

Form 605Corporations Act 2001
Section 671B**Notice of ceasing to be a substantial holder**

To Company Name/Scheme _____

ACN/ARSN _____

1. Details of substantial holder(1)

Name _____

ACN/ARSN (if applicable) _____

The holder ceased to be a
substantial holder on

/ /

The previous notice was given to the company on

/ /

The previous notice was dated

/ /

2. Changes in relevant interests

Particulars of each change in, or change in the nature of, a relevant interest (2) of the substantial holder or an associate (3) in voting securities of the company or scheme, since the substantial holder was last required to give a substantial holding notice to the company or scheme are as follows:

Date of change	Person whose relevant interest changed	Nature of change (4)	Consideration given in relation to change(5)	Class (6) and number of securities affected	Person's votes affected

3. Changes in association

The persons who have become associates (3) of, ceased to be associates of, or have changed the nature of their association (7) with, the substantial holder in relation to voting interests in the company or scheme are as follows:

Name and ACN/ARSN (if applicable)	Nature of association

4. Addresses

The addresses of persons named in this form are as follows:

Name	Address

Signature

print name _____

capacity _____

sign here _____

date / /

* At a meeting of the Board on 22 November 2013, the Directors resolved to approve the delegation of the preparation and lodgement of substantial shareholder notices on behalf of BlackRock Investment Management (Australia) Limited.

DIRECTIONS

- (1) If there are a number of substantial holders with similar or related relevant interests (eg. a corporation and its related corporations, or the manager and trustee of an equity trust), the names could be included in an annexure to the form. If the relevant interests of a group of persons are essentially similar, they may be referred to throughout the form as a specifically named group if the membership of each group, with the names and addresses of members is clearly set out in paragraph 4 of the form.
- (2) See the definition of "relevant interest" in sections 608 and 671B(7) of the Corporations Act 2001.
- (3) See the definition of "associate" in section 9 of the Corporations Act 2001.
- (4) Include details of:
 - (a) any relevant agreement or other circumstances because of which the change in relevant interest occurred. If subsection 671B(4) applies, a copy of any document setting out the terms of any relevant agreement, and a statement by the person giving full and accurate details of any contract, scheme or arrangement, must accompany this form, together with a written statement certifying this contract, scheme or arrangement; and
 - (b) any qualification of the power of a person to exercise, control the exercise of, or influence the exercise of, the voting powers or disposal of the securities to which the relevant interest relates (indicating clearly the particular securities to which the qualification applies).See the definition of "relevant agreement" in section 9 of the Corporations Act 2001.
- (5) Details of the consideration must include any and all benefits, money and other, that any person from whom a relevant interest was acquired has, or may, become entitled to receive in relation to that acquisition. Details must be included even if the benefit is conditional on the happening or not of a contingency. Details must be included of any benefit paid on behalf of the substantial holder or its associate in relation to the acquisitions, even if they are not paid directly to the person from whom the relevant interest was acquired.
- (6) The voting shares of a company constitute one class unless divided into separate classes.
- (7) Give details, if appropriate, of the present association and any change in that association since the last substantial holding notice.

This is Annexure A of 5 pages referred to in form 605 Notice of ceasing to be a substantial shareholder

08-Sep-16

William Stockl, Authorised Signatory

Date

2. Changes in relevant interests

TREASURY WINE ESTATES LTD (TWE)

Date of Change	Person whose relevant interest changed	Nature of change (4) / Consideration given in relation to change (5)		Class (6) and number of securities affected	Person's votes affected	
12-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	9.40	ord	4,332	4,332
12-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	9.40	ord	388	388
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	17,520	17,520
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	30,126	30,126
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	2,890	2,890
12-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	9.40	ord	1,444	1,444
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	8,372	8,372
12-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	9.36	ord	82,618	82,618
12-Aug-16	BlackRock Investment Management (UK) Limited	on mkt sell	9.40	ord	-6,549	-6,549
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	10,968	10,968
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	74,306	74,306
12-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.36	ord	4,462	4,462
15-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	9.64	ord	-5,310	-5,310
16-Aug-16	BlackRock Japan Co., Ltd.	on mkt buy	9.53	ord	835	835
16-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.53	ord	1,577	1,577
16-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.53	ord	4,345	4,345
16-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.53	ord	1,738	1,738
16-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.53	ord	2,947	2,947
16-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	9.53	ord	710	710
16-Aug-16	BlackRock Fund Advisors	on mkt buy	9.53	ord	5,254	5,254
17-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	9.55	ord	1,446	1,446
17-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	9.55	ord	21,107	21,107
17-Aug-16	BlackRock Investment Management, LLC	on mkt buy	9.55	ord	2,484	2,484
17-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	-27,365	-27,365
17-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	-1,892	-1,892
17-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	16,655	16,655
18-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.02	ord	11	11
18-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	10.02	ord	15,863	15,863
18-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.02	ord	79	79
18-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	10.02	ord	152	152
18-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	10.02	ord	143	143
18-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.02	ord	112	112
18-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	10.65	ord	28,880	28,880
18-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	10.65	ord	2,360	2,360

Date of Change	Person whose relevant interest changed	Nature of change (4) / Consideration given in relation to change (5)		Class (6) and number of securities affected	Person's votes affected	
18-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	10.02	ord	434	434
18-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	10.02	ord	48	48
18-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.02	ord	13	13
18-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.02	ord	213	213
18-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.02	ord	13	13
18-Aug-16	BlackRock International Limited	on mkt buy	10.02	ord	377	377
18-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	10.02	ord	64	64
19-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.54	ord	6,889	6,889
19-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.54	ord	9,751	9,751
19-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.54	ord	1,137	1,137
19-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	-6,062	-6,062
19-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	10.53	ord	4,344	4,344
19-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.54	ord	18,431	18,431
19-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.54	ord	1,108	1,108
19-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	10.54	ord	950	950
19-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	10.53	ord	2,898	2,898
22-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	-1,455	-1,455
22-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	11.03	ord	1,164	1,164
22-Aug-16	BlackRock Institutional Trust Company, National Association	in specie	n/a	ord	-82,739	-82,739
22-Aug-16	BlackRock Japan Co., Ltd.	on mkt buy	11.03	ord	1,259	1,259
22-Aug-16	BlackRock Investment Management (UK) Limited	on mkt buy	11.02	ord	5,144	5,144
22-Aug-16	BlackRock Institutional Trust Company, National Association	in specie	n/a	ord	82,739	82,739
22-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.00	ord	-500	-500
22-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.00	ord	-6,981	-6,981
22-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.00	ord	-653	-653
23-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.16	ord	-654	-654
23-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	11.19	ord	43,470	43,470
23-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	11.17	ord	3,714	3,714
23-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.16	ord	-500	-500
23-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.17	ord	8,010	8,010
23-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.16	ord	-6,979	-6,979
23-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.19	ord	15,377	15,377
23-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	11.17	ord	8,408	8,408
23-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.19	ord	15,458	15,458
23-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	2,800	2,800
23-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.19	ord	44,257	44,257
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-3,719	-3,719
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-17,862	-17,862
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-13,108	-13,108
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-1,427	-1,427

Date of Change	Person whose relevant interest changed	Nature of change (4) / Consideration given in relation to change (5)		Class (6) and number of securities affected	Person's votes affected	
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-3,626	-3,626
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-952	-952
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-43,231	-43,231
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-14,380	-14,380
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-3,405	-3,405
24-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-37,825	-37,825
25-Aug-16	BlackRock Investment Management (UK) Limited	on mkt buy	11.29	ord	457	457
25-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.29	ord	26,311	26,311
25-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	11.29	ord	4,347	4,347
26-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	11.22	ord	7,055	7,055
26-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.20	ord	-640	-640
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-3,962	-3,962
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-7,518	-7,518
26-Aug-16	BlackRock Japan Co., Ltd.	on mkt buy	11.16	ord	1,657	1,657
26-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.22	ord	6,681	6,681
26-Aug-16	BlackRock Financial Management, Inc.	on mkt buy	11.22	ord	3,209	3,209
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-5,485	-5,485
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-3,931	-3,931
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-47,249	-47,249
26-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	-1,746	-1,746
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-3,086	-3,086
26-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	11.16	ord	14,510	14,510
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-28,965	-28,965
26-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	11.16	ord	950	950
26-Aug-16	BlackRock Fund Advisors	in specie	n/a	ord	117	117
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-2,687	-2,687
26-Aug-16	BlackRock Advisors (UK) Limited	on mkt sell	11.16	ord	-6,786	-6,786
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-42,783	-42,783
26-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.20	ord	-8,038	-8,038
29-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.22	ord	-6,783	-6,783
29-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.22	ord	-582	-582
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-4,902	-4,902
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-34,465	-34,465
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-2,047	-2,047
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-10,361	-10,361
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-2,707	-2,707
30-Aug-16	BlackRock Institutional Trust Company, National Association	in specie	n/a	ord	-9,703	-9,703
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-2,622	-2,622
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-36,590	-36,590

Date of Change	Person whose relevant interest changed	Nature of change (4) / Consideration given in relation to change (5)		Class (6) and number of securities affected	Person's votes affected	
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-3,480	-3,480
30-Aug-16	BlackRock Investment Management (UK) Limited	in specie	n/a	ord	8,915	8,915
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-30,612	-30,612
30-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.24	ord	-8,442	-8,442
30-Aug-16	BlackRock Institutional Trust Company, National Association	in specie	n/a	ord	9,703	9,703
31-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt buy	11.23	ord	3,493	3,493
31-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.23	ord	-12,541	-12,541
31-Aug-16	BlackRock Japan Co., Ltd.	on mkt buy	11.23	ord	1,930	1,930
31-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	11.23	ord	2,607	2,607
31-Aug-16	BlackRock Investment Management (UK) Limited	on mkt buy	11.23	ord	18,360	18,360
31-Aug-16	BlackRock Investment Management (UK) Limited	on mkt sell	11.23	ord	-4,680	-4,680
31-Aug-16	BlackRock Japan Co., Ltd.	on mkt buy	11.23	ord	1,040	1,040
31-Aug-16	BlackRock Fund Advisors	on mkt buy	11.23	ord	6,646	6,646
31-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.23	ord	-17,111	-17,111
31-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	11.23	ord	5,642	5,642
31-Aug-16	BlackRock Asset Management Canada Limited	on mkt buy	11.23	ord	6,230	6,230
31-Aug-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.22	ord	-6,857	-6,857
31-Aug-16	BlackRock International Limited	on mkt buy	11.23	ord	8,572	8,572
31-Aug-16	BlackRock Investment Management (Australia) Limited	on mkt buy	11.23	ord	3,017	3,017
31-Aug-16	BlackRock Asset Management Canada Limited	on mkt sell	11.23	ord	-167	-167
31-Aug-16	BlackRock Investment Management, LLC	on mkt buy	11.23	ord	1,775	1,775
31-Aug-16	BlackRock Japan Co., Ltd.	on mkt sell	11.23	ord	-259	-259
31-Aug-16	BlackRock Advisors (UK) Limited	on mkt buy	11.23	ord	756	756
31-Aug-16	BlackRock Advisors (UK) Limited	on mkt sell	11.23	ord	-5,649	-5,649
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-6,151	-6,151
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-4,670	-4,670
01-Sep-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.36	ord	-424	-424
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-1,551	-1,551
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-2,707	-2,707
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-10,242	-10,242
01-Sep-16	BlackRock Advisors (UK) Limited	on mkt sell	11.41	ord	-4,350	-4,350
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-515	-515
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-4,148	-4,148
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-59,479	-59,479
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-34,807	-34,807
01-Sep-16	BlackRock Advisors (UK) Limited	on mkt buy	11.41	ord	194	194
01-Sep-16	BlackRock Fund Advisors	in specie	n/a	ord	-532	-532
01-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.36	ord	-13,276	-13,276
02-Sep-16	BlackRock Fund Advisors	on mkt buy	11.31	ord	969	969
02-Sep-16	BlackRock Fund Advisors	on mkt buy	11.40	ord	3,264	3,264
02-Sep-16	BlackRock Fund Advisors	on mkt buy	11.40	ord	2,370	2,370
02-Sep-16	BlackRock Fund Advisors	in specie	n/a	ord	-1,204	-1,204

Date of Change	Person whose relevant interest changed	Nature of change (4) / Consideration given in relation to change (5)		Class (6) and number of securities affected	Person's votes affected	
02-Sep-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.33	ord	-14,375	-14,375
02-Sep-16	BlackRock Advisors (UK) Limited	on mkt sell	11.31	ord	-900	-900
02-Sep-16	BlackRock Fund Advisors	on mkt buy	11.31	ord	14,446	14,446
02-Sep-16	BlackRock Advisors (UK) Limited	on mkt sell	11.31	ord	-4,350	-4,350
02-Sep-16	BlackRock Institutional Trust Company, National Association	on mkt sell	11.33	ord	-3,656	-3,656
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-19,480	-19,480
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-13,058	-13,058
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-3,140	-3,140
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-3,964	-3,964
05-Sep-16	BlackRock Investment Management (UK) Limited	on mkt buy	11.32	ord	4,795	4,795
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt buy	11.20	ord	7,821	7,821
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-897	-897
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-6,872	-6,872
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-60,262	-60,262
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-2,174	-2,174
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-4,884	-4,884
05-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.19	ord	-29,845	-29,845
06-Sep-16	BlackRock Fund Advisors	on mkt buy	11.27	ord	867	867
06-Sep-16	BlackRock Fund Advisors	in specie	n/a	ord	-6,704	-6,704
06-Sep-16	BlackRock Advisors (UK) Limited	on mkt sell	11.27	ord	-7,534	-7,534
06-Sep-16	BlackRock Institutional Trust Company, National Association	in specie	n/a	ord	-3,520	-3,520
06-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.22	ord	-55,648	-55,648
06-Sep-16	BlackRock Japan Co., Ltd.	on mkt buy	11.27	ord	1,882	1,882
06-Sep-16	BlackRock Investment Management (Australia) Limited	on mkt sell	11.22	ord	-27,999	-27,999

This is Annexure B of 1 pages referred to in form 605 Notice of ceasing to be a substantial shareholder

	08-Sep-16
William Stockl,	Date
Authorised Signatory	

7. Addresses

The addresses of persons named in this form are as follows:

Name	Address
BlackRock Group	
BlackRock Inc.	55 East 52nd Street New York NY 10055 USA
BlackRock Advisors (UK) Limited	12 Throgmorton Avenue. London, EC2N 2DL, United Kingdom
BlackRock Asset Management Canada Limited	161 Bay Street, Suite 2500 Toronto, Ontario M5J 2S1 Canada
BlackRock Financial Management, Inc.	1209 Orange Street, Wilmington, New Castle County, Delaware 19801, United States
BlackRock Fund Advisors	400 Howard Street San Francisco, CA, 94105 United States
BlackRock Institutional Trust Company, National Association	1225 17th Street, Suite 300, Denver, CO 80202 (Colorado, USA)
BlackRock International Limited	Exchange Place One, 1 Semple Street, Edinburgh, EH3 8BL, United Kingdom (Scotland, United Kingdom)
BlackRock Investment Management (Australia) Limited	Level 26, 101 Collins Street Melbourne VIC 3000 Australia (Victoria, Australia)
BlackRock Investment Management (UK) Limited	12 Throgmorton Avenue London EC2N 2DL United Kingdom
BlackRock Investment Management, LLC	1209 Orange Street, Wilmington, New Castle County, Delaware 19801, United States
BlackRock Japan Co., Ltd.	Marunouchi Trust Tower Main, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-8217 (Japan)