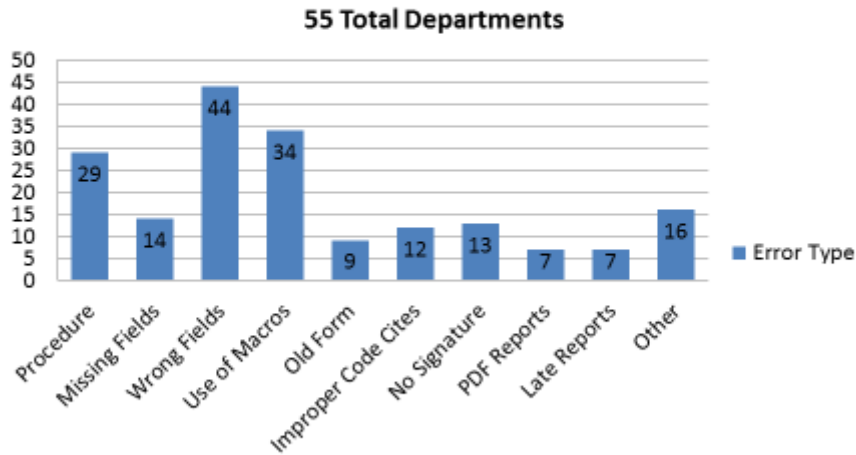


Delegate Report Errors 2015



Fireworks Inspection Delegation Program Overview

Delegate Report Errors 2014



Errors Definition/Errors Reported

Procedure – These reports were noted as not following Procedure 08-02, Fireworks Delegation Electronic Correspondence, which was provided to each participating department at the start of the 2016 firework’s season. The issue was primarily Item 4 of the procedure which established a specific format for the email subject line and the file name format. The format was specified to assist BFS in efficiently routing and processing the reports. Many departments did not follow the correct format for the email subject line for resubmitting corrected reports, but those errors are not included in the count as it did not cause any additional work during review. 51.6% (compared to 43.6% for FY2015 and 52.7% for FY2014) of all departments failed on at least one of their delegated report submittals to follow the report submittal procedure. This error occurred 95 times overall (66 times for FY2015).

Missing Fields – These reports were noted as failing to fill in all of the required fields on the BFS 40d report form. All fields in the report that required information to be entered by the delegate were detailed in the BFS 40 Report Fields document and emphasized during the training. All necessary information was included on a Field Checklist for each certificate location. A revised version of the report was provided for FY2015 with drop-down fields to assist the delegates in providing all necessary information in a standard format. 21.9% (compared to 18.2% for FY2015 and 25.5% for FY2014) of all departments failed on at least one of their submittals to complete the required field information on the form. This error occurred 25 times overall (16 times for FY2015).

Wrong Fields – These reports were noted as failing to follow the specific format and wording on the BFS 40d report form, or not correctly transferring the information from the certificate holder’s

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file to the report. All fields were detailed in the BFS 40 Report Fields document as to where the information could be found on the Field Checklist and were highlighted as part of the training. As noted above, a revised version was provided in FY2015 with drop-down fields to assist the delegates in providing information in a standard format which was continued for FY2016. 54.7% (compared to 58.2% for FY2015 and 80% for FY2014) of all departments failed on at least one of their submittals to follow the wording provided on the referenced instructions. This error occurred 83 times overall (80 times for FY2015).

Use of Macros – These reports were noted as either not using the standard macros for completing the body of the report, reformatting the macro from the standard provided, or copying the macro with the reference number included to the report. The Fireworks Standard Language Macros file contained nearly all possible code citations related to inspections. The macros were in the proper format and font for copying and pasting to the report form. The macros are numbered to match the Fireworks Inspection Checklists to allow ease of locating correct code language. The Fireworks Standard Language Macros document was provided to each delegated department with their other delegated inspection documents and instructions. The method of copying and pasting the macros was explained and demonstrated during the in-person training and was re-emphasized to all departments in the multimedia training materials. Also included as errors are reports submitted with the standard language, but failed to provide the requisite detail under the Inspector's Comments section to indicate how the facility was deficient during the inspection. 28.1% (compared to 47.3% for FY2015 and 61.8% for FY2014) of all departments failed on at least one of their submittals to use the macros in the manner demonstrated during the training. This error occurred 32 times overall (56 times for FY2015).

Old Form – This category saw the greatest increase in error. These were reports that were submitted on the prior year's BFS 40d report form. During the training it was noted that all documents had been updated from last year and that all prior years' documents should be discarded. The correct version of the BFS 40d report form was provided to each delegated department with their other delegated inspection documents and instructions. The form for FY2016 had only some minor formatting changes that made final review faster. Submittals on prior year's forms were not returned for correction but were noted as an error since the delegates did not follow the program requirements. One department submitted all reports utilizing the FY2014 form. 28.1% (compared to 5.4% for FY2016 and 16.4% for FY2014) of all departments failed to use the correct report form for at least one of their submittals. This error occurred 62 times overall (3 times for FY2015).

Improper Code Cites – These reports were noted as having deficiencies listed that were not in accordance with NFPA 1124. Examples of report errors includes citing local code violations on the BFS 40d, enforcing sections of the code in conflict with the training and interpretations provided, and citing sections of the code for facilities that were exempt from the requirements based upon their limited stock. The section listing the individual departments later in this report details the specific deficiencies for those reports. 12.5% (compared to 18.2% for FY2015 and 21.8% for FY2014) of all departments failed to make accurate code citations on at least one of their submittals. This error occurred 13 times overall (11 times for FY2015).

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No Signature – These reports were submitted without a digital scan of a signature in the block provided. This process was stressed during all of the training materials that all reports must have a signature on them to be processed for payment by LARA Finance and the process was demonstrated during the training as an example report was filled out on the screen. 10.9% (compared to 10.9% for FY2015 and 23.6% for FY2014) of all departments failed to submit at least one of their reports with the required signature. This error occurred 12 times overall (11 times for FY2015).

PDF Reports – These reports were submitted as PDF documents for review. In accordance with Procedure 08-02, all reports were required to be submitted in Microsoft Word format to allow for final editing and formatting by BFS. One department submitted all reports in the pdf format for FY2016 after being noted as making the same error in FY2015. 9.3% (compared to 9.1% for FY2015 and 12.7% for FY2014) of all departments submitted at least one of their reports in the incorrect format. This error occurred 18 times overall (11 times for FY2015).

Late Reports – These reports were noted as being submitted either later than the 5-day period specified in Procedure 08-02 or were not resubmitted after correction within the 5-day period in Procedure 08-02. 18.8% (compared to 18.2% for FY2015 and 12.7% for FY2014) of all departments had at least one of their reports submitted outside of the timelines established in the procedure. This error occurred 24 times overall (23 times for FY2015).

Other – This category contains all other errors from failing to follow established procedures or training instructions that were found during the report review process. 23.4% (compared to 16.4% for FY2015 and 29.1% for FY2014) of all departments had a least one report submitted with additional errors not noted above. This category included inspections that were conducted in the weeks following July 4 at permanent CFRS facilities that were available to be inspected prior to the height of the fireworks sales season. This error occurred 22 times overall (22 times for FY2015).

Financial Implications of Inspection Delegation Program

Payments for delegated fire department inspections for FY2016 totaled \$132,020. With the total of 304 documented inspections, the average is \$434.28 per inspection. With each inspection taking roughly an hour to complete as well as report and administrative time, a generous estimate of 3 hours per inspection would be a payment of \$144.76 per hour. BFS also has additional costs to the program for supervisory time to review, return, and correct delegate reports as well as answering a variety of questions from delegate inspectors needed additional guidance.

One concern presented was whether or not BFS would be able to complete all inspections of CFRS facilities without the use of the delegated departments. BFS inspectors accomplished inspections of all facilities in 2012 – the first year of the fireworks program prior to delegation. Quantifying the exact cost for BFS to conduct all inspections is difficult due to variations in travel time, current workload, etc. BFS inspectors have varying wage amounts based upon

Fireworks Inspection Delegation Program Overview

experience and years of service. A conservative estimate of the hourly overtime cost of a BFS inspector is \$50 since benefits are already factored into their current pay scale – about 1/3 the amount paid to the delegates per hour. Even with the potential of additional time for travel to conduct the inspections, it would likely be less than 50% of the cost per hour that is paid to the delegated departments. This savings would place the Fireworks Safety Program as a whole into a position where the current deficit per year to operate the program is eliminated and the program would be completely self-funded as intended.

Fireworks Inspection Delegation Program Overview

Individual Department Report:

Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Adrian	3	0	2	<ul style="list-style-type: none"> • Distributed prior to review • Facility name didn't match checklist
Allen Park	3	1	0	<ul style="list-style-type: none"> • Facility email didn't match checklist • Didn't use opening macro
Allendale	2	1	1	<ul style="list-style-type: none"> • Email subject line not in required format • Wrong inspection date in filename • Macro copied with number • Project status left open
Alpine	4	1	0	<ul style="list-style-type: none"> • Facility name didn't match checklist • Facility contact didn't match checklist
Ann Arbor	1	1 (3 Times)	0	<ul style="list-style-type: none"> • Filename not in required format • Email subject line not in required format • PDF format submitted • XPS format submitted • 1 assigned facility with no inspection or notification given
Battle Creek	9	9		<ul style="list-style-type: none"> • PDF format submitted • No resubmittal of revised reports • Repeat issues from 2015 • 2 assigned inspections not completed or notification given

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Bedford Township	2	2	2	<ul style="list-style-type: none"> • Filename not in required format • Email subject line not in required format • Facility email missing • PDF format submitted • Late submittals • No signature • Wrong project number in filename • 1 assigned facility with no inspection or notification given
Bridgeport	1	0	0	
Burton	14	2	0	<ul style="list-style-type: none"> • No inspector comments for deficiencies • Wrong date in filename • Wrong date in email subject line • FD information not completed
Cadillac	4	1	2	<ul style="list-style-type: none"> • Required parking barriers • Email subject line not in required format • Incorrect macro used for recheck inspection • Facility email didn't match checklist
Canton	5	1	4	<ul style="list-style-type: none"> • Facility email didn't match checklist • Macro copied with number • Footer not completed • No signature • Project status left open
Center Line	1	0	1	<ul style="list-style-type: none"> • Macro copied with number
Coldwater	3	2	1	<ul style="list-style-type: none"> • Filename not in required format • No facility type selected

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Commerce Township	2	0	2	<ul style="list-style-type: none"> • Filename not in required format • 1 assigned facility with no inspection or notification given
Cutlerville	0	0	0	<ul style="list-style-type: none"> • 1 assigned location not inspected or notified
Dearborn	0			<ul style="list-style-type: none"> • No facilities opened but no notification to BFS. One facility (Walmart) was operated but not inspected.
Delta	7	0	7	<ul style="list-style-type: none"> • Used old form • Facility email didn't match checklist • Project status left open • Facility name didn't match checklist

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Detroit	43	6	26	<ul style="list-style-type: none"> • Facility name didn't match checklist • Incorrect inspection type • Macro copied with number • Incorrect code cite for display height • Project status left open • Incorrect certificate number in filename • Incorrect project number in filename • Incorrect inspection type • Facility email didn't match checklist • Incorrect inspection date in filename • Incorrect inspection date in email subject line • Incorrect project number in email subject line • Facility address didn't match checklist • Old form used • Email subject line not in required format • Filename not in required format • Incorrect facility contact name • Incorrect certificate number and project number in report • Facility phone number didn't match checklist • Last submittal • 9 assigned facilities with no inspection or notification

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Dexter	2	1	0	<ul style="list-style-type: none"> • No fire safety certification selected • No project status selected • Filename not in required format
Ferndale	2	1	2	<ul style="list-style-type: none"> • Email subject line not in required format • Filename not in required format • Submitted to incorrect email address • Late submittal • Partial inspection documented for exempt location that was issued citation
Flint	4	0	4	<ul style="list-style-type: none"> • Old form used • Violations noted for exempt location • Incorrect facility email
Graafshap	1	0	0	
Grand Blanc	2	0	1	<ul style="list-style-type: none"> • Incorrect facility contact • Old form used
Grand Haven	1	1	0	<ul style="list-style-type: none"> • Macro copied with number • Footer not completed • 1 assigned location not inspected or notified
Grand Ledge	1	0	0	
Grand Rapids	5	0	5	<ul style="list-style-type: none"> • Old form used • Incorrect facility contact • Report distributed prior to review • Didn't use opening macro • Wrong project number and certificate number in report • 1 assigned location not inspected or notified

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Grand Traverse Metro	5	0	1	<ul style="list-style-type: none"> • Email subject line not in required format • Missing FD email info in footer • 2 assigned inspections not completed or notifications given
Hamtramck	3	1 (2 times)	2	<ul style="list-style-type: none"> • First submittal not on any form • Email subject line not in required format • Filename not in required format • No macro used • No signature • Facility email not completed • Project status left open • FD information not complete
Harrison Township	1	0	1	<ul style="list-style-type: none"> • Wrong inspection date in filename
Highland Township	4	1	4	<ul style="list-style-type: none"> • Project status left open • Macro copied with number • Combined final/recheck inspection on single form • Violations noted as corrected in report • Filename had last year's certificate and project number • Report had last year's certificate and project numbers • Late submittal
Howell	3	0	3	<ul style="list-style-type: none"> • Distributed prior to review • Late inspection for recheck • Old form used

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Independence	6	1	0	<ul style="list-style-type: none"> • Violations noted for exempt facility • Required parking barriers
Kentwood	7	2 (3 times)	2	<ul style="list-style-type: none"> • PDF format submitted • No signature • Incorrect inspection date in filename • Incorrect inspection date in email subject line • No facility email completed • Incorrect facility email
Lennox Township	1	1		<ul style="list-style-type: none"> • Filename not in required format • Facility email didn't match checklist • No signature
Madison Township	2	0	1	<ul style="list-style-type: none"> • Incorrect certificate number on report
Marquette Township	3	0	0	
Marysville	3	0	3	<ul style="list-style-type: none"> • Old form used
Meridian Township	3	0	1	<ul style="list-style-type: none"> • Macro copied with number
Midland	10	0	3	<ul style="list-style-type: none"> • Facility email address didn't match checklist • Incorrect project number
Muskegon	4	1	4	<ul style="list-style-type: none"> • Filename not in required format • Fire safety certification not complete • No project status selected • Old form used
Niles	1	1	0	<ul style="list-style-type: none"> • Filename not in required format • Incorrect certificate number • Old form used • No signature
North Oakland	1	0	0	

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Oshtemo	5	0	4	<ul style="list-style-type: none"> • Incorrect inspection date • Late submittal • Facility contact name didn't match checklist • Filename not in required format
Owosso	5	0	0	
Pinconning-Fraser	2	2	0	<ul style="list-style-type: none"> • Filename not in required format • PDF format submitted • Incorrect certificate number on report • Old form used
Plainfield	8	0	6	<ul style="list-style-type: none"> • No facility email entered • Email subject line not in required format • Facility contact phone number didn't match checklist • Facility contact email didn't match checklist • Facility contact name didn't match checklist
Plainwell	1	1		<ul style="list-style-type: none"> • Filename not in required format • Facility email address didn't match checklist
Resort Bear Creek	3	1	3	<ul style="list-style-type: none"> • Email subject line had last year's certificate number • Filename had last year's project number • Old form used • Facility email not entered
Rochester Hills	4	0	1	<ul style="list-style-type: none"> • Late submittal
Romulus	4	0	4	<ul style="list-style-type: none"> • Project status left open • Old form used • Late submittal

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Roseville	4	0	4	<ul style="list-style-type: none"> • Filename had wrong inspection date • Facility name didn't match checklist • Old form used • Facility notified they could not sell but report submitted showing full approval on 6/2. Facility authorized to sell by delegate on 6/15. • Incorrect facility contact name
Saginaw	4	1	4	<ul style="list-style-type: none"> • Filename had wrong certificate number and project number • Facility contact didn't match checklist • Facility contact phone number didn't match checklist • No signature • Old form used • Incorrect certificate year on report • Incorrect certificate type in filename and report
Saginaw Township	4	0	4	<ul style="list-style-type: none"> • No inspection type selected • Old form used • Project number didn't match checklist • Incorrect certificate year on report
Saline	2	1	1	<ul style="list-style-type: none"> • Filename not in required format • Deficiencies noted with corrections on same report
Saugatuck Township	1	1		<ul style="list-style-type: none"> • Report submitted by unapproved inspector
Shelby Township	6	0	0	

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
South Haven	11	6	5	<ul style="list-style-type: none"> • Incorrect certificate type on report • Copied macro with number • No inspector comments entered for deficiencies • Incorrect macro used for recheck inspection • FD information block not completed • No facility contact name entered • No inspection type selected • Cited for not providing parking barriers
Sparta	2	0	1	<ul style="list-style-type: none"> • Late submittal
Sterling Heights	11	0	7	<ul style="list-style-type: none"> • Project number didn't match checklist • Last submittal • Facility email didn't match checklist • Permanent CFRS facilities inspected 7/12 and 7/15 • 1 assigned facility with no inspector or notification given
Taylor	11	2	9	<ul style="list-style-type: none"> • No opening macro entered • Old form used (2014) • 1 assigned facility with no inspection or notification given
Thomas Township	2	1	0	<ul style="list-style-type: none"> • Filename not in required format • Temporary approval with no deficiencies

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Utica	2	2	0	<ul style="list-style-type: none"> • Filename not in required format • Email subject line no in required format • No opening macro entered • Last submittal • Deficiencies cited with correction noted • Opening macro for temporary approval with full approval noted • Old form used
Van Buren	6	0	2	<ul style="list-style-type: none"> • No facility zip code entered • Facility contact phone number didn't match checklist • 1 assigned facility with no inspection or notification given
Walker	7	2	5	<ul style="list-style-type: none"> • Filename not in required format • Macro copied with number • Email subject line not in required format • Facility address didn't match checklist
Warren	10	5 (2 times)	0	<ul style="list-style-type: none"> • Filename not in required format • PDF document submitted • Certificate number didn't match checklist • No signature • Macro partially used • Deficiencies noted on exempt facility – required closing for the weekend

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Delegated Department	Number of Reports Submitted	Number of Reports Returned	Number of Reports Corrected by BFS	Issues Noted on Reports
Wayne-Westland Fire Authority	2	2 (2 times)	2	<ul style="list-style-type: none"> • Filename not in required format • Email subject line not in required format • Report partially in all-caps • Corrected report resubmitted late • Facility name didn't match checklist • 8 assigned locations with no inspection or notification given
Wyoming	9	0	2	<ul style="list-style-type: none"> • Project number didn't match checklist • Incorrect inspection date in filename