



SUMMARY ANALYSIS OF DELIBERATE SECONDARY FIRES THROUGHOUT SEFTON DURING THE 2010 BONFIRE PERIOD

VERSION 1.0

KNOWLEDGE & INFORMATION MANAGEMENT DIRECTORATE

Please note that the data in this document is based on the live Incident Recording System. As this is a live system, the data contained within this document is subject to review and can be changed without announcement.

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- **Introduction**

This report presents a comparative analysis of Deliberate Secondary Fires, Wheelie Bin Fires and incidents of Violence at Work that occurred during the 2009 and 2010 Bonfire Periods within Sefton.

- **Methodology**

To identify and analyse any trends in incidents during the Bonfire Periods in 2009 and 2010 the following methodologies were followed:

- The period of analysis covered from 00.00hrs on 19th October to 23.59hrs on 7th November¹.
- Fire related incidents analysed within this report are all Deliberate Secondary Fires². Instances of Violence at Work have been collected from the OSHENS Health and Safety System.
- The analytical tools adopted in this report includes:
 - MapInfo Mapping Software – used to identify hotspot areas for incidents and used to filter data according to district, ward, Super Output Area and Police Beat level.
 - Crystal Reports – utilised to extract raw data and information from the BOSS Fire Reporting System.
 - Excel – used to analyse raw data.
- The wheelie bin analysis is based on the “Wheelie Bin” tag in Vision Boss; not on a narrative search.

¹ Previous Bonfire reports ran from 07:00 20th October – 07:00 7th November. Therefore the historical figures in this report will differ slightly in comparison to previous reports

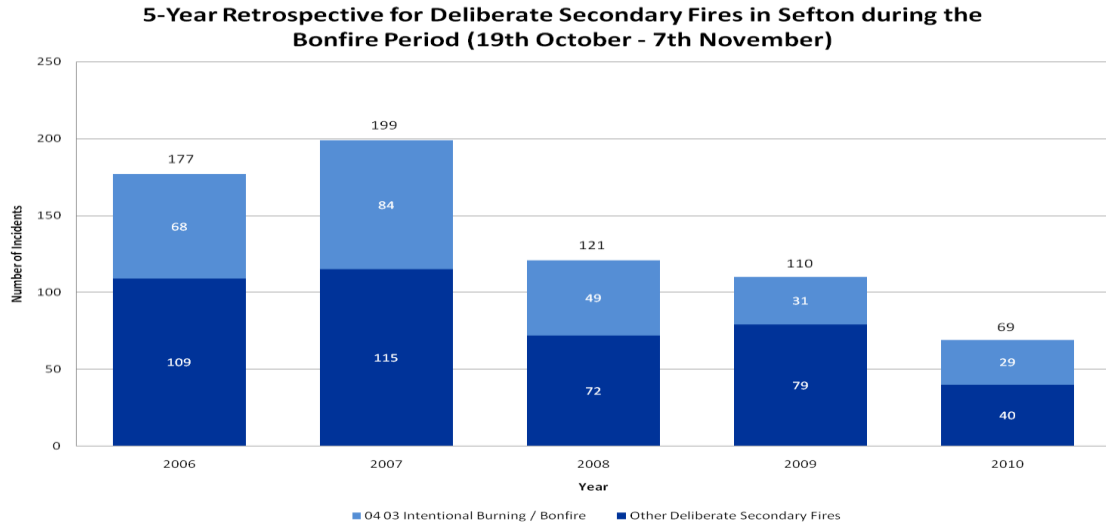
² FSEC (Fire Service Emergency Cover) incidents codes include: 04 01 – Derelict Building, 04 02 – Grassland, 04 03 – Bonfires, 04 04 – Outdoor Structure, 04 05 – Refuse, 04 06 – Derelict Vehicle.

Findings

Deliberate Secondary Fires

- **Retrospective**

Chart 1: 5 Year Retrospective for Deliberate Secondary Fires during Bonfire Period in Sefton



As Chart 1 illustrates, there has been a continuing trend of reductions in the number of deliberate secondary fires from 2007 to 2010.

There has been a reduction of 108 (61.0%) deliberate secondary fires from the Bonfire Period 2006 to Bonfire Period 2010. During the 2010 Bonfire Period there were 69 incidents reported in Sefton, this is a decrease of 41 (37.3%) incidents compared to the 2009 Bonfire period. Compared to the 2007 Bonfire Period, when Sefton witnessed the largest number of deliberate fires during the five year period, Sefton has witnessed a reduction of 130 (65.3%) incidents.

Deliberate Secondary Fires – by Incident Type

Table 1: Incidents attended by Type within Sefton, 2009 and 2010

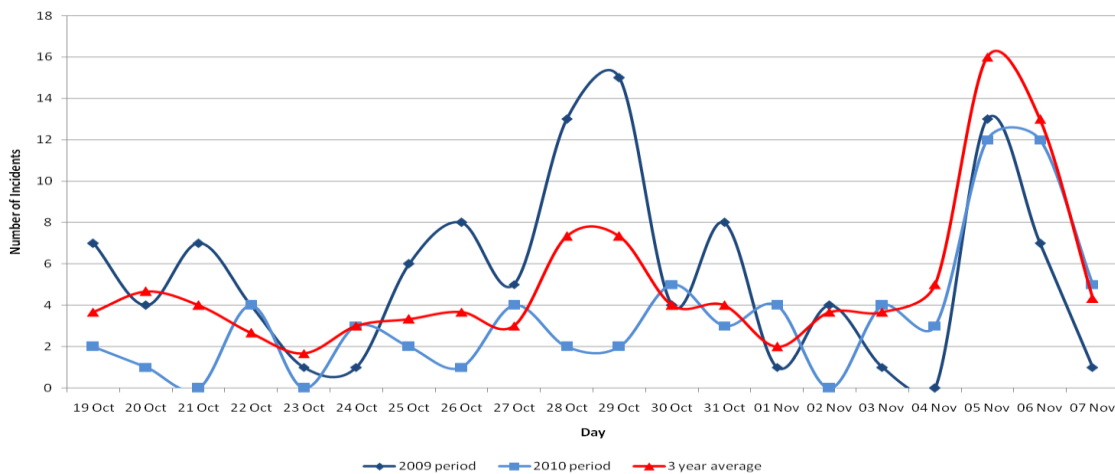
Incident Type	2009	2010	Difference	% Change
04 01 Derelict Building	1	5	4	400.0%
04 02 Grassland	7	1	-6	-85.7%
04 03 Intentional Burning / Bonfire	31	29	-2	-6.5%
04 04 Outdoor Structure	5	2	-3	-60.0%
04 05 Refuse Fire	66	32	-34	-51.5%
Grand Total	110	69	-41	-37.3%

Table 1 illustrates, during the Bonfire Period 2010, Sefton witnessed a reduction in four deliberate secondary fire incident types with refuse fires witnessing the largest reduction of 34 (51.5%) incidents compared to the Bonfire Period 2009. The remaining three incident types to witness a reduction were as follows: Grassland (-6), Intentional Burning/Bonfire (-2) and Outdoor Structure (-3). Derelict property fires was the only incident type that witnessed an increase from 1 incident during the Bonfire Period 2009 to 5 incidents during Bonfire Period 2010. There were no derelict vehicle fires during the 2009 or 2010 Bonfire Periods.

Temporal Analysis

Chart 2: Day to Day Comparison of Deliberate Secondary Fires in Sefton

Comparison of Deliberate Secondary Fires in Sefton between 2009, 2010 and the 3 year average, by Day



As Chart 2 illustrates, for 10 days during the Bonfire Period of 2010, Sefton witnessed fewer deliberate secondary fires compared to the Bonfire Period 2009 and the 3-year average. During the 28th and 29th October 2010, Sefton witnessed a reduction of 24 deliberate secondary fires compared to the same period in 2009. On the 5th November

2010, Sefton witnessed a similar trend to that of the 2009 Bonfire Period and the 3-year average, with deliberate secondary fires increasing.

Chart 3: Cumulative Daily Comparison of Deliberate Secondary Fires in Sefton

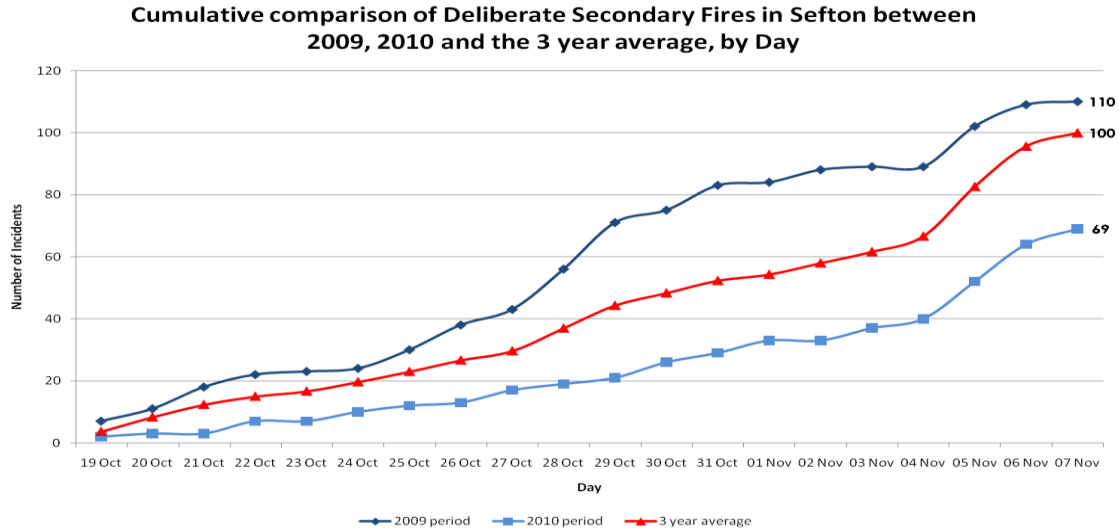


Chart 2 illustrates, that during the 2010 Bonfire Period there were consistently fewer deliberate secondary fires than that during 2009 and the 3 year average.

Deliberate Secondary Fires by Hour

Chart4: Distribution of Incidents by Hour

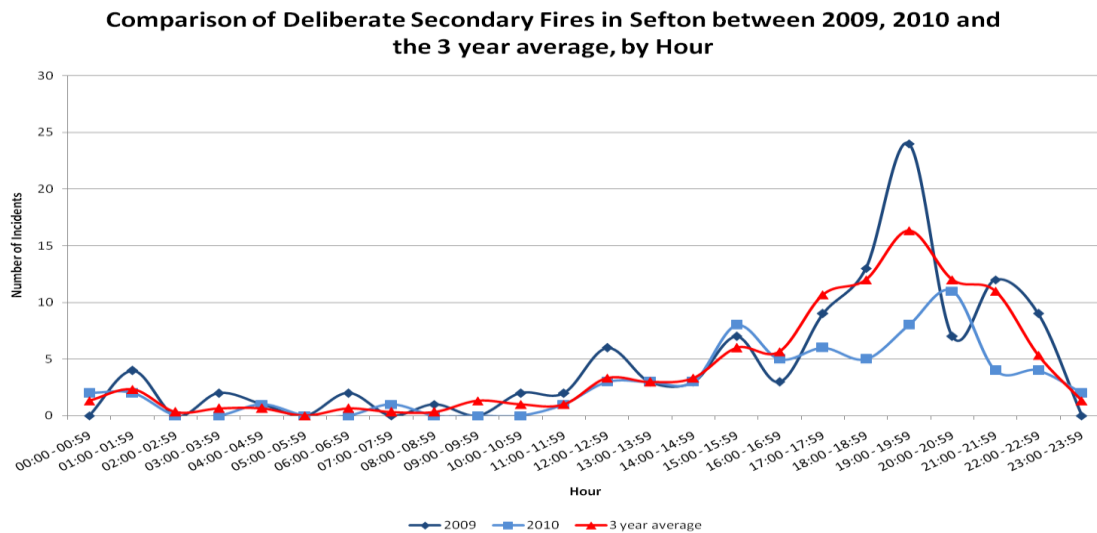


Chart 4 illustrates, between 00:00 and 11:59 there was a lull in the number of deliberate fires, and from 12:00 activity increases with the majority of deliberate secondary fires

occurring between 15:00hrs and 20:59hrs. During the 2010 Bonfire Period, activity peaks between 20:00 and 20:59, this is an hour later than that during the 2009 Bonfire Period and the 3-year average. Chart 4 also illustrates that during the 2010 Bonfire Period there is a steeper decline in the number of deliberate secondary fires after 20:59hrs compared to the previous year and 3-year average.

Deliberate Secondary Fires by Ward

Table 2: Incidents Attended in Sefton by Ward

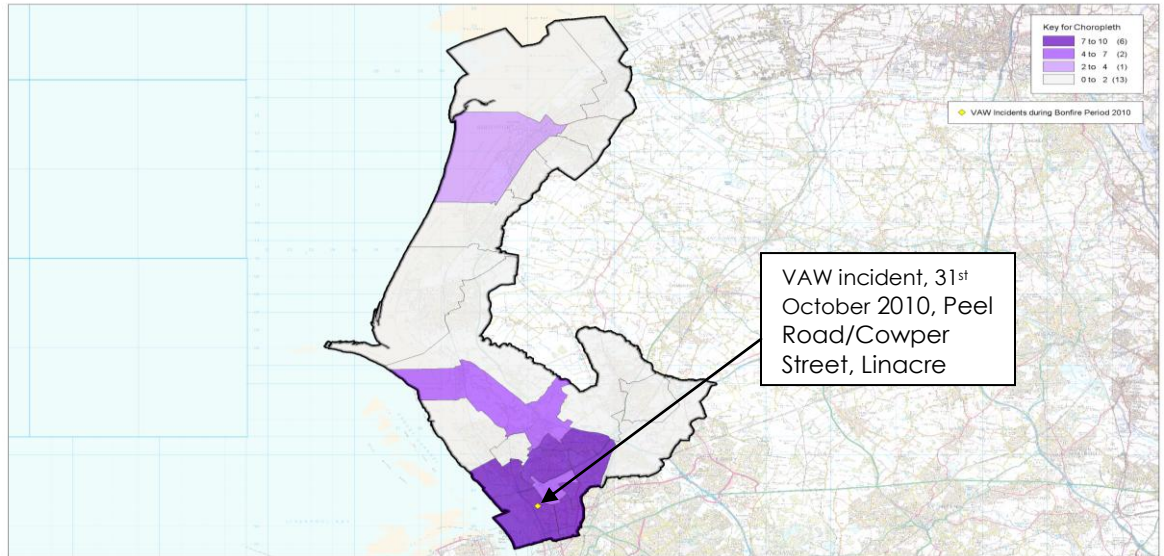
Ward	2009	2010	Difference	% Change
Ford	12	10	-2	-16.7%
Linacre	19	10	-9	-47.4%
Netherton & Orrell	7	8	1	14.3%
St Oswald	18	8	-10	-55.6%
Derby	11	7	-4	-36.4%
Church Sefton	5	7	2	40.0%
Litherland	14	5	-9	-64.3%
Manor	4	4	0	0.0%
Dukes	3	3	0	0.0%
Norwood	2	1	-1	-50.0%
Kew	1	1	0	0.0%
Ainsdale	1	1	0	0.0%
Ravenmeols	0	1	1	N/A
Victoria	3	1	-2	-66.7%
Cambridge	0	1	1	N/A
Molyneux	3	1	-2	-66.7%
Harington	1	0	-1	-100.0%
Birkdale	2	0	-2	-100.0%
Park Sefton	1	0	-1	-100.0%
Blundellsands	1	0	-1	-100.0%
Sudell	2	0	-2	-100.0%
Grand Total	110	69	-41	-37.3%

As illustrated in Table 2, 14 wards throughout the Sefton District witnessed a reduction in deliberate secondary fires during the 2010 Bonfire Period compared to the 2009 Bonfire period, 5 wards witnessed no change in the number of incidents.

The top 5 ranking wards for deliberate secondary fires during the 2009 Bonfire Period witnessed a reduction in fires during the 2010 Bonfire Period: St. Oswald (-10), Litherland (-9), Linacre (-9), Derby (-4) and Ford (-2).

Church was the only ward in the Sefton District that witnessed an increase of more than 1 deliberate secondary fires during the 2010 Bonfire Period compared to the 2009, with an increase of 6 incidents.

Map 1: Choropleth Map Identifying Density by Ward and Incidents of Violence at Work



Author: James Watson
Date: 09/11/2010
Produced using MapInfo
Knowledge and Information Management

Choropleth Analysis for Deliberate Secondary Fires in Sefton, during Bonfire Period 2010 (19th October - 7th November)

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Map 1 illustrates, during the Bonfire Period 2010, south Sefton witnessed the majority of deliberate secondary fires, all five wards that witnessed 7 or more deliberate secondary fires are neighbouring wards located south of the Sefton District, as indicated by the dark shading of the wards.

Duke's was the only ward north of the Sefton District that witnessed 2 or more deliberate secondary fires, with 2 incidents during the Bonfire Period 2010.

Wheelie Bin Incidents

During the Bonfire Period 2010, Sefton witnessed only three wheelie bin fires. This is a reduction of 7 deliberate wheelie bin fires compared to the Bonfire Period 2009.

Violence at Work

Incident Number	Date	Time	Location	Station	Incident Type	Details of VAW	District	Ward
031957-31102010	31/10/2010	19:32:00	PEEL ROAD,COWPER STREET,BOOTLE,	31	Refuse	GEO 333309, 396156 VERIFIEDWHILST IN ATTENDANCE, NUMBER OF YOUTHS VERBALLLY ABUSED TRG STAFF WHO HAD CHALLENGED THE OVER SETTING OFF FIREWORKS	Sefton	Linacre