

**Appendix A: Asbestos Register for BFS- Accra.**

Summary of Asbestos Survey Results, BFS- Accra												
Product Sampling						Material Assessment						RPAS
#	Location	Places/Item/ Materials Surveyed	Sample ID	Product type	Sampled Source	Extent of damage	Accessibility	Surface treatment	Asbestos Type	Sampled/Presumed/Strongly Presumed	MAS	Risk
1	Engineering Unit	Entry corridor ceiling of the CO2 Recovery Plant	ERP-01	Thermal insulation	Steam line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
2	Utility Unit	Hot water section	UWP-01	Thermal insulation	Hot water Pump	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
3	Utility Unit	Hot water section	UWP-02	Thermal insulation	Hot water line from tank to pump	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
4	Utility Unit	Compressor Section	UCP-03	Thermal insulation	Hot line to Condensate Tank	Bad Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
5	Utility Unit	Boiler House Manifolds	UHM-04	Thermal insulation	High Pressure steam supply to line 8	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
6	Utility Unit	Boiler House Manifolds	UHM-05	Thermal insulation	Steam supply line from boiler	Medium Deterioration of linear and angular	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14

					to manifold	pipe joint exposing lagging material						
7	Corridor b/n Utilities and Brew House	Condensate Line	CUL-01	Thermal insulation	From Brew house to Utilities	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
8	Brew House	Wet Copper - Tun	BWCT-01	Thermal insulation	Steam line form Utilities to Wet Copper-Tun	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
9	Brew House	Wet Copper - Tun	BWCT-02	Thermal insulation	Base Lining thermal insulation material	Highly deteriorated lagging material exposing material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	12	14
10	Brew House	Mash Tun	BMT-03	Thermal insulation	Base Lining thermal insulation material	Highly deteriorated lagging material exposing material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	12	14
11	Brew House	Mash Tun	BMT-04	Thermal insulation	Steam line to Mash Tun	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
12	Brew House	Brew House ceiling condensate lines	BCCL-01	Thermal insulation	Condensate return Line to Utilities	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
13	Brew House	Mash Copper	BMC-01	Thermal insulation	Steam line from utilities to Mash Copper	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14

14	Cellars Corridor	Corridor Ceiling line hot water supply line	CCSPL- 01	Thermal insulation	Hot water line to Cellars	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
15	Cellars	CIP pipeline	C IPL-01	Thermal insulation	CIP pipeline at cellars	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
16	Cellars	Cellars corridor end ceiling lines steam supply line	CSSL- 01	Thermal insulation	Steam line 8 to Packaging	Medium Deterioration of linear joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
17	Cellars	Fermentation storage line Tank 104	CFST- 104	Pipe Lagging	Storage line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Occasio nally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	13
18	Cellars	Fermentation storage line Tank 105	CFST- 105	Pipe Lagging	Storage line	Medium Deterioration of linear joint exposing lagging material	Occasio nally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	13
19	Cellars	Fermentation storage line Tank 107	CFST- 107	Pipe- Lagging	Storage line	Medium Deterioration of linear joint exposing lagging material	Occasio nally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	13
20	MLT	Roof Top	MLT- RT1	Thermal insulation	Steam line 8 at MLT Roof Top	Bad Deterioration of linear and angular pipe joint exposing lagging material	Occasio nally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	13

21	MLT	Roof Top	MLT-RT 2	Thermal insulation	Steam line 8 at MLT joint	Medium Deterioration of linear and angular pipe joint exposing lagging material	Occasionally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	13
22	MLT	Roof Top	MLT-RT3	Thermal insulation	Steam line 8 at MLT curve metal cladding joint	Medium Deterioration of linear and angular pipe joint exposing lagging material	Occasionally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	13
23	MLT	Roof Top	MLT-RT 4	Thermal insulation	Steam line 8 from MLT to Brew House	Medium Deterioration of linear and angular pipe joint exposing lagging material	Occasionally visited	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	13
24	Cellars	Glycol Line to unfiltered beer storage	CGL-01	Thermal insulation	Glycol line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
25	Cellars	Glycol Line to unfiltered beer storage	CGL-02	Thermal insulation	Glycol line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
26	Packaging	L5 Pasto Condensate line	PL5-PCL-01	Thermal insulation	Steam line 5	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
27	Packaging	L5 Pasto Condensate line	PL5-PCL-02	Thermal insulation	Left side in feed section	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14

28	Packaging	L5 Pasto Condensate line	PL5-PCL-03	Thermal insulation	Line on top of zone 8	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
29	Packaging	L5 Pasto steam line	PL5-SL-01	Thermal insulation	Just before the modulating valve	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
30	Packaging	L5 Pasto steam line	PL5-PSL-02	Thermal insulation	Behind the filler	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
31	Packaging	L5 Filler Glycol line	PL5-FGL-01	Thermal insulation	On top of the Chiller	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
32	Packaging	L5 Beer line	PL5-BL-01	Thermal insulation	Near the filler	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
33	Packaging	L5 Washer Bath 1	PL5-WB-01	Thermal insulation	Caustic transfer line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
34	Packaging	L5 Washer Bath 5	PL5-WB-02	Thermal insulation	Caustic transfer line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14

35	Packaging	L8 Steam supply line	PL8-SSPL-01	Thermal insulation	Steam line 8	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
36	Packaging	L8 Pasto Glycol line	PL8-PGL-01	Thermal insulation	Glycol Line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
37	Packaging	L8 Pasto Glycol line	PL8-PGL-02	Thermal insulation	At in-feed of PHE	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
33	Packaging	L5 Washer Bath 1	PL5-WB-01	Thermal insulation	Caustic transfer line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
38	Packaging	L8 Pasto Glycol line	PL8-PGL-03	Thermal insulation	At discharge of PHE	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
39	Packaging	Steam line	PSL-01	Thermal insulation	At the ceiling of office door 2	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
40	Packaging	Steam Line to Kegging	PSLK-01	Thermal insulation	Near the main PKG Water meter	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	13

41	Packaging	Steam Line to Kegging	PSLK-02	Thermal insulation	Near the main PKG Water meter	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	13
42	Packaging	Main Steam line to Washer 1	PBW-01	Thermal insulation	Main steam line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
43	Packaging	Main Steam line to Washer 1	PBW-02	Thermal insulation	Main steam line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
44	Packaging	Main Steam line to Washer 5	PBW-03	Thermal insulation	On top of main PKG entrance	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
45	Packaging	Main Steam line to Washer 5	PBW-04	Thermal insulation	Main steam line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	10	14
46	Packaging	Washer 1 Gasket	PWG-1	Thermal insulation gasket	Washer flange	Good Condition- Improperly disposed of gasket waste from flange maintenance	Easy	Enclosed within the flange	Chrysotile	Sampled 1 sample	6	14
47	Packaging	Washer 5 Gasket	PWG-2	Thermal insulation gasket	Washer flange	Good Condition- Improperly disposed of gasket waste from flange maintenance	Easy	Enclosed within the flange	Chrysotile	Sampled 1 sample	6	14

48	Car Park in front of the reception	Roofing	RCP-01	Asbestos-cement corrugated roofing sheet	Roofing concrete sheet	Low damage, visible deterioration around the edges	Easy	Unsealed asbestos cement sheets	Chrysotile	Sampled 1 sample	6	12
49	Car Park in front of the reception	Roofing	RCP-02	Asbestos-cement corrugated roofing sheet	Roofing concrete sheet	Low damage, visible deterioration around the edges	Easy	Unsealed asbestos cement sheets	Chrysotile	Sampled 1 sample	6	12
50	Car Park in front of SAP office	Roofing	RCP-03	Asbestos-cement corrugated roofing sheet	Roofing concrete sheet	Low damage, visible deterioration around the edges	Easy	Unsealed asbestos cement sheets	Chrysotile	Sampled 1 sample	6	12
51	Car Park in front of SAP office	Roofing	RCP-04	Asbestos-cement corrugated roofing sheet	Roofing concrete sheet	Low damage, visible deterioration around the edges	Easy	Unsealed asbestos cement sheets	Chrysotile	Sampled 1 sample	6	12
Based on Summary of field survey, 2017												

**Appendix B: Asbestos Register for BFN- Kumasi.**

Summary of Asbestos Survey Results, BFN-KUMASI												
Product Sampling						Material Assessment						RPAS
#	Location	Places/Item/ Materials Surveyed	Sample ID	Product type	Sampled Source	Extent of damage	Accessi-bility	Surface treatment	Asbestos Type	Sampled/Pres-umed/Strongly Presumed	MAS	Risk



1	<b>Brew house Unit</b>	Steam pipe line	BSPL1	Thermal insulation	Steam line	Good Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
2	<b>Utility Unit</b>	Flue gas at boiler house	FGB	Thermal insulation	Hot water Pump	Good Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
3	<b>Brew house Unit</b>	MCV	MCV	Thermal insulation	Hot water line from tank to pump	Good Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
4	<b>Utility Unit</b>	Alcohol pump at ammonia compressor number 8 area	AP	Thermal insulation	Hot line to Condensate Tank	Badly damaged Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
5	<b>Utility Unit</b>	Steam manifold at boiler house	SM	Thermal insulation	High Pressure steam supply line	Good Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	6	9
6	<b>Utility Unit</b>	Residual fuel line opposite engineering amenities	RFL	Thermal insulation	Steam supply line from boiler to manifold	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
7	<b>Packaging Unit</b>	Line 4 pasteurizer steam pipe	L4PS	Thermal insulation	Steam line	Damaged at more than 3 joints Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12

8	<b>Packaging Unit</b>	Line 4 Pasteurizer	L4P2	Thermal insulation	Steam line	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	6	12
9	<b>Packaging Unit</b>	Line 3 washer steam pipe	PL3WS	Thermal insulation	Washer Conveyer lines 3	Highly deteriorated lagging material exposing material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
10	<b>Packaging Unit</b>	Line 3 bottle washer condensate return line	PL3BW	Thermal insulation	Conveyer lines 3	Highly deteriorated lagging material exposing material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	12
11	<b>Kitchen</b>	Fire blanket	K1	Woven cloth	Pantry	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	6	9
12	<b>Old generator house</b>	Fire blanket	OGH1	Woven cloth	Stores	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	9	15
13	<b>Administration annex, Safety Office</b>	Fire blanket	AA1	Woven cloth	Office complex	Medium Deterioration of linear and angular pipe joint exposing lagging material	Easy	Enclosed in metal cladding	Amosite	Sampled 1 sample	6	9

Based on Summary of field survey, 2017

