

## Appendix B

### Application for the review of a premises licence under the Licensing Act 2003

#### PLEASE READ THE FOLLOWING INSTRUCTIONS FIRST

Before completing this form please read the guidance notes at the end of the form. If you are completing this form by hand please write legibly in block capitals. In all cases ensure that your answers are inside the boxes and written in black ink. Use additional sheets if necessary.

You may wish to keep a copy of the completed form for your records.

I **Chief Supt Justin BURTENSHAW, Brighton & Hove Divisional Commander, Sussex Police on behalf of Sussex Police Chief Constable Jo SHINER**

Apply for the review of a premises licence under Section 51 of the Licensing Act 2003 for the premises described in Part 1 below.

#### Part 1 – Premises or club premises details

<b>Postal address of premises or, if none, ordnance survey map reference or description</b>  Antidote Bar 5-6 Western Road	
<b>Post town</b>  Hove	<b>Post code (if known)</b>  BN3 1AE

<b>Name of premises licence holder or club holding club premises certificate (if known)</b>  Antidote Bar Ltd
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<b>Number of premises licence or club premises certificate (if known)</b>  1445/3/2022/00266/LAPRET
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**Part 2 - Applicant details**

I am

**Please tick yes**

- 1) an interested party (please complete (A) or (B) below)
  - a) a person living in the vicinity of the premises
  - b) a body representing persons living in the vicinity of the premises
  - c) a person involved in business in the vicinity of the premises
  - d) a body representing persons involved in business in the vicinity of the premises
- 2) a responsible authority (please complete (C) below)
- 3) a member of the club to which this application relates (please complete (A) below)

**(A) DETAILS OF INDIVIDUAL APPLICANT** (fill in as applicable)

**Please tick**

Mr  Mrs  Miss  Ms  Other title (for example, Rev)

**Surname**

**First names**

**Please tick yes**

**I am 18 years old or over**

**Current postal address if different from premises address**

**Post town**

**Post Code**

**Daytime contact telephone number**

**E-mail address (optional)**

**(B) DETAILS OF OTHER APPLICANT**

Name and address
Telephone number (if any)
E-mail address (optional)

**(C) DETAILS OF RESPONSIBLE AUTHORITY APPLICANT**

Name and address  Sussex Police, Licensing, John Street, Brighton, East Sussex, BN2 0LA.
Telephone number (if any)  01273 404 535 - Ext 550826
E-mail address (optional)  brighton.licensing@sussex.police.uk

**This application to review relates to the following licensing objective(s)**

Please tick one or more boxes

- 1) the prevention of crime and disorder
- 2) public safety
- 3) the prevention of public nuisance
- 4) the protection of children from harm

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

**Please state the ground(s) for review** (please read guidance note 2)

A review is being sought by Sussex Police due to on-going high drug readings in the premises, including within staff areas, which undermines the prevention of crime and disorder licensing objective.

Previously the venue traded as 'Back Beat Bar' and there was a documented history of drug taking within the premises. Sussex Police worked with the former venue operator at the time in an effort to control and reduce this issue. It was felt that progress was being made as lower drug readings were found when the premises was swabbed by Police in October 2020. Due to this, the venue was placed as a 'watching brief' with a view that, unless further intelligence was received, the venue had made progress in the right direction.

The current operator took over in November 2021 and 'Antidote Bar Ltd' applied to Brighton & Hove City Council to become the Premises Licence Holder on 19<sup>th</sup> November 2021 with the application form forwarded to ourselves via email from the Council on 22<sup>nd</sup> November 2021 so that we could conduct our standard checks. Due to the previous drugs issues at the venue a meeting was requested with the new management so that we could assist them in preventing the issues from reoccurring.

The venue was visited several times over the last 12 months for drugs readings to be taken and feedback and advice was provided to the current operator on how to make improvements and ensure their venue was an inhospitable place for drug takers. The aim being to have a zero-tolerance policy towards their venue being used to consume drugs.

Drug readings have since returned to high levels and Sussex Police have no confidence that the current operator is able or has the desire to take control or ownership of the issue of drug consumption. They are allowing specific crime to perpetuate at the premises and deliberately undermining the licensing objective of the prevention of crime and disorder.

**Please provide as much information as possible to support the application** (please read guidance note 3)

Antidote is a licensed bar with club facilities across two floors (ground and basement) located at 5-6 Western Road, Hove.

The premises are authorised for the following licensable activities:

- **Performance of Dance**  
Every Day: 10:00 - 02:00      Ground floor and basement.
- **Anything of a similar description to live music, recorded music and performance of dance**  
Every Day: 10:00 - 02:00      Ground floor and basement.
- **Performance of Live Music**  
Every Day: 10:00 - 02:00      Ground floor and basement.

- **Performance of Recorded Music**  
Every Day: 10:00 - 02:00      Ground floor and basement.
- **Late Night Refreshment**  
Every Day: 23:00 - 02:30      Only on the ground floor.
- **Sale by Retail of Alcohol (on the premises)**  
Every Day; 10:00 - 02:00      Ground floor and basement.

**Opening hours:** Everyday: 10:00 - 02:30

Sussex Police have consistently tried to work with the current operator throughout the past 12 months to support them in making changes and improvements and bringing to their attention our concerns around drug taking within the venue. This has been unsuccessful and leaves Sussex Police with no choice but to ask a committee to consider revocation of the Premises Licence in this instance to prevent further crime taking place and perpetuating at Antidote.

Below is a timeline of interactions with the current Designated Premises Supervisor who is also named as a Director of the Premises Licence Holder since they took the licence and venue over.

#### **Monday 22<sup>nd</sup> November 2021**

Sussex Police received a notification email from Brighton & Hove City Council Licensing department in regards of an application to transfer the premises licence and appoint a new designated premises supervisor (DPS). Due to previous history at the venue when it traded as Back Beat Bar contact was made with the new owner, Francois ROBERTS requesting a meeting so that we could go through the previous issues and assist them where possible to ensure the venue is run responsibly. The meeting was confirmed for 04<sup>th</sup> December 2021.

#### **Saturday 04<sup>th</sup> December 2021 – 16:00hrs**

A pre-arranged meeting was held at the premises. This was a joint meeting attended by Sussex Police Licensing, Brighton & Hove City Council Licensing, and the current premises licence holder / designated premises supervisor – Francois ROBERTS.

Mr ROBERTS stated that he was aware of the history at the venue and was keen to turn this around. He commented that he had already barred several the regulars that he believed was the cause of some of the issues. The plan going forward was to run the basement bar as an events space and operate DJ nights. Mr ROBERTS also advised that he had plans to install a noise limiter which was a condition under his licence as well as looking to source a local security firm to provide SIA Door Supervisors. Due to costs, he was currently sourcing door staff himself and employing them directly. He was provided with refusals and incident logbooks by Brighton & Hove City Council and was also sent a number of posters in regard to drink spiking's and safeguarding by police.

Sussex Police conducted drug swabbing which showed that, despite the lower readings back in October 2020, high levels had returned in the venue. The results were given on the night by phone call and followed up officially by email to Mr ROBERTS on 06<sup>th</sup> December 2021. These are listed below and evidenced as Appendix 1. Within the email you will see we provided Mr ROBERTS with drug

prevention advice.

### **Basement**

Bar – Cocaine 5.57

Table within the bar area – Cocaine 5.24

### **Gents Toilets**

Sink – Cocaine 6.05

Toilet seat – Cocaine 6.56

### **Ladies Toilets**

Left cubical toilet seat – Cocaine 1.06

Left cubical toilet roll holder – Cocaine 3.80

Right cubical toilet seat – Cocaine 5.88

Right cubical toilet roll holder – Cocaine 6.19

### **Ground floor**

#### **Gents Toilets**

Ledge by flush button in cubical – Cocaine 3.08 and Ketamine 2.18

Silver ledge – Cocaine 5.50

#### **Ladies Toilets**

Ledge by flush button in cubical – Cocaine 5.07

Toilet seat – Cocaine 1.46

Tiled ridge – Cocaine 4.20

Hand dryer – Cocaine 3.35

### **Guidance on drug reading results – Full statement submitted with this review document:**

GE Security, the Ion Track Itemiser manufacturer give the following guidance in their Technology Statement about interpreting swab results:

***Readings of between 1 and 2 times the alarm threshold can be classed as a “low” response. It could be attributed to cross contamination of the surface tested, background contamination, or greatly degraded historic contamination. It is not indicative of recent direct contact.***

***Alarms of between 2 and 3 times the alarm threshold can be classed as a “medium” response. It could be attributed to cross contamination of the surface tested or recent historic contamination that may have been left a number of days prior to the sample being taken.***

***Alarms of between 3 and 4 times the alarm threshold can be classed as a “high” response. This level of response would not be attributed to cross contamination and is indicative of recent and direct contact with measurable quantities of the narcotic identified by the machine.***

**Readings of 4.00 and above** are estimated to relate to microgram amounts of contamination being transferred to the sample media. **This level of contamination is not generally experienced in any other environment than somewhere that has been in direct contact with a bulk amount of the source narcotic, i.e. this level is not generally experienced as background contamination or through incidental cross contamination by being in close contact with other contaminated areas or persons.**

### **Wednesday 29<sup>th</sup> December 2021**

An email was sent to Mr ROBERTS in regard to fly posting occurring on St James Street, Brighton advertising an event to be held at Antidote Bar on that day. He was asked to make arrangements to have the posters removed. Mr ROBERTS did acknowledge the email and confirmed he would ensure the poster and any additional ones are taken down.

### **Friday 14<sup>th</sup> January 2022**

Sussex Police was copied into an email from Brighton & Hove City Council sent to the DPS, Mr ROBERTS, in regard to a noise complaint that had been received by the local authority.

### **Saturday 05<sup>th</sup> February 2022 – 20:00hrs**

Police Licensing attended the venue to conduct drug swabbing with the results as follows:

#### **Basement**

Bar – Cocaine 3.11  
Table within the bar area – Cocaine 2.94

#### **Gents Toilets**

Sink – Nil  
Toilet seat – Nil

#### **Ladies Toilets**

Left cubical toilet seat – Nil  
Left cubical toilet roll holder – Nil  
Right cubical toilet seat – Nil  
Right cubical toilet roll holder – Cocaine 1.79

#### **Ground floor**

#### **Gents Toilets**

Ledge by flush button in cubical – Cocaine 3.53  
Silver ledge – Cocaine 5.39

#### **Ladies Toilets**

Ledge by flush button in cubical – Cocaine 4.25

Toilet seat – Cocaine 1.31  
Tiled ridge – Nil  
Hand dryer – Cocaine 3.40

Of note, the basement swabbing was conducted later in the evening due to access and at the time the area was being cleaned by staff in preparation for a private hire booking. These results were emailed to Mr ROBERTS on 08<sup>th</sup> February 2022 in which Sussex Police Licensing acknowledged that the results were heading in the right direction and again giving drug prevention advice. This email was responded to by Mr ROBERTS on 23<sup>rd</sup> February 2022 where he set out his security arrangements as well as future plans for the venue in regards to a refurbishment and a new business model. Sussex Police Licensing responded to this email to ask them to advise once the refurbishment was completed so that a further follow up visit could be carried out. See Appendix 2.

### **Friday 11<sup>th</sup> March 2022**

Police Licensing were requested by our Investigations team to assist in securing some CCTV from the venue. This was in regard to an incident that occurred at the venue on 06<sup>th</sup> February 2022. Officers originally requested this on 07<sup>th</sup> February and chased up on both 14<sup>th</sup> and 28<sup>th</sup> February 2022 without success. Mr ROBERTS stated he was not aware of these interactions and believes that possibly communication was with staff at the venue rather than directly with himself. See Appendix 3.

### **Friday 08<sup>th</sup> July 2022 – 19:00hrs**

Police Licensing attended the venue to conduct drug swabbing with the results as follows:

#### **Basement**

Bar – Cocaine 3.77  
White table top left of the DJ booth – Cocaine 1.38  
DJ Booth – Cocaine 4.73  
Middle tabletop – Cocaine 3.36

#### **Gents Toilets – no readings taken**

#### **Ladies Toilets**

Left cubical toilet roll holder – Cocaine 1.41  
Hand dryer - Nil  
Shelf at top of stairs - Cocaine 1.12

#### **Ground floor**

#### **Gents Toilets**

Back of cubical toilet - Cocaine 3.51 and Ketamine 1.76  
Cubical ledge to the side – Cocaine 5.27  
Top of urinal – Cocaine 5.61  
Ledge above urinal – Cocaine 4.62

#### **Ladies Toilets**



Back of cubical toilet - Cocaine 6.38

Toilet seat – Cocaine 3.06

**Kitchen - An area you would expect to be accessible only to staff at the venue.**

Metal counter top by microwave – Cocaine 1.58

Metal top of cool counter – Cocaine 4.23

These results were emailed to Mr ROBERTS on 11<sup>th</sup> July 2022 and included a request for him to attend John Street Police Station for a meeting with Sussex Police Licensing as well as Brighton & Hove City Council Licensing and Environmental Protection department. Mr ROBERTS acknowledged this meeting request and said he would bring with him an action plan. See Appendix 4.

**Wednesday 13<sup>th</sup> July 2022 – 14:00hrs**

Meeting held at John Street Police Station with Mr ROBERTS. In attendance were officers from both Brighton & Hove City Council Licensing and Environmental Protection departments.

Sussex Police Licensing went through the areas of concerns, notably being the high drug readings especially within the kitchen and DJ Booth, areas you would presume are only accessible to staff members and asked what the plan was to get this under control. Mr ROBERTS advised he had brought in new SIA security although these were still in-house rather than using a local firm due to costs. Mr ROBERTS was advised by police that as he was employing his own SIA that he needed to have a non-front line SIA badge himself. To date on checking the SIA public register (12<sup>th</sup> December 2022) no such licence has been registered in Mr ROBERTS name.

He was also asked about the process for any drugs that are found on persons or within the venue. He advised that they are seized and stored in a safe place for police to collect. To date (12<sup>th</sup> December 2022) Sussex Police has never been asked to attend the venue to collect any seized drugs.

Mr ROBERTS then stated that towards the end of July 2022 the main bar would close for two weeks so that a full refurbishment could take place including the toilets. We requested that we were informed of confirmed dates as and when he had them. It was hoped that the opportunity would be taken to design out areas within the toilets that people use for consuming drugs i.e., flat surfaces.

Going forward the plan was to operate more as a cocktail bar with a daytime food offering on the ground floor and the basement becoming a member only club.

Mr ROBERTS was advised that this meeting was a final warning and that if the venue continued to be used to consume drugs that Sussex Police would be left with no other option than to call a review of the premises licence.

Environmental Protection went through recent noise complaints they had received and dealt with. Mr ROBERTS advised he planned to address this by installing a second door leading down to the basement club. He was reminded about the need to use a noise limiter which he stated was not possible with bands as they control their own sound levels. Mr ROBERTS also advised he was looking at the possibility of bringing in a club scan machine.

Brighton & Hove City Council Licensing offered to do some staff training once the refurbishment work was completed.

At the end of the meeting Mr ROBERTS provided attendees with a copy of the venues Drugs Policy. See Appendix 5.

#### **Saturday 23<sup>rd</sup> July 2022 – 23:30hrs**

A licensing inspection was conducted by Response officers from Sussex Police. The officers were advised by staff that they permit people to consume drinks outside in plastics until 02:30 when busy inside. This was brought to the attention of Licensing and taken up with Mr ROBERTS. The premises licence has the following condition attached to it:

*'6. No drinks are to be taken outside between 23:00 and 10:00.'*

On reviewing the attending officers body worn video the staff members advised that normally they permit customers to stand outside with drinks until 01:30 but as it was really busy the previous night, they allowed it until 02:30.

This was disputed by Mr ROBERTS and the email trail is attached. See Appendix 6.

As officers were just told of the above rather than seeing people outside with drinks at the time, no official breach was issued but communication focused on ensuring all staff are aware of the premises licence permissions and conditions.

#### **Wednesday 26<sup>th</sup> October 2022**

Mr ROBERTS was emailed by Sussex Police Licensing due to an advert for an event to held on Halloween at Antidote. We were requesting additional information as it mentioned an after party at a secret location which raised concerns about a possible unauthorised music event (rave). Mr ROBERTS replied to us the following day to advise that he had asked the event organiser what they meant as an "after party". The organiser advised Mr ROBERTS that the event had now been cancelled but the after party was due to be held in Newhaven but no mention of what location as they had not been able to secure it. It was suggested to Mr ROBERTS that any future advertising for the venue was run past him so that he could be fully aware of what was being advertised under his venue name and licence.

#### **Saturday 29<sup>th</sup> October 2022 – 21:00hrs**

Police Licensing attended the venue to conduct drug swabbing. On arrival Mr ROBERTS was not present but was enroute so officers waited for him to arrive. While waiting, a staff member was spotted coming out of the ground floor toilets with a spray bottle which we believe to possibly be cleaning fluid. They were then seen to head down to the basement, presumably to spray the basement toilets. Mr ROBERTS then arrived. The attending officer explained what they had seen and advised that although they were there to drug swab there was now no point in doing so and would come back another time. Mr ROBERTS was annoyed that we had attended on a busy night and stated that 'what did we expect if we were going to give them a chance of passing'. He was asked about any drugs seized to which he advised that door staff don't seize drugs, they just refuse entry. This goes against what he previously advised about seizing and storing in a safe place for police to collect.

**Thursday 08<sup>th</sup> December 2022 – 18:40hrs (swabbed ground floor and 20:25hrs to swab basement.**

Police Licensing attended the venue to conduct drug swabbing with the results as follows:

**Basement**

Till screen- Cocaine 5.24  
DJ Booth – Heroin 1.37  
High table in corner – Nil  
Staff side of bar servery – Cocaine 4.20  
Front of bar – Cocaine 3.06

**Gents Toilets**

Hand dryer – Cocaine 3.07  
Toilet roll holder – Cocaine 3.09  
Toilet seat - Nil

**Ladies Toilets**

Cubical 1 toilet roll holder – Cocaine 5.40  
Cubical 1 toilet seat – Cocaine 1.59  
Cubical 2 toilet roll holder – Cocaine 1.427  
Cubical 2 toilet seat – Nil  
Hand dryer - Nil

**Ground floor**

**Gents Toilets**

Top of urinal – Cocaine 5.42  
Sink – Cocaine 4.71  
Hand Dryer – Cocaine 6.19  
Back of cubical toilet - Cocaine 4.52  
Toilet seat – Cocaine 4.58  
Toilet bin – Cocaine 6.10  
Cubical toilet ledge – Cocaine 4.95

**Ladies Toilets**

Hand Dryer – Cocaine 4.25  
Sink – Cocaine 4.00  
Toilet roll holder – Cocaine 2.93  
Back of toilet – Cocaine 4,47  
Toilet seat – Cocaine 6.08  
Toilet bin – Cocaine 6.34

These results were emailed to Mr ROBERTS on 09<sup>th</sup> December 2022. Once again, we see high readings within areas that you would expect to be occupied only by staff employed at the venue.

Sussex Police believe we have worked with the current PLH/DPS regarding the

issues of drugs within the venue. We have offered advice and been open to any communication with Mr ROBERTS. Following the last set of results, we now believe we have reached a point of having no confidence in the current owner and manager to be able to get the drugs issue under control. This is especially when we are also recording high readings within areas that are, in theory, only open to staff.

A change of DPS we don't believe is a viable option as Mr ROBERTS is also the premises licence holder. A suspension was considered but suggestions have been put forward by Mr ROBERTS which have not materialised, and it is believed that after re opening the venue would soon slip back into its old ways with drugs being consumed on site.

Sussex Police therefore contend that the only course of action is for revocation of the premises licence.

**Please tick yes**

Have you made an application for review relating to this premises before

If yes please state the date of that application: N/A

**If you have made representations before relating to this premises please state what they were and when you made them**

N/A

**Please tick yes**

- I have sent copies of this form and enclosures to the responsible authorities and the premises licence holder or club holding the club premises certificate, as appropriate
- I understand that if I do not comply with the above requirements my application will be rejected

**IT IS AN OFFENCE, LIABLE ON CONVICTION TO A FINE UP TO LEVEL 5 ON THE STANDARD SCALE, UNDER SECTION 158 OF THE LICENSING ACT 2003 TO MAKE A FALSE STATEMENT IN OR IN CONNECTION WITH THIS APPLICATION**

**Part 3 – Signatures** (please read guidance note 3)

**Signature of applicant or applicant's solicitor or other duly authorised agent** (See guidance note 4). **If signing on behalf of the applicant please state in what capacity.**

Signature (on behalf of the applicant)

**REDACTED**

Insp M.Palmer- Harris

Date 15<sup>th</sup> December 2022.

Capacity: Operations, Planning and Licensing Inspector.  
Force Licensing & Public Safety Manager on behalf of Chief Superintendent,  
Divisional Commander, Brighton & Hove Division

<b>Contact name (where not previously given) and postal address for correspondence associated with this application (please read guidance note 5)</b>	
Insp M.Palmer-Harris Sussex Police Licensing John Street	
<b>Post town</b>	<b>Post Code</b>
Brighton	BN2 0LA
<b>Telephone number (if any)</b> 01273 404 535 Ext REDACTED	
<b>If you would prefer us to correspond with you using an e-mail address your e-mail address (optional)</b> brighton.licensing@sussex.police.uk	

#### Notes for Guidance

1. The ground(s) for review must be based on one of the licensing objectives.
2. Please list any additional information or details for example dates of problems which are included in the grounds for review if available.
3. The application form must be signed.
4. An applicant's agent (for example solicitor) may sign the form on their behalf provided that they have actual authority to do so.
5. This is the address which we shall use to correspond with you about this application.

## Appendix 1

**From:** Brighton Licensing  
**Sent:** 06 December 2021 14:44  
**To:** Francois Roberts REDACTED  
**Cc:** Donna Lynsdale <Donna.Lynsdale@brighton-hove.gov.uk>  
**Subject:** Police & Council Licensing Inspection - 4th Dec 21

Dear Francois,

Thank you for meeting with us on Saturday.

Firstly, please find attached your letter in regards to the drug swabbing results. As mentioned on the phone and set out within the letter, you do have very high readings which is a concern. The venue does have a history of high readings back in Feb and Aug 2020. By the time we re tested in Oct 2020 the situation had improved. Of note this was only in the main ground floor bar, not the basement.

You do need to get on top of the drug issue within your venue. If we continue to see high readings we would have no choice but to look to have your premises licence revoked. That won't happen overnight – as mentioned we work with a stepped approach. We do give you the opportunity to address the issues.

Secondly, I have today sent you some posters for your venue in regards to drink tampering and safeguarding. You should receive those by the end of the week.

We are here to assist you in anyway we can so please do not hesitate to make contact should you have a query or need advice.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone:** 01273 404 535 **Ext:** REDACTED **Mobile:** REDACTED  
**Twitter:** @SusPolLicensing



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## Brighton & Hove Licensing Unit

Police Station  
John Street  
Brighton  
BN2 0LA

Tel: 01273 470101 ext. REDACTED

Email: [brighton.licensing@sussex.pnn.police.uk](mailto:brighton.licensing@sussex.pnn.police.uk)

06<sup>th</sup> December 2021

Francois Roberts  
Antidote Bar  
5-6 Western Road  
Hove  
East Sussex  
BN3 1AE

Dear Francois,

Our records show that you are the Premies Licence Holder and Designated Premises Supervisor for Antidote Bar, 5-6 Western Road, Hove.

As you are aware on 4<sup>th</sup> December 2021, we conducted drug swabbing around your venue, please find below the results,

### **Basement**

Bar – Cocaine 5.57  
Table within the bar area – Cocaine 5.24

### Gents

Sink - Cocaine 6.05  
Toilet seat – Cocaine 6.56

### Ladies

Left cubical toilet seat - Cocaine 1.06  
Left cubical toilet roll holder Cocaine 3.80  
Right cubical toilet seat - Cocaine 5.88  
Right cubical toilet roll holder Cocaine 6.19

**Sussex Police Headquarters**  
Malling House, Church Lane, Lewes, E. Sussex, BN7 2DZ

Telephone: 101 | 01273 470101

Email: [brighton.licensing@sussex.pnn.police.uk](mailto:brighton.licensing@sussex.pnn.police.uk)

## Ground Floor

### Gents

Ledge by flush button in cubical - Cocaine 3.08 & Ketamine 2.18  
Silver ledge – Cocaine 5.50

### Ladies

Ledge by flush button in cubical - Cocaine 5.07  
Toilet seat – Cocaine 1.46  
Tiled ridge – Cocaine 4.20  
Hand dryer – Cocaine 3.35

Results of between 1 and 2 can be classed as a **“low”** response. It could be attributed to cross contamination of the surface tested, background contamination, or greatly degraded historic contamination. It is not indicative of recent direct contact.

Results of between 2 and 3 can be classed as a **“medium”** response. It could be attributed to cross contamination of the surface tested or recent historic contamination that may have been left a number of days prior to the sample being taken.

Results of between 3 and 4 times can be classed as a **“high”** response. This level of response would not be attributed to cross contamination and is indicative of recent and direct contact with measurable quantities of the narcotic identified by the machine.

Readings of 4.00 and above are estimated to relate to microgram amounts of contamination being transferred to the sample media. This level of contamination is not generally experienced in any other environment than somewhere that has been in direct contact with a bulk amount of the source narcotic, i.e. this level is not generally experienced as background contamination or through incidental cross contamination by being in close contact with other contaminated areas or persons.

So, anything 3 and above means drugs have recently been consumed using those areas.

You have very high drug readings throughout the venue which need to be drastically reduced. What we would normally suggest in situations like this is you need to make the area less user friendly for drug taking. Remove flat surfaces if possible and if not cover them with a material that would not make it possible for them to snort drugs of them. You could also increase your toilet checks and make the patrons aware that the toilets will be checked on a regular basis, I would personally get you're your door staff to carry out more thorough checks on entry and not only check males – you can see for yourself with the results above that females are just as likely to consume drugs.

We will revisit soon to carry out the tests again and hopefully we will see an improvement. If there are any matters within this letter that you wish to discuss then please do not hesitate to contact us via the email address above.

Yours sincerely,

Mark Thorogood  
Licensing Officer  
Brighton & Hove Division

c.c Brighton & Hove City Council Licensing



## Appendix 2

**From:** Thorogood, Mark REDACTED  
**Sent:** 24 February 2022 14:37  
**To:** Francois Roberts REDACTED  
**Subject:** RE: Recent Drug Readings

Afternoon Francois,

Thank you for the update. Maybe once all the work is done you could let us know and we will come say Hi and take a look.

Kind Regards

Mark.



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**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**

**Telephone:** 01273 404 535 **Ext:** REDACTED **Mobile:** REDACTED

**Twitter:** @SusPolLicensing

**From:** Francois Roberts REDACTED  
**Sent:** 23 February 2022 21:05  
**To:** Thorogood, Mark 33005 REDACTED  
**Subject:** RE: Recent Drug Readings

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#)\*\***

Dear Mark,

Thank you for the email and I apologise for the delayed response. I was relieved to know that the results are heading in the right direction however i would like to get them a lot better. I have had words with my head of security to increase vigilance and do better searching. I now have security 7 days a week and we are in the process of employing a female security staff member to search female customers as well as female toilets.

In terms of reducing flat surfaces in the toilets where customers can take drugs off, we have decided to completely renovate the upstairs venue, that will mean new toilets without electric hand dryers rather tissue dispensers with slanted surfaces. As for the actual toilet tissue dispensers that is a difficult decision to make as customers tend to clog up the toilet with excess tissue which costs us a lot in plumber fees. We will instead position them higher up during the renovation so no one can use the surfaces for taking drugs.

Post renovation, we will be having a new business model to attract better clientele. Once all the aforementioned drug use prevention measures are implemented we should have better results.

Kind Regards,

Francois Roberts

Sent from [Mail](#) for Windows

**From:** REDACTED

**Sent:** 08 February 2022 09:54

**To:** REDACTED

**Subject:** Recent Drug Readings

Dear Francois,

Please find below results from your recent drug swabbing at your premises. The figures in black are what the resulted were on our first visit and ones in red are what they are after our visit at the weekend.

## **GROUND FLOOR**

### GENTS

LEDGE BY FLUSH BUTTON IN CUBICAL - COCAINE 3.08 & KETAMINE 2.18 cocaine 3.53

SILVER LEDGE – COCAINE 5.50 Cocaine 5.39

### LADIES

LEDGE BY FLUSH BUTTON IN CUBICAL - COCAINE 5.07 cocaine 4.25

TOILET SEAT – COCAINE 1.46 cocaine 1.31

TILED RIDGE – COCAINE 4.20 nothing

HAND DRYER – COCAINE 3.35 cocaine 3.40

## **BASEMENT**

BAR – COCAINE 5.57 cocaine 3.11

TABLE WITHIN THE BAR AREA – COCAINE 5.24 cocaine 2.94

### GENTS

SINK - COCAINE 6.05 nothing

TOILET SEAT – COCAINE 6.56 nothing

### LADIES

LEFT CUBICAL TOILET SEAT - COCAINE 1.06 nothing

LEFT CUBICAL TOILET ROLL HOLDER COCAINE 3.80 nothing

RIGHT CUBICAL TOILET SEAT - COCAINE 5.88 nothing

RIGHT CUBICAL TOILET ROLL HOLDER COCAINE 6.19 cocaine 1.79

The results are heading in the right direction but you still have some over 3 which does evidence that you have still got drug consumption going on within your venue. We would ask you to look carefully

at any flat surfaces within the toilets to see if you can remove these and consider moving things like toilet roll holders and hand dryers further up so people can't sniff things off the top of them.

For now we will continue to monitor the situation but due to the improvement at this time we do not need to take any further steps in regards to enforcement. Please do not take your eye off the ball when it comes to drug consumption within your venue.

If you have any queries please do not hesitate to contact us.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**

**Telephone: 01273 404 535 Ext: REDACTED Mobile: REDACTED**

**Twitter: @SusPolLicensing**

### Appendix 3

**From:** Francois Roberts REDACTED  
**Sent:** 11 March 2022 13:17  
**To:** Brighton Licensing <Brighton.Licensing@sussex.police.uk>  
**Cc:** Donna.Lynsdale@brighton-hove.gov.uk  
**Subject:** Re: CCTV - Sussex Police

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#).\*\***

Okay thank you for your help mark, I will make a file ready to be sent today for when the investigating officer requires it.

Have a lovely weekend,

Many thanks,

Francois

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---

**From:** [Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk) <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Sent:** Friday, March 11, 2022 1:14:13 PM  
**To:** Francois Roberts REDACTED  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk) <[Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)>  
**Subject:** RE: CCTV - Sussex Police

I have asked the investigating officer to make contact with you. They are currently on rest days so will come back to you early next week.

Many Thanks

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone:** 01273 404 535 **Ext:** REDACTED **Mobile:** REDACTED  
**Twitter:** @SusPolLicensing

**From:** Francois Roberts REDACTED  
**Sent:** 11 March 2022 13:11  
**To:** Brighton Licensing <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)  
**Subject:** Re: CCTV - Sussex Police

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#).\*\***

Good afternoon Mark,

I believe this is a big misunderstanding as I do not recall being contacted by anyone especially by phone on the 14th. They may have contacted my staff in regards to this which they did not inform me of this. I do apologise if I am mistaken.

Would you know where I would be able to find this link so I can upload the footage please.

Kindest regards,  
Francois

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**From:** [Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk) <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Sent:** Friday, March 11, 2022 12:59:19 PM  
**To:** Francois Roberts REDACTED  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk) <[Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)>  
**Subject:** RE: CCTV - Sussex Police

Afternoon Francois,

Thank you for your reply.

On checking the file I can see it makes mention of the following:

07<sup>th</sup> Feb – CCTV request links sent.

14<sup>th</sup> Feb – A call was made to yourself and you advised you would get CCTV over that afternoon.

28<sup>h</sup> Feb – Officers attended the venue and asked staff to ask you to upload the CCTV as still not received.

I can only go by what's on the investigation notes which states the above.

I will pass your email on to the officer investigating and they will make contact with you to retrieve the CCTV.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone:** 01273 404 535 **Ext:** REDACTED **Mobile:** REDACTED  
**Twitter:** @SusPolLicensing

**From:** Francois Roberts REDACTED  
**Sent:** 11 March 2022 12:49  
**To:** Brighton Licensing <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)  
**Subject:** Re: CCTV - Sussex Police

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#).\*\***

Hello Mark,

Thank you for your email. I have not received any communications from yourself or the police regarding this. I have been waiting for someone to contact me with the relevant details for me to send through. I still have the footage as cctv is stored for almost two months as I purchased a very big hard drive. I have never been at the premises when police have been there asking for cctv footage. My stuff have never left me any contact details for whom I am to contact to send over footage and have just been waiting for another visit. I do apologise for any inconvenience caused and would please kindly ask that I be contacted directly by email or phone in the coming future for any footage you may need as I will be very happy to cooperate.

I will get this over to you by today, I am just waiting for the footage to be sent to me by the company that does my cctv.

Please may you also send me any other dates of footage you would like me to send to you. I have footage stored that goes back to 24/12/2021.

Kindest regards,  
Francois Roberts

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**From:** [Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk) <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Sent:** Friday, March 11, 2022 9:55:58 AM  
**To:** Francois Roberts REDACTED  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk) <[Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)>  
**Subject:** CCTV - Sussex Police

Good Morning Francois,

We have been made aware of an incident that occurred within your venue on 06<sup>th</sup> Feb 2022 which resulted in a member of your staff and security being assaulted. It appears on a number of occasions officers had asked for the CCTV to be downloaded on to a link that was provided to yourselves. Despite chasing a number of times it does not seem the CCTV has even been provided and we now believe it has been lost.

Can you please provide me with your side of things so that we can workout how to deal with this possible breach of your licence conditions.

**For the Prevention of Crime and Disorder:**

- I. Digital CCTV and appropriate recording equipment to be installed, operated and maintained throughout the premises internally and externally to cover all public areas with sufficient numbers

of cameras as agreed with Sussex Police. **CCTV footage will be stored for a minimum of 28 days, and the management will give full and immediate cooperation and technical assistance to the Police in the event that CCTV footage is requested for the prevention and detection of suspected or alleged crime.** The CCTV images will record time and display dates and times, and these times will be checked regularly to ensure their accuracy and will be changed when British Summer Time starts and ends. During the hours of darkness suitable lighting will be provided to illuminate the outside area of the premises fronting Farman Street.

I look forward to hearing from you.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone: 01273 404 535 Ext: REDACTED Mobile: REDACTED**  
**Twitter: @SusPolLicensing**

## Appendix 4

**From:** Francois Roberts REDACTED  
**Sent:** 12 July 2022 15:21  
**To:** Brighton Licensing <Brighton.Licensing@sussex.police.uk>  
**Subject:** Re: Drug Readings - Meeting

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#).**\*\*

Hello mark,

I am shocked by all these readings, especially by the new spots people are finding to consume drugs.

I will indeed be attending tomorrow's meeting and I look very forward to it to tackle this drug problem once and for all.

I have completed the action plan and will be putting this forward to you and the council.

Many thanks,

Francois Roberts

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**From:** [Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk) <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Sent:** Monday, July 11, 2022 9:30:55 AM  
**To:** Francois Roberts REDACTED  
**Subject:** Drug Readings - Meeting

Dear Francois,

As promised please see below the results from the swabbing we conducted on Friday 08<sup>th</sup> July 2022.

### UPSTAIRS

LADIES CUBICLE BACK AREA OF TOILET FLUSH – COCAINE 6.38

LADIES TOILET SEAT – COCAINE 3.06

GENTS CUBICLE BACK OF TOILET – COCAINE 3.51, KETAMINE 1.76

CUBICLE LEDGE ON THE SIDE – COCAINE 5.27

TOP OF URINAL – COCAINE 5.61

LEDGE WHERE TILES MEET WALL ABOVE URINAL – COCAINE 4.62

### KITCHEN

METAL COUNTER TOP BY MICROWAVE – COCAINE 1.58

METAL TOP OF COLD COUNTER – COCAINE 4.23

### DOWNSTAIRS

BAR TOP – COCAINE 3.77

WHITE TABLE TOP , LEFT OF DJ BOOTH – COCAINE 1.38

DJ BOOTH – COCAINE 4.73

TABLE TOP MIDDLE HIGH ON LEFT – COCAINE 3.36



LADIES DOWNSTAIRS  
LEFT CUBICLE TOILET ROLL HOLDER COCAINE 1.41  
HAND DRYER – 0  
SHELF AT THE TOP OF STAIRS – COCAINE 1.12

As mentioned on the phone we would like to invite you for a meeting at John Street Police Station on Wednesday 13<sup>th</sup> July at 14:00. Brighton & Hove City Council colleagues will also be joining us. The reason for the meeting is part of our stepped approach which we have mentioned before. This is the final stage now so it would be good for you to come to the meeting with an action plan and time scale of how your going to deal with the drug issues within your venue.

If you can please confirm your attendance.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone:** 01273 404 535 **Ext:** REDACTED **Mobile:** REDACTED  
**Twitter:** @SusPolLicensing

## Appendix 5

### Drugs Policy POA

Below is the plan of action I and my Security staff have decided to put in place based on the recent high readings:

- All security personnel have been briefed that they are now to carry out mandatory searches for both male and female guests attending the venue. Failure to a consent to a search will mean refusal of entry.
- Bar staff will now have to carry out mandatory half hour checks of toilets. I have printed a sign off sheet for that for verification purposes. Should staff fail or miss to check and sign the toilet check chart, there will be warnings issued.
- All staff have been informed that they must report any suspicious activity they see to the Manager on duty who will liaise with security personnel.
- I have been in touch with our CCIV installer about adding more cameras to cover the areas that are currently blind spots i.e. Kitchen, the two white tables behind DJ booth and bottom of the stairs leading to club. This will be installed on 30<sup>th</sup> of July.
- Lastly a toilet renovation must be done to eradicate flat surfaces from which drugs could be consumed.

I feel the above steps will help deter illegal drugs and drug taking from taking place in the venue. Internally I have put all staff on notice that the recent readings are unacceptable and anyone of them who deviates from the above POA will face disciplinary action and/or dismissal.

## Appendix 6

**From:** Francois Roberts REDACTED

**Sent:** 25 July 2022 11:37

**To:** Brighton Licensing <Brighton.Licensing@sussex.police.uk>

**Cc:** Donna.Lynsdale@brighton-hove.gov.uk; Mylene.Hayward@brighton-hove.gov.uk

**Subject:** Re: Licensing inspection

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#).\*\***

Hello mark,

I completely agree and understand with everything above. My staff members should have known. I did conduct an emergency meeting with both staff and security the following day after our meeting explaining all the licensing conditions and the problems we are having and what is expected by everyone. I have already fired two staff members due to them not adhering to they're new conditions and not doing the toilet checks in the timely manner that has been given to them. I do not have any room for mistakes, and we will and have been doing what is asked by us by law without fail.

I look forward to licensing visits as it will give us a chance to prove ourselves.

Kind regards,

Francois

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**From:** [Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk) <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>

**Sent:** Monday, July 25, 2022 11:26:53 AM

**To:** Francois Roberts REDACTED

**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk) <[Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)>;

[Mylene.Hayward@brighton-hove.gov.uk](mailto:Mylene.Hayward@brighton-hove.gov.uk) <[Mylene.Hayward@brighton-hove.gov.uk](mailto:Mylene.Hayward@brighton-hove.gov.uk)>

**Subject:** RE: Licensing inspection

Good Morning Francois,

Thank you for your fast response. The check we made on the Saturday, we did ask to speak with the manager and a female approached but I am unsure who she is. The staff member behind the bar was the one that I believe possibly tried to call yourself and then proceeded to answer the officers questions. We would expect anyone working at the venue to be fully aware of the licence and the conditions upon it. In regards to the times outside I am only repeating what the staff member advised our officers. When we do our checks it is normal for the security to pass us over to a member of staff rather than deal with the inspection themselves.

As at the time there is no evidence of people outside with drinks we will not issue you a breach however on going checks will be made to ensure compliance of the licence conditions.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone:** 01273 404 535 **Ext:**REDACTED **Mobile:** REDACTED  
**Twitter:** @SusPolLicensing

**From:** Francois Roberts REDACTED  
**Sent:** 25 July 2022 09:01  
**To:** Brighton Licensing <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk); [Mylene.Hayward@brighton-hove.gov.uk](mailto:Mylene.Hayward@brighton-hove.gov.uk)  
**Subject:** Re: Licensing inspection

**\*\*External Email- Think before you click. If you do not trust the sender, do not click on any links or open any attachments. Further information can be found [here](#).\*\***

Hi mark,

I think you have my staff person mistaken and didn't fully understand her responses to her question. I was there working behind the bar Friday night and was also present the whole evening.

We did not breach our licensing. The outside was closed from 11pm and no one was taking they're drinks outside as my security was very strict on this the whole night. We left people stay in the bar till 2:30 as they were not allowed to take they're drinks outside or have plastic cups. The new staff member in question has worked with us for one week and was the wrong person to talk to. Saturday evening was a busy evening and we have been closed downstairs for the past couple weeks due to a leak we have had.

On Saturday night, we closed the bar at 1:05. I have just looked at the cctv. Outside tables were brought in way before 11pm on both nights this weekend and I see on cctv that before 11pm my security officer was informing people to bring they're drinks in and that they were not allowed to take them out on both nights and there is cctv evidence of this.

I would prefer the police spoke to me or spoke to security for accurate answers next time. I do recall telling all my staff strictly that they can allow people to stay in till 2:30 and finish they're drinks inside as customers are not allowed to take they're drinks outside in plastic cups and they all understood this as not one person was given a plastic cup as frankly I threw them all away.

I took our meeting very seriously and I am working very hard, day and night to make sure we fully comply with our licencing and new action plan for our drug problem but I can assure you there has not been a breach in our licensing this weekend.

If you have any other questions in regards to this please feel free to ask.

Kind regards,  
Francois

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**From:** [Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk) <[Brighton.Licensing@sussex.police.uk](mailto:Brighton.Licensing@sussex.police.uk)>  
**Sent:** Monday, July 25, 2022 8:41:13 AM  
**To:** Francois Roberts REDACTED  
**Cc:** [Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk) <[Donna.Lynsdale@brighton-hove.gov.uk](mailto:Donna.Lynsdale@brighton-hove.gov.uk)>;  
[Mylene.Hayward@brighton-hove.gov.uk](mailto:Mylene.Hayward@brighton-hove.gov.uk) <[Mylene.Hayward@brighton-hove.gov.uk](mailto:Mylene.Hayward@brighton-hove.gov.uk)>  
**Subject:** Licensing inspection

Morning Francois,

Officers conducted a licensing inspection over the weekend and during that visit the bar person advised the following:

LICENCED TO OPEN UNTIL 2:30 AND **LET PEOPLE DRINK OUTSIDE UNTIL THEN IF BUSY.**  
SERVE DRINKS IN PLASTIC CUPS.

On reviewing the body worn video the bar person clearly advises the officers that tonight (23<sup>rd</sup> July) they let people stay outside until 01:30 but yesterday it was until 02:30 as it was really busy.

Under your licence you have the following condition:

6. No drinks are to be taken outside between 23:00 and 10:00.

Can you please come back to me with your comments on this as this is a possible further breach of your premises licence.

I look forward to hearing from you – please can you click “reply to all” as Donna Lynsdale and Mylene Hayward from Brighton & Hove City Council are copied in.

Kind Regards

Mark.



**Mark Thorogood**  
Police Licensing Officer

**Brighton & Hove Licensing Unit : John Street, Brighton**  
**Telephone:** 01273 404 535 **Ext:** REDACTED **Mobile:** REDACTED  
**Twitter:** @SusPolLicensing

### **Morpho Detection (UK) Ltd Technology Statement**

The Itemiser<sup>(x)</sup> and Mobile Trace are programmed to detect and identify microscopic amounts of many different types of narcotics. Cocaine is one of the most reactive and easy to detect substances in the equipments library. Responses are reported to the user by a simple and clear computer interface. An “alarm Strength” number gives intensity of the response. This strength is an indication of the amount of narcotic contamination that was collected on the sampling media used, in the case of Itemiser<sup>98</sup>, a cotton – paper disk and with the Itemiser<sup>3/3e/DX</sup> and Mobile Trace a Teflon coated fiberglass strip. These traps are cleaned and packed by MDII in Boston, USA to ensure they are not contaminated before use. They should also be checked before use on site in a customs or police application.

Samples are taken from areas likely to contain fingerprints from the target subject but not necessarily directly from the person themselves. The machine will correctly identify contamination down to nanogram (billionth of a gram) levels.

Alarms of between 1 and 2 times the alarm threshold can be classed as a “low” response. It could be attributed to cross contamination of the surface tested, background contamination, or greatly degraded historic contamination. It is not indicative of recent direct contact.

Alarms of between 2 and 3 times the alarm threshold can be classed as a “medium” response. It could be attributed to cross contamination of the surface tested or recent historic contamination that may have been left a number of days prior to the sample being taken.

Alarms of between 3 and 4 times the alarm threshold can be classed as a “high” response. This level of response would not be attributed to cross contamination and is indicative of recent and direct contact with measurable quantities of the narcotic identified by the machine.

Readings of 4.00 and above are estimated to relate to microgram amounts of contamination being transferred to the sample media. This level of contamination is not generally experienced in any other environment than somewhere that has been in direct contact with a bulk amount of the source narcotic, i.e. this level is not generally experienced as background contamination or through incidental cross contamination by being in close contact with other contaminated areas or persons.

It should be noted that the presence of any response to drugs using the Itemiser could be used as grounds for furthering an investigation depending on the SOP of the enforcement agency using the device.

A full technical introduction to the ITMS detection principals follows.

## Technology Notes - Trace Detection Technologies

The three most prevalent technologies available for trace detection of narcotics and explosives include Ion Mobility Spectrometry (IMS), Combination Gas Chromatography-Chemiluminescence (GC-CLD), and enhanced IMS, or Ion Trap Mobility Spectrometry (*ITMS*). A fourth combination gas chromatography and mass spectrometry (GC-MS) is also available, but it is used mostly in lab-related equipment.

**IMS** separates ionized molecular compounds on the basis of their transit times (sometimes called “time of flight” or “drift time”) when subjected to an electric field in a tube. This time is then compared to stored transit times of known compounds making it possible to distinguish the target material (explosives or narcotics) from other molecules. This technique is fast and makes a compact device possible. Gaseous samples enter an ionization chamber where an ionization source emits low-energy beta particles resulting in ion formation in the gaseous phase. A gating mechanism allows the ions of the correct polarity to pass through the shutter grid and enter the ion drift region where an applied electric field mobilizes the ions. Less than 1% of the ions created in the ionization chamber actually reach the drift tube as more than 99% of the ions are discharged on the shutter grid. The rate at which these ions traverse the ion drift region is inversely proportional to the size of the ion. This correlation allows for the identification of the analyte of interest.[3]

**GC-Chemiluminescence** uses quantitative measurements of the optical emission from excited molecules to determine analyte concentration. Although GC-CLD technology has good sensitivity and selectivity, its range of detection is fairly limited. The GC-CLD technology employed in explosive detectors can only detect nitro compounds. Today, with the ever-increasing threat of non-nitro substances such as HMTD and TATP that are outside the detection range of this technology, the practical application of GC-CLD as an option for security outside the structured controls of a laboratory is limited. In addition, there are practical concerns about the expense of maintenance, instrument complexity, high consumable gas costs, and containment of potentially harmful materials, such as ozone, from the operator.

**ITMS**, like IMS, separates ionized vapors and then measures the mobility of the ions in an electric field. In the typical implementation of ITMS, the gaseous sample passes through a semi-permeable membrane prior to ionization. Also like IMS, the gaseous samples then enter an ionization chamber where an ionization source emits low-energy beta particles resulting in ion formation in the gaseous phase. Unlike IMS, however, the ionization in ITMS is allowed to reach equilibrium in a field free region and then pulsed into the drift tube where an electric field accelerates the ions to the collector. Note that in the ITMS detector, the shutter grid does not exist, resulting in a much greater portion of the ions entering the drift tube.

### **Performance Requirements of Trace Detection**

When comparing these technologies, there are important performance requirements that we can use to evaluate their application for checkpoint, facility, or event security. The requirements include sensitivity, selectivity, and range of compounds detected, logistics, and reliability/maintenance.

**Sensitivity (detection effectiveness)** is the degree of response of an instrument to an introduced concentration. In other words, how much of an explosive or narcotic material is required to detect it. In real world application of these devices, we must realize that there is a time limit to complete the analysis in order to process sample targets through the unit, typically in the 3-to10-second range. Assuming this is a realistic range, GC-CLD technology will have a loss in selectivity, as the GC column will not provide enough separation of the nitro compounds over this analysis time.

Traditional IMS loses sensitivity with the loss of ions to the shutter grid with its non-equilibrium ionization. ITMS enhances the sensitivity through many methods.

**Selectivity** is the ability to distinguish between compounds. Typically when sampling for explosives or narcotics, other materials are present and the threat signals need to be selected by the technology. All three technologies are able to accurately select the threat compound if it is present above the sensitivity level of that detector, although there are significant operational differences.

**Range of compounds detected** is quite simply the spectrum of material that the device can detect simultaneously. GC-CLD concentrates on distinguishing between nitro compounds, but detects *only* nitro substances. IMS detects *either* negative or positive ions, but not both at the same time. ITMS simultaneously detects negative and positive ions, including both nitro and non-nitro target substances.

**Logistics** incorporate practical application issues present with each technology. This could include regulatory issues for ozone, radioactive sources, bottled gases, etc. IMS and ITMS contain radioactive sources. GCCLD requires handling of sensitive gases such as hydrogen, ozone, or helium.



**Reliability/Maintenance.**

Looking at the real world application of this technology in areas outside the controlled laboratory environment, reliability of operation and the ability to maintain peak performance in dusty, high-traffic, or humid conditions become a concern. Downtimes due to maintenance or excessive maintenance costs become other factors of concern. Both GC-CLD and IMS are unprotected from dust, dirt, and water vapor entering the system. This is a serious problem for traditional IMS, as the dryer or desiccant requires frequent changing and leads to downtime. In addition, the contamination material can lead to a loss of sensitivity over time if it is not installed in a very clean environment. The latest ITMS systems have regenerating dryers that do not require changing and a semi-permeable membrane to protect them from dirt, dust, and humidity. GC-CLD systems require replacement of the chemical modules approximately every 3-6 months if usage is high, which can be almost as expensive as a new bench-top ITMS or IMS detector.

While all three require similar sampling consumables, the GC-CLD requires gas bottle replacement on top of the consumables. The ITMS and IMS devices require dopant depending on the application.

**ITMS vs. IMS Technology**

Enhancements to IMS analysis through ITMS technology allow for vast improvements to ionization efficiency, and therefore sensitivity of the detector. ITMS enables extremely low concentrations of electrophilic vapors, such as explosive vapors, to be detected—impossible with traditional IMS.

The ionization chamber in the ITMS detector is a field-free region where the ion population, both negative and positive ions, is allowed to build up by the action of the beta particles on the dopant gas. With IMS and ITMS, the high density of electrons produces a high probability of ionization of the dopant gas molecules, which in turn collide with the target molecules. Electric charge is then transferred to the target molecules because of their extremely high charge affinity, and the overall result is high ionization efficiency.

Since the ITMS detector does not incorporate a shutter grid as in traditional IMS, there is no loss of ions by discharge onto the shutter grid, which could account for a loss of up to 99% of the ions. With ITMS, ions are accumulated over a 20mS interval and then compressed into a pulse of 0.2mS, increasing the density and collected current by a factor of 100 [4,5,6]. Further enhancement is made with the addition of a semi-permeable membrane that excludes dust and dirt.

This enhancement makes the system more sensitive to the materials of concern and allows continued operation and sensitivity in environments outside the lab that are high-traffic, humid, or dusty. In addition to providing a charge medium, the chemical dopant that is added into the analysis in the detector region to reduce the chances of ionizing unwanted analyte. Ammonia is the primary dopant for positive ions used in the ITMS detector, while methylene chloride is used as the dopant for negative ions. The dopants accept charge from the low-energy beta particles thereby reducing the chance of analytes with charge affinities lower than that of the dopant to accept

charge. The target contraband molecules will accept the charge more readily than the dopants due to their higher affinity for the charge. This process reduces the amount of possible interferences due to the other analytes because the detector recognizes only charged species [4,5,6].

Finally, recent advancements in ITMS technology incorporate engineered high-speed switching systems that allow for millisecond alternating from positive to negative ion mode, thereby allowing for simultaneous detection and analysis of target positive and negative ions. Most narcotics have a positive ion affinity, while most explosives have a negative ion affinity; however, there are some important exceptions. TATP, for example, is an explosive that is seen as a positive affinity molecule, which would not be detected in a traditional IMS in single-mode operation for explosives. Detection limits for real world samples in ITMS in vapor sampling mode are in the picogram range.

### Summary

As we look to implement a total solution for security, trace detection technologies become an integral component of that solution. Complementing x-ray scanners and metal detection, trace detection closes security loopholes by detecting microscopic particles that remain on clothing, luggage, ID cards, and more after explosives or narcotics are handled. Because it can sniff out vapors that build up in confined spaces, trace detection is especially effective for finding contraband hidden in compartments, suitcases, and lockers. ITMS technology offers the advantage of detecting a wider range of targeted substances in a more flexible detector design. Therefore it is ideal for practical applications such as checkpoint security, and screening vehicles, personnel, shipside, sea craft, packages, luggage, and cargo.

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