Neutral Citation Number: [2015] EWCA Crim 714

Case No: 201205532 B3

IN THE COURT OF APPEAL (CRIMINAL DIVISION)
ON APPEAL FROM KINGSTON-UPON-THAMES CROWN COURT
Mr Justice Calvert-Smith
T20070664

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 30/04/2015

Before :

LORD HUGHES
MR JUSTICE WILKIE
and
MR JUSTICE IRWIN

- -

Between :

MANFO KWAKO ASIEDU	**Appellant**
- and -	
THE QUEEN	**Respondent**

- -
- -

Stephen Kamlish QC, Ali Naseem Bajwa QC, Di Middleton and Catherine Oborne (instructed by **Irvine Thanvi Natas Solicitors**) for the **Appellant**
Max Hill QC and Alison Morgan (instructed by **The Crown Prosecution Service**) for the **Respondent**

Hearing dates: 9th and 10th February 2015

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Approved Judgment

Lord Hughes:

1. The applicant renews his application for leave to appeal against his conviction for conspiracy to cause explosions likely to endanger life or to cause serious injury to property, after refusal by the single judge. He had pleaded guilty to this offence at his re-trial in November 2007. He had previously been tried together with others on an indictment charging both conspiracy to murder and this offence, arising from the same alleged conduct. At the end of a long trial in July 2007, the jury had convicted others, but had been unable to agree about this applicant. Upon his plea of guilty to this offence at the outset of the re-trial, the Crown did not ask for a re-trial of the graver alternative count, nor of count four which charged possession of an explosive substance with intent. His contention that his conviction is unsafe is grounded upon complaints of lack of proper disclosure by the Crown of material relating to scientific evidence, and associated criticism of the evidence of one of the scientists called by the Crown at the effective (first) trial.

2. The charges against this applicant and his five co-accused arose out of the taking of home-made bombs onto the London Transport system on 21 July 2005. That was two weeks after terrorist suicide bombers had exploded bombs on underground trains and a bus on 7th July, causing some fifty-two deaths. The case against the applicant and his co-accused was that they had similarly taken home-made bombs onto underground trains and buses. The bombs were contained in rucksacks, and were triggered by battery-driven electric devices which fired home-made detonators when an electric circuit was completed by the wearer. On 21 July there were five such bombs, taken separately by five of the six defendants from a common starting point in west London onto either trains or buses. Four of those devices were activated by four of the applicant's co-accused, called Omar, Osman, Mohammed and Ibrahim. Omar activated his on a Victoria Line train in the tunnel approaching Warren Street Station. Osman activated his on a train near to Shepherd's Bush station. Mohammed activated his device on a northern line train between Stockwell and the Oval. Ibrahim activated his on a number 26 bus in Hackney. In each of these cases, the electric circuit when completed successfully fired the home-made detonator, but the detonator did not set off the bulk charge. There was a bang, and some resultant confusion, but no major explosion. The fifth device was carried by Asiedu. He abandoned it in some parkland in Little Wormwood Scrubs.

3. The Crown case was that this was a plot to explode bombs which would kill. The devices, which were recovered, were all of the same construction. The bulk charge (which failed to explode) was made of domestic ingredients, flour and hydrogen peroxide. The detonators were all the same, comprising high explosive primers made from household materials publicly available. The electric firing devices were again the same and similarly home-made. Packed around the bulk charges was shrapnel, in the form of bolts, screws, washers or tacks, such as would increase the injuries in the event of explosion. Because in the event the bulk charges did not explode, the carriers were able initially to escape in the confusion, but some could be seen, undisguised, on CCTV and one had left clear evidence of his identity in his rucksack. They were arrested one by one in Birmingham, London and Rome. The police rapidly identified two London flats as having been used by them, one at Curtis House in north London and one in the west at Dalgarno Gardens near Ladbroke Grove.

4. Asiedu when arrested gave long police interviews. What he said was very largely untruthful; he lied about who he was and about knowing the other defendants; he said he knew nothing at all about the bombs; he denied having anything to do with buying the hydrogen peroxide. As to the day when the bombs were set off, he asserted a false alibi. A police officer had to go to Ghana to establish the truth about his identity.

5. In the weeks and months after the arrests, the police were able to assemble clear evidence that Asiedu had been instrumental in the purchase of some 442 litres of hydrogen peroxide from several different suppliers, lying to the sellers about the purpose for which it was required. He was shown to have asked for 70% concentration if available, but ordinarily the product is sold only at 18%, and that is what he had been able to get. There was then evidence from Curtis House that the peroxide had been cooked in the kitchen, and concentrated from this 18% solution. There were rotas for this cooking duty, and notes of the specific gravity achieved, which indicated a strength in the region of 70%. There was much other evidence uncovered connected with the construction of the bombs by the defendants.

6. Sometime towards the end of 2006, over a year after the event and when the trial was imminent, the first four defendants (but not Asiedu) served amended defence case statements. In them, they asserted for the first time that they had indeed made the bombs, but that they had always intended that they should not explode; rather they were hoaxes intended to frighten or to make a political statement about UK actions in Iraq. The trial had to be delayed for this hoax assertion to be investigated. Much later, during the trial, the other defendants, through Ibrahim, advanced a further assertion not previously contained in their defence statements, namely that they had concentrated the hydrogen peroxide to about 70%, but having done so, watered it down by adding an equal volume of water, thus reducing the strength to around 35%. It was their positive case that the bombs were constructed of a mixture of flour and hydrogen peroxide, in proportions of roughly 1:2.

7. At a late stage in the trial Asiedu went to some lengths to distance himself from the other defendants. Inconsistently with his previous stance, and with a letter which he had written to Ibrahim's sister whilst awaiting trial saying that all the defendants were totally innocent, his case underwent a sea change after the Crown case was closed and Ibrahim had given evidence in chief. His case as put to Ibrahim in cross examination was that Ibrahim had, personally and via his solicitors, put pressure on him in prison to change his solicitor and to adopt the hoax defence. Consistently with his instructions, leading counsel roundly attacked the hoax assertion as absurd. By contrast, his defence, which he supported by evidence on oath, was that there had been a plan to make real bombs, but that he had learned of it only the night before they were deployed, and he was never a party to it. He had earlier bought the hydrogen peroxide innocently, believing that the others were using it for painting and decorating, or, later, that they were making cosmetics. Later Ibrahim had told him that the others were making "firecrackers", but he was never party to such a plan. On the night before the bombs were detonated he was with the others in Dalgarno Gardens and realised for the first time that they were talking about a suicide bombing mission and expected him to take part. He was afraid to voice his disagreement because the others were now seen to be terrorists who would kill him, so he bided his time, and when once separated from them, abandoned his device in the park in Little Wormwood Scrubs.

8. After the jury disagreed in his case, but had convicted the first four defendants, Asiedu was re-tried some four months later. At the outset of his re-trial, having sought in open court information from the judge as to the range of likely sentence in such event, he pleaded guilty to the lesser alternative count of conspiracy to cause explosions likely to endanger life or to cause serious damage to property. The tendering of this plea of guilty followed detailed discussions between his lawyers and those acting for the Crown. He asserts that the Crown initiated them, but it does not matter who did so; he was represented then, as now, by tenacious leading and junior counsel plus solicitors. Prior to tendering his plea, a detailed statement of the factual basis for it was prepared on his behalf, discussed with the Crown, and submitted to the judge so that a sentence indication might be given. It ran to three pages. In it he said (amongst other things) that:

   i) he had agreed in March 2005 to take part in making bombs by buying the hydrogen peroxide; he was reluctant but did as asked; he appreciated that any explosion of the bombs would be likely to endanger life and that he thus committed the offence charged in count 2 from March 2005;

   ii) at this time he was living at Curtis House with Omar, as he was for the majority, but not all, of the period from March to the deployment of the bombs in July; he had been aware of the cooking of the hydrogen peroxide in the kitchen; he had not personally taken part in this activity, but continued to buy the peroxide for the process; and

   iii) at Dalgarno Gardens overnight on 20/21 July he had learned of a planned suicide mission the next day; he had refused to be one of the suicide bombers but had helped to mix the materials to make one of the five bombs.

9. On 20 November 2007 Asiedu was sentenced to 33 years imprisonment for the offence to which he had pleaded guilty. An application to this court for leave to appeal that sentence was refused on 10 July 2008 (Sir Igor Judge P, Rafferty and Grigson JJ).

Scientific evidence and disclosure

10. The deployment of these bombs took place just a fortnight after the fatal suicide attacks on the London transport system of 7th July had killed and injured a very large number of people. The use of home-made starch/peroxide bombs was new at the time, and expertise in such material was scarce. The Forensic Explosives Laboratory ("FEL") could undertake some of the necessary reporting work, but it seems that it was not in a position to deal with analysis of the content of the devices. In consequence, Dr Black, who was an academic expert in isotopic analysis without experience of trial (forensic) work was instructed to undertake this analysis. The present application for leave to appeal is built entirely around the evidence of this expert. In due course his was by no means the only scientific evidence at the trial. Very important evidence was given by FEL scientists as to the potential of flour/peroxide mixtures of various recipes to explode and as to the manufacture and potency of the detonators. But Dr Black's evidence was relied on by the Crown and was in parts challenged by the defendants other than Asiedu. In particular, his evidence refuted the re-dilution assertion when it appeared during the trial.

11. The particular issues which Dr Black was initially asked to address were these:

    i) the composition of the starch/peroxide residues recovered from the bombs;

    ii) the origin of the starch;

    iii) whether the bombs were made from a single mix or from a number of mixes made independently;

    iv) whether there was or was not scientific evidence that the bombs were prepared at Curtis House and/or Dalgarno Gardens;

    v) whether there was or was not scientific evidence of concentration of peroxide at either address.

12. Dr Black produced a first report in June 2006. He had proceeded by way of (1) isotopic analysis, (2) chemical analysis of trace elements, (3) microscopic examination, (4) Xray diffraction, and (5) Xray fluorescence. At the end of a substantial report, his stated summary of conclusions read, omitting inessential detail, as follows:

> "7.1 Isotopic analysis of the scene residues found on 21 July 2005 show them to be flour-hydrogen peroxide mixtures.
>
> 7.2 Isotopic analysis of all the scene residues and commercially available flour types shows the flour used in the devices was similar to control sample GL12, labelled chapatti flour, and the control FUDCO chapatti flour GDA 353.
>
> 7.3 X ray diffraction analysis of the scene residues also supports the isotopic analysis and shows the incorporation of inorganic components to the residues which are consistent with stabilisers from the hydrogen peroxide.
>
> 7.4 Lead isotopic analysis of all the scene residues show them to be identical to one another [and]…. to residues recovered from the bins at Curtis House and from Curtis House.
>
> 7.5 Trace element analysis of the scene residues shows clear links to cooking pans at Curtis House…..
>
> 7.6 Physical shapes and structures of …residue found [at] Curtis House show them [sic] to be identical to those from scene residues originating from Warren Street, No 26 bus, Shepherd's Bush, the bins at Curtis House, The Oval and 58 Curtis House.
>
> 7.7 There is thus scientific evidence to suggest that the devices were prepared at Curtis House.
>
> 7.8 There is no scientific evidence to suggest that the devices were prepared at …Dalgarno Gardens.

> …
>
> 7.10 Analysis of the isotopic data for the hydrogen peroxide, scene residues and control flour materials suggests a mixture of between approximately 68-74% hydrogen peroxide was used at a strength between approximately 3 and 4 times the initial concentration (between 54-72%)."

13. This report was seen by forensic scientists working at the FEL who, whether or not directly concerned in the case, were concerned that some conclusions appeared to them to be unjustified. Within the service there was a system for such concerns to be made known to the Head of the Laboratory, and if appropriate via him to others, in order to avert any risk of a potential miscarriage of justice. The procedure set out in the laboratory quality manual (section 9 paragraph 3) shows that this is a system rightly taken seriously. Where anything emerges which might indicate that a past miscarriage of justice has occurred, its stated aim is to enable the information to reach, by one route or another, the Criminal Cases Review Commission. Where something emerges which might have the potential to cause a future miscarriage of justice, then its stated aim is to ensure that it is corrected and the correction provided to anyone outside the laboratory to whom uncorrected material has been given. Defence teams who have been given information which needs correction are, rightly, identified in the manual as examples of those in the latter situation.

14. It is now known that particular officers of the FEL prepared, first, a document beginning "Is Dr Black's report fit for purpose?" ("the fit for purpose document") and, second, draft comments on his report ("the draft comments document") . The second was certainly sent in electronic copy to the principal forensic scientist dealing with this case, Mr Todd. It is also now clear that the gist of the concerns expressed in these documents was communicated orally (i) to Dr Black at a meeting with other scientists (including Mr Todd) on 13 November 2006, attended by two police officers and (ii) to counsel at a visit they made to the FEL and subsequently at a case conference, both on 22 November. As part of that conference there was a telephone conversation between Mr Hill QC (then first junior counsel for the Crown) and Dr Black, at which some queries arising from the expressed concerns were discussed.

15. The outcome of this was that Dr Black wrote two additional witness statements in December 2006, both duly served on all parties and forming to a large part the basis of his evidence in due course at the trial. The first was entitled an "amendment" to his original statement. It began by saying that "a number of errors occurred in the original report", and offered his apology. It went on to re-work some paragraphs of his original report in a way which to an extent altered their import, including subparagraphs 7.2 and 7.10 of the conclusions which we have set out at paragraph 12 above. The second was a substantial addendum statement, setting out a good deal of further work and the conclusions which he drew from it. Thereafter the defendants instructed a scientific expert, Professor Michels, who met Dr Black on one or more occasions and discussed his conclusions with him and who in due course gave evidence at the trial, differing in some respects from him. Both addressed the late-appearing re-dilution assertion.

16. Although Dr Black thus corrected his first report, and added to it, what did not happen was the disclosure to the defence of either the Fit for Purpose document or the Draft

Comments document. Both were, we are satisfied, clearly disclosable. We consider below, to the extent appropriate without re-hearing scientific evidence, what impact in the end any of the concerns might have had at the trial of the six defendants who included Asiedu. But whatever hindsight may now tell us about that question, those two documents plainly had at least the potential to be of assistance to the defence as possibly undermining a part of the Crown case, namely some, though by no means all, of Dr Black's conclusions. As such, they fell to be disclosed to the defence. It is true of course that Dr Black's amendment statement clearly stated that he acknowledged errors and was correcting them, so that the defence was not only on notice that he had made errors but also could see which conclusions he agreed involved error. But this did not obviate the disclosability of the two documents. It would be for the defence to examine, on its own terms, whether the corrections adequately met the criticisms, whether the final conclusions ought to be challenged or not, and whether or not Dr Black's general standing as an expert witness ought to be challenged. Moreover, the amendment statement, whilst it corrected the first, said nothing about the errors having been drawn to Dr Black's attention by others and to that extent did not provide the defence with the same potential ammunition that ought to have been available to them. And since Dr Black adhered to some conclusions about which the FEL critics had expressed doubt, there was in those cases no correction and therefore also neither acknowledgement nor disclosure of peer criticism.

17. The factual position which we have been able to set out above has, even now, emerged only piece by piece. In January 2013, in response to the present application for leave to appeal and to grounds which raised the issue of the FEL concerns, the Crown properly traced and disclosed the key documents, namely the Fit for Purpose document and the Draft Comments document (the two principal documents) together with the notes of the meeting on 13 November 2006. The case conference of 22 November, however, emerged only at the two day hearing before us some two years later in February 2015. That led leading counsel for the applicant understandably to seek further assurance that full disclosure had now been made, and indeed he went on to raise a query as to the good faith of those representing the Crown. He asked us to order an independent enquiry into the disclosure history by fresh counsel. We concluded that that was not called for, but in response to his concerns we ordered, after the hearing before us was otherwise completed, a further disclosure investigation and specifically required to know whether either of the two principal documents had been seen by counsel, solicitors, or the police officers present at the case conference. We have been told that the necessary records have been exhumed from storage and inspected by their authors. There is no sign that any of those persons saw either of the two documents and none has any recollection of doing so. There is no reason to doubt this information, nor the good faith of those who have provided it. The case conference was not only, or even principally, about Dr Black. The notes of it do not suggest that the relevant discussion was conducted over a document, rather than being initiated by an oral report of topics of concern. Its outcome was that further work was to be done, and that two further statements would be made, one a correction and the other an update or addendum.

18. That does not alter the facts that (a) the two principal documents were not identified as apt for disclosure pre-trial, as plainly they should have been, and (b) the discussion at the case conference of part of material which derived from them was produced only at the hearing before us, eight years or so after the trial, and only after specific request

for its disclosure. We are satisfied that the first was a clear failure of the duty of disclosure. If disclosure of the two principal documents and of the gist of the 13 November discussion had been made, as it should have been, there would probably have been no occasion for disclosure of the telephone conversation at the case conference. As it is, the late emergence of the latter has lent some limited colour to the applicant's assertion that there has been a deliberate cover-up. Having considered detailed additional written submissions made after the hearing on behalf of the applicant, we see no evidence of this. We are, however, on an application for leave to appeal against conviction, concerned solely with the safety of the conviction. We therefore need in any event to consider the relevance of non-disclosure, of whatever kind, to that issue. That involves considering (i) the applicant's plea of guilty and (ii) the significance of the undisclosed material. We have heard argument about both matters.

The plea of guilty

19. A defendant who pleads guilty is making a formal admission in open court that he is guilty of the offence. He may of course by a written basis of plea limit his admissions to only some of the facts alleged by the Crown, so long as he is admitting facts which constitute the offence, and Asiedu did so here. But ordinarily, once he has admitted such facts by an unambiguous and deliberately intended plea of guilty, there cannot then be an appeal against his conviction, for the simple reason that there is nothing unsafe about a conviction based on the defendant's own voluntary confession in open court. A defendant will not normally be permitted in this court to say that he has changed his mind and now wishes to deny what he has previously thus admitted in the Crown Court.

20. It does not follow that a plea of guilty is always a bar to the quashing by this court of a conviction. Leaving aside equivocal or unintended pleas (which do not concern us here), there are two principal cases in which it is not. The first is where the plea of guilty was compelled as a matter of law by an adverse ruling by the trial judge which left no arguable defence to be put before the jury. So, if the judge rules as a matter of law that on the defendant's own case, that is on agreed or assumed facts, the offence has been committed, there is no arguable defence which the defendant can put before the jury. In that situation he can plead guilty and challenge the adverse ruling by appeal to this court. If the ruling is adjudged to have been wrong, the conviction is likely to be quashed. Contrast the situation where an adverse ruling at the trial (for example as to the admissibility of evidence) renders the defence being advanced more difficult, perhaps dramatically so. There, the ruling does not leave the defendant no case to advance to the jury. He remains able, despite the evidence against him, to advance his defence and, if convicted, to challenge the judicial ruling as to admissibility by way of appeal. If he chooses to plead guilty, he will be admitting the facts which constitute the offence and it will be too late to mount an appeal to this court. For this important distinction see *R v Chalkley & Jeffries* [1997] EWCA Crim 3416; [1998] 2 Cr App R 79, which on this point is clear law. That was a case in which the defendants had failed to persuade the trial judge to exclude evidence pursuant to section 78 of the Police and Criminal Evidence Act 1984, and, faced with evidence which they judged to be difficult to overcome, had pleaded guilty, indeed in explicit terms which made it clear that they now admitted the conspiracy to rob which was charged. Giving the court's judgment, Auld LJ said this at 94D:

> "Thus, a conviction would be unsafe where the effect of an incorrect ruling of law on admitted facts was to leave an accused with no legal escape from a verdict of guilty on those facts. But a conviction would not normally be unsafe where an accused is influenced to change his plea to guilty because he recognises that, as a result of a ruling to admit strong evidence against him, his case on the facts is hopeless. A change of plea to guilty in such circumstance would normally be regarded as an acknowledgment of the truth of the facts constituting the offence charged."

21. The second situation in which a plea of guilty will not prevent an appeal is where even if on the admitted or assumed facts the defendant was guilty, there was a legal obstacle to his being tried for the offence. That will be true in those cases, rare as they are, where his prosecution would be stayed on the grounds that it is offensive to justice to bring him to trial. Such cases are generally described, conveniently if not entirely accurately, as cases of 'abuse of process'. The classical example of such is *R v Horseferry Road Magistrates' Court ex p Bennett* [1994] AC 42 and later [1995] 1 Cr App R 147, where the defendant had been charged in England after being illegally routed here from a foreign country with which there was no extradition treaty. His committal for trial was quashed and the prosecution was stayed. In the subsequent similar case of *Mullen* [1999] 2 Cr App R 143, where the prosecution had proceeded to conviction after trial, that conviction was quashed. As this court there said,

> ". . . for a conviction to be safe, it must be lawful; and if it results from a trial which should never have taken place, it can hardly be regarded as safe."

By parity of reasoning, if the trial process should never have taken place because it is offensive to justice, a conviction upon a plea of guilty is as unsafe as one following trial.

22. *Chalkley* was not such a case, and the court there went too far in offering, obiter, the opinion that a plea of guilty would prevent an appeal even in such circumstances. That dictum was inconsistent with the reasoning in the later case of *Mullen* (although there had been no plea of guilty there) and it was corrected in *Togher* [2000] EWCA Crim 111; [2001] 1 Cr App R 457. There this court referred to the ratio of *Chalkley* as set out above at paragraph 20 and said:

> "We would not wish to question this passage in the judgment of Auld LJ. However, it cannot be applied to the situation which exists here, where the defendants were unaware of the material matters alleged to amount to an abuse of process. If they could establish an abuse, then this Court would give very serious consideration to whether justice required the conviction to be set aside. We would, however, emphasise that the circumstances where it can be said that the proceedings constitute an abuse of process are closely confined. The reason for this is that the majority of improprieties in connection with bringing proceedings can be satisfactorily dealt with by the court exercising its power of control over the proceedings. It

> has to be a situation where it would be inconsistent with the due administration of justice to allow the pleas of guilty to stand."

And the court had earlier made clear that:

> "Certainly, if it would be right to stop a prosecution on the basis that it was an abuse of process, this Court would be most unlikely to conclude that if there was a conviction despite this fact, the conviction should not be set aside."

23. That position was further endorsed by this court in the later case of *Early* [2002] EWCA Crim 1904; [2003] 1 Cr App R 19. The case arose from the notorious London City Bond investigations into evasion of duty upon bonded goods. The appellants had all pleaded guilty, in several cases after applications for a stay on grounds of abuse of process had failed. Those applications had been made on the basis of entrapment which is, of course, no defence but may be grounds for a stay: see *R v Latif* [1996] UKHL 16; [1996] 1 WLR 104. Subsequently it transpired that a key manager at the bonded warehouse, who was a Crown witness, had been a participating informer, that he had lied on oath about this and other matters to the knowledge of the investigators who had not revealed the lie, that the judge had been given false information about his status, and that that the investigators had facilitated offences, in other words that there had indeed been entrapment.

24. This court approached the appeals in accordance with *Mullen* and *Togher*. Rose LJ first made some general remarks as to the gravity of perjury in PII or abuse of process hearings. He said this:

> "Judges can only make decisions and counsel can only act and advise on the basis of the information with which they are provided. The integrity of our system of criminal trial depends on judges being able to rely on what they are told by counsel and on counsel being able to rely on what they are told by each other. This is particularly crucial in relation to disclosure and Pll hearings. Accordingly, Mr Gompertz QC, rightly, accepted that when defence counsel advised Rahul, Nilam Patel and Pearcy as to plea, they were entitled to assume that full and proper disclosure had already been made. He also rightly accepted that a defendant who pleaded guilty at an early stage should not, if adequate disclosure had not by then been made, be in a worse position than a defendant who, as the consequence of an argument to stay proceedings as an abuse, benefited from further orders for disclosure culminating in the abandonment of proceedings against him. Furthermore, in our judgment, if, in the course of a PII hearing or an abuse argument, whether on the voir dire or otherwise, prosecution witnesses lie in evidence to the judge, it is to be expected that, if the judge knows of this, or this court subsequently learns of it, an extremely serious view will be taken. It is likely that the prosecution case will be regarded as tainted beyond redemption, however strong the evidence against the defendant may otherwise be. Such an approach is consistent with the view

> expressed by this court, in Edwards [1996] 2 CAR 345 @ 350F where, in a different context, Beldam LJ referred to the suspicion of perjury starting to infect the evidence and permeate other similar cases in which the witnesses are involved."

The ratio of the case appears from what follows immediately:

> "We approach the question of safety of these convictions, following pleas of guilty, in accordance with Mullen [1999] 2 Cr App R 143 as approved in Togher & others [2001] 1 Cr App R 457, namely a conviction is generally unsafe if a defendant has been denied a fair trial. We bear in mind, in particular, three observations by Lord Woolf CJ in Togher. First, at paragraph 30, "if it would be right to stop a prosecution on the basis that it was an abuse of process, this court would be most unlikely to conclude that, if there was a conviction despite this fact, the conviction should not be set aside". Secondly, at paragraph 33, "The circumstances where it can be said that the proceedings constitute an abuse of process are closely confined. It has to be a situation where it would be inconsistent with the due administration of justice to allow the pleas of guilty to stand". Thirdly, at paragraph 59, freely entered pleas of guilty will not be interfered with by this court unless the prosecution's misconduct is of a category which justifies this. A plea of guilty is binding unless the defendant was ignorant of evidence going to innocence or guilt. Ignorance of material which goes merely to credibility of a prosecution witness does not justify reopening a plea of guilty."

25. It is clear from the sentences which directly follow the reference to a defendant being denied a fair trial that Rose LJ was, consistently with principle, in this context referring to the case of abuse of process such as renders it unfair to try the defendant at all. Entrapment, if made out, can be an example of such unfairness. The court was clearly satisfied that the defendants who had pleaded guilty had been deprived of a stay on such grounds.

26. In the present case, the submission of Mr Kamlish QC for the applicant is that:

i) the non-disclosure of the FEL documents was an abuse of process, moreover one committed in bad faith;

ii) Dr Black committed perjury at least at one point in his evidence when asked to explain something which had been in his original report and was removed by the amendment in December;

iii) had the non-disclosure been exposed before or during the trial the proceedings would have ended by order of the court (it seems by way of stay) and there would never have been a second trial or occasion for the applicant to plead guilty;

iv) alternatively but for the non-disclosure the applicant might have been acquitted at the trial;

v) the non-disclosure led to the applicant being misled by the Crown and to pleading guilty to a false case;

vi) the applicant was deprived of any real choice but to plead guilty, and his plea was accordingly a nullity; and

vii) in the circumstances, the plea was not a true confession to the offence.

27. Carefully presented as they are, these submissions are unarguable. Non-disclosure is not by itself an abuse of the process of the court. It is a failure of duty on the part of the prosecution as a whole. It may in some cases be serious. A conviction after trial may be unsafe if material was left undisclosed, especially (but not only) if it provided a defence; *R v Barkshire* [2011] EWCA Crim 1885 and *R v Bard* [2014] EWCA Crim 463, cited to us, were examples. But non-disclosure does not by itself amount to a circumstance making it unfair to put the defendant on trial at all and it does not afford grounds for a stay. The remedy for non-disclosure will ordinarily be orders for the defendant to be provided with the necessary material, and such order as will ensure that he is not unfairly damaged by its late delivery. Usually the trial can proceed fairly. Sometimes, if the material emerges late, a re-trial may be necessary if the defendant seeks it; in others he may judge that he will be better served by continuing the trial and making a point of the Crown's failures. But there is nothing akin to the kind of misbehaviour which characterises either the *ex p Bennett* type of case, or others of gross executive misconduct of a kind which makes it offensive to justice to put the defendant on trial at all.

28. This is well illustrated by *Togher*. After the defendants had entered pleas of guilty, it had emerged at a linked re-trial that there had been concealment by the investigators of breaches of internal guidance for surveillance and that false assurances had been given by counsel to the trial judge to the effect that authority for the surveillance had been obtained. In the context of a defence which asserted plant and the dishonest framing of the defendants by the investigators, this was plainly of great importance. The non-disclosure was characterised by deliberate failure on the part of the investigators. The case reached the Court of Appeal after the trial judge at the re-trial had stayed the proceedings for abuse of process, and thus it was that this court had to resolve the law as to when an appeal may be mounted notwithstanding a plea of guilty. But, having done so, this court went on to hold that the re-trial ought not to have been stayed at all; the remedy for the non-disclosure was a fair re-trial with all exposed. For this reason, the appeals against conviction were dismissed. It was otherwise in *Early* because there the non-disclosure concealed entrapment, which <u>is</u> a ground for a stay.

29. As will be seen, we are not satisfied that Dr Black's evidence at the trial justifies the description of perjury. But even if at the single point of explaining one of the changes from original to amendment statement it did so, that is not a ground for staying the proceedings. The references in *Early* to the significance of perjury were to false evidence given in PII or voire dire proceedings when the issue of entrapment fell to be decided by the judge; there the perjury concealed grounds for a stay.

30. Accordingly, we do not agree that if the FEL documents had been exposed at or before trial the proceedings would have been brought to an end against this applicant, or, for that matter, against any of the others; indeed it is clear that they would not. Whether this applicant would have been acquitted is a matter of complete speculation. Despite his abandonment of his own device, he had no doubt a formidable case to meet, but no one can say. Similarly, he might or might not have been acquitted at the re-trial had he fought it, but he did not. These speculations have nothing to do with whether his plea of guilty amounted to an unambiguous and voluntary confession.

31. It is entirely clear that it did. Of course a defendant who is confronted by a powerful case may have difficult decisions to make whether to admit the offence or not. He will of course be advised that if he does plead guilty that fact will be reflected in sentence, but that general proposition of sentencing law does not alter his freedom of choice in the absence of an improper direct inducement from the judge, such as there was in *R v Inns* (1974) 60 Cr App R 231. He will always have it made clear to him that a plea of guilty, should he choose to tender it, amounts to a confession. Only he knows the true facts, which usually govern whether he is guilty or not and did so here. If he is guilty, the fact that the choice between admitting the truth and nevertheless denying it may be a difficult one does not alter the effect of choosing to admit it. We do not begin to agree that Asiedu had no real choice but to plead guilty. He had a completely free choice. Nor do we agree with the further submission made on his behalf that the conviction of the others in some way altered the climate against him. That would be irrelevant to his freedom of choice, but as a matter of fact the disagreement of the first jury in his case, when he had distanced himself from the hoax defence advanced by those whom it convicted, might if anything have been taken as some encouragement.

32. Because it is of cardinal importance that a defendant makes up his own mind whether to confess by way of plea of guilty or not, and because only he knows the true facts, it is not open to him to assert that he was led to plead guilty by mistaken overstatement of the evidence against him. As Sir Igor Judge P observed in *R v Hakala* [2002] EWCA Crim 730 at paragraph [81], the trial process is not a tactical game. A defendant knows the true facts; he ought not to admit to facts which are not true, whatever the evidence against him, and this will always be the advice he is given. If he does admit them, the evidence that they are true then comes from himself, whatever may be the other evidence advanced by the Crown.

33. In the present case, moreover, it is in any event impossible to see that the admissions which this applicant made can to any material extent have been influenced by the evidence of Dr Black at all, still less by those parts of it which had received adverse comment within the FEL. By the time of the trial it was common ground that the devices were made of flour and hydrogen peroxide. It was the positive assertion of those who admitted that they had made them that those ingredients were mixed in proportions of about 1 to 2. It was common ground amongst all the defendants that the hydrogen peroxide had been cooked at Curtis House to a concentration of about 70%. The only remaining issue to which the scientific evidence of Dr Black had any relevance was whether it might be true that, after first being concentrated to 70%, the hydrogen peroxide had been watered down to about 35%, so as to make the devices into hoaxes.

34. But this was not Asiedu's case. His positive case at trial was that he had been led to believe, at least on the night before the devices were deployed, that they were real and

intended to be used in suicide attacks. He ridiculed the hoax defence, joining with the prosecution in doing so. The issue in his case was whether he had ever taken part in making the devices with the intention to endanger life. As counsel's very full skeleton argument on his behalf rightly asserts, the central issue in his case was his own state of mind – his intention. In due course, the admissions which he made upon his plea of guilty, carefully reduced to writing, owed nothing whatever to the evidence of Dr Black. The evidence that he had been the procurer of the hydrogen peroxide, in enormous quantities, owed nothing to Dr Black. The evidence that he had lied to the suppliers to obtain it likewise had nothing to do with Dr Black. Dr Black's evidence could offer no assistance on the intention with which Asiedu did those things. He alone knew the truth of that, and what he admitted was that he had himself had the intention to make real bombs from March. That was contrary to the positive case which he had sworn at the trial was true, namely that he had bought the hydrogen peroxide in all innocence, believing it to be for decorating or for cosmetic manufacture. It was thus, and very clearly, an unambiguous admission.

35. It follows that Asiedu's plea of guilty unequivocally establishes his guilt. There is nothing arguably unsafe about his conviction, whatever may be the true analysis of Dr Black's evidence. The failure of disclosure has for these reasons no impact on the safety of his conviction.

The impact of the failure of disclosure on the scientific evidence and the trial

36. That is sufficient to dispose of this application, which must be refused. Since, however, we have been addressed at some length on the impact both of Dr Black's evidence and the failure to disclose the FEL documents criticising some parts of it, we ought to deal with those two matters so far as the material permits us properly to do so. In doing so, we emphasise that we have not embarked upon any determination of any scientific dispute. We were provided with further reports or statements both supporting Dr Black and differing from him, but have not examined them in any detail and have not heard evidence from any of the scientists. Given the plea of guilty, that was unnecessary and inappropriate when dealing with this application for leave. What can, however, be done, and is appropriate, is to identify the extent to which there was, by the time of the trial, any remaining scientific issue, and how far any issue which remained might be affected by the non-disclosure of the FEL criticisms of Dr Black's initial statement.

37. The concerns expressed by the FEL authors of the two principal documents were these.

    i) Conclusion 7.1 was overstated and unjustified because isotopic analysis, being of the atoms of elements (here oxygen and carbon) can tell one the elements but does not identify the compounds in which they are present.

    ii) Conclusion 7.2 (and an earlier statement at 6.2.6 that the scene residues were mixtures of hydrogen peroxide and chapatti flour) were overstated because all wheat flours, including FUDCO chapatti flour, had broadly similar isotopic values for carbon and the isotopic readings were not specific to chapatti flour.

    iii) A statement at 6.1.10 that oxygen isotopic readings in the scene residues indicated that additional components "rich in oxygen (e.g. hydrogen

peroxide)" had been added to the flour was overstated because other additions could have supplied the oxygen – including water.

iv) Paragraph 6.2.7 stated

> "The difference in the oxygen isotope ratios between the starting flour and the scene residues is related to the proportion of hydrogen peroxide added to the material during the preparation of the mixture. This can be quantified through use of a weighed isotope mixing curve …figure A7.2… This shows the proportions of unevaporated hydrogen peroxide in the mixture is between 82-87%, however note results in section 6.4 (evidence of evaporation of hydrogen peroxide)."

Firstly, this was said to contain the assumption without proof, also reported at 7.1, as to what the two components in the mixture were (for which see (i) above). Secondly, the quantification was said to be wrongly derived from the mixing curve, which showed, it was said, inadvertent transposition of the flour and peroxide percentages.

v) Paragraph 6.4.1 stated:

> "The carbon and oxygen isotope data from….the scene residues shows that the hydrogen peroxide was concentrated in order to make the samples. The isotopic composition of the samples can only be achieved by concentrating the hydrogen peroxide…"

Readings from Dr Black's own experimental cooking of peroxide were then given in 6.4.2, from which a peroxide concentration in the samples of approximately 54-72% was deduced. Firstly, this was said to be unsupported by evidence of concentration in the scene residues, which might have achieved their isotopic profiles by other means, including the mixing of water with the flour. Secondly, there was said to be an inconsistency between the second sentence and 6.2.7 above. Thirdly, there was said to have been no consideration given to the possible decomposition of the peroxide during cooking, which could alter the isotopic ratios ("fractionation"). Generally, it was said that isotopic ratio measurements do not show conclusive evidence of the concentration of the peroxide.

vi) Paragraph 6.5.2 recorded that the scene residues recovered shared the same isotopic profiles, save that those which were moist when recovered differed slightly (but not enough to suggest different origins) as a result of fractionation. This conclusion was said to be "incongruous", it seems because dry and moist samples could not both contain 68-74% peroxide.

Point (i): conclusion 7.1

38. It is easy to see the force of this criticism, which is in fact apparent from the description of isotopic study provided by Dr Black himself in the same report at

Appendix A1 and A1.1. Some elements, including carbon and oxygen, have a mixture of atoms, most of them with the usual number of neutrons and a few with a slightly larger number, giving a raised atomic weight. Isotopic analysis involves measuring the ratio of the heavier atoms to the normal ones. Thus it seems clearly correct that by itself this process detects the characteristics of this particular manifestation of the element concerned, in whatever compound it is contained, but it does not follow without more that this necessarily identifies the compound. Whether if there were sufficient control samples of different compounds this would or would not be possible is not discussed in the materials we have seen. Conclusion 7.1, insofar as it gave the impression that isotopic analysis by itself had identified, or could identify, the compounds as flour and peroxide, was at least potentially misleading. At first sight, and without hearing scientific evidence, we provisionally conclude that it ought not to have been written in that form. Nor was this paragraph amended in Dr Black's Amendment Report.

39. 7.1, however, is only the summary conclusion. The rest of the report shows the full position. At 6.1.1 it shows that flour was identified not by isotope analysis but by X ray diffraction. At 6.1.4 it shows that X ray diffraction also detected the presence of sodium stannate, which is used as a stabiliser in one of the two brands of hydrogen peroxide bought by Asiedu and of which empty bottles were found at Curtis House.

40. More importantly, however, there was at the trial no issue at all about the two components of the devices. They were admitted by those who made them to be flour and hydrogen peroxide. Although Asiedu's defence differed from that of the others when it came to the suggested watering down of the peroxide and the construction of hoax devices, there was no possible reason to doubt the two components. To the extent that there was an overstatement in conclusion 7.1 it was irrelevant to the case. Its only possible materiality might have been if it were thought to bear on the scientific credentials of Dr Black (as distinct from his familiarity with the way to frame reports for forensic purposes). It must have been apparent to any scientist reading his report. The point was not even touched upon in cross-examination.

Point (ii): conclusion 7.2 & para 6.2.6

41. The point made in the FEL documents was that all wheat flours, of which FUDCO chapatti flour was one, were examples of flour made from C3 plants, for which the average ratio for carbon 13 atoms is -27 per mill. That, it was said, called into question the "uniqueness" of FUDCO flour.

42. The average ratio figure of -27 was derived from Dr Black's own report, where it appears at Appendix A3 and was fully explained. He had at no point used any expression such as "uniqueness", which was the critics' word. Rather he had said that his analysis showed that all wheat flours clustered together with broadly similar ratios, but that there were sufficient differences between FUDCO and ordinary wheat flour to differentiate them. It is not obvious what was suspect about that.

43. By way of defence statement in advance of the trial, one or more of the other defendants advanced the positive case that the devices had been made with Sainsbury's flour rather than with FUDCO flour. When Dr Black came to make his amendment statement in December 2006, he also made an addendum statement detailing further work, part of which addressed this assertion. The addendum

statement set out trace element analysis which distinguished clearly between FUDCO flour and Sainsbury's flour. A table at A6.1 clearly showed marked differences between the two in strontium, sodium, calcium, iron and copper and table A6.2 and slide 32 supported the stated conclusion (at 6.2.1) that trace element and isotopic analysis both showed that the two flours were "different to a degree well outside analytical uncertainty". Meanwhile, the amendment statement, which said that it was devoted to correcting errors, drew attention to the original conclusion 7.2 and corrected it to:

> "7.2 Isotopic **and trace element** analysis of all the scene residues and commercially available flour types shows the flour used in the devices was similar to control sample GL/12 labelled chapatti flour and the control FUDCO chapatti flour GDA 353" (emphasis added)

44. It is very difficult to see how it made any difference to the issue of hoax construction which flour it was. The suggestion made in argument before us was that the type of flour went, first, to Dr Black's scientific credibility as an expert and, second, to the credibility of Asiedu's narrative account that an experimental mix had been made at Curtis House but the main mixing had been done at Dalgarno Gardens. As to the first, the point might go to Dr Black's occasionally casual writing of reports, but if the addendum material was accurate his scientific credibility would scarcely be affected. The second suggestion is far-fetched. True it is that Asiedu gave a circumstantial account of events at Dalgarno Gardens on the morning of the day when the devices were deployed, and true it is that he narrated the mixing of the components. But the identity of the flour variety did not point to either Curtis House or to Dalgarno Gardens. Wherever the mixing was done, it could have been either type of flour.

45. The reality is that it simply did not matter which type of flour it was. Indeed, whilst counsel for Mohammed dutifully put to Dr Black that it might have been Sainsbury's flour, suggesting that the difference between dry and moist scene residue samples might muddy the picture, he shied away from the trace element analysis and understandably made little of the cross examination.

Point (iii): paragraph 6.1.10

46. This point appears to add little. Dr Black's original paragraph 6.1.10 said no more than that the scene residues contained something more than just flour, which was unarguably correct, that the extra something contained a lot of oxygen, which no one doubted, and that it **could** be hydrogen peroxide – "e.g. hydrogen peroxide". In this instance there does not seem to be any overstatement of the conclusion.

Point (iv): paragraph 6.2.7

47. When Dr Black met other scientists including his critics on 13 November 2006, a note was made after the discussion. There is no sign that it was sent to him for approval, and in places it is not easy to be sure to whom comments ought to be attributed. But at least on its face it suggests that Dr Black was asked about the figures of 82-87% for the proportion of unevaporated peroxide in the mix and agreed that the figures for peroxide and flour had been inadvertently transposed. It also suggests that he went away to think about it. The next event was the telephone conversation with counsel

on 22 November, when, apparently without the original FEL documents before them, they asked if any mistake went to the mix proportion, or to the concentration figure for the hydrogen peroxide, or to both. Dr Black told them that the mix proportion might be "slightly different" and that he wanted to run more tests. He also told them that there were "more ingredients" which were better at showing mix and concentration; that was clearly a reference to trace element work. It was left that he would write two further statements, one of correction and one dealing with additional work.

48. The amendment statement, when made a little later, drew attention to paragraph 6.2.7. as a place where a mistake had been made, and removed from it the last sentence containing the figures of 82-87%. It also substituted the word "illustrated" for "quantified". A fresh diagram of the mixing curve referred to was provided. This differed, however, only marginally from the first one. There were some modifications to the labelling. It left out percentage figures which had previously appeared along the curve, and which may or may not have been the source of inadvertent transposition if it had occurred. But the plotted positions were the same, for flour and peroxide samples, and for scene residues, and also for different mixture proportions. What the amendment statement did not, however, say, was that there had been any previous inadvertent transposition of the two components, flour and peroxide. Nor did it say that the error had been drawn to the author's attention, together with other criticisms, by reputable scientists in the field.

49. This correction in the report being apparent, Dr Black was cross-examined about the disappearance of the figures of 82-87% flour as the mix. Perhaps understandably, the questions assumed a connection between these figures and the fact that he had conducted a second set of peroxide cooking/concentration experiments. It is by no means clear that the two had any connection; the concentration experiments no doubt yielded plots on the mixing curve, but any inadvertent transposition/misreading of the end points of that curve seems to have been independent of them. What Dr Black told the court was (i) a second concentration experiment was his own idea because the speed of heating had been very rapid the first time, it seems in part because of the apparatus used, and (ii) the substituted mixing curve in his addendum report used concentrated peroxide at the relevant end rather than unevaporated peroxide as the first (from which he said he had derived these figures) had done. What he did not say was that there had been any transposition of figures. We take the view, at least in the absence of any further explanation, that he ought to have done. It does not, however, follow that Mr Kamlish's characterisation of this evidence as perjured is justified. Rather, it would appear to be a failure to appreciate the extent of an expert witness' duty to the court. Given the likely suggestion that the chemical qualities and isotopic characteristics of the peroxide might be altered in the course of cooking ("fractionation"), it is understandable enough why the experiment was repeated at a much slower speed. The speed of cooking and possible effect on composition had been discussed at the meeting of 13 November; once again we make the assumption in the applicant's favour that Dr Black can properly be criticised for not referring to this in his addendum report, and any failure is similarly of the expert's duty of frankness. Fractionation was very fully explored before and at trial. It was addressed by Professor Michels for the defence and was the principal point of challenge to Dr Black's evidence. Thus the failure to disclose the initial references to it in the FEL documents does not appear to have occasioned damage to any defendant on this point

(and see point (v) below). The evidence that the first mixing curve had relied on unevaporated peroxide as one terminus seems consistent with what paragraph 6.2.7 said, although why it was ever thought that unevaporated material was the best marker point is less than clear.

50. Whatever may be the correct analysis of paragraph 6.2.7, the mixing curves and any inadvertent transposition, the 82-87% figures went to the mix of ingredients not to the level of concentration of peroxide, which was the only significant live issue in the trial to which Dr Black's evidence was relevant. These figures were removed by him from his report well before the trial and attention was drawn to their removal. The mix was not significantly in doubt at the trial, for those who made the devices made a positive case that it was peroxide to flour at 2:1. Dr Black's evidence on this point was in no sense critical to the Crown case.

Point (v): concentration of hydrogen peroxide

51. The concentration of peroxide, as mixed with the flour, was an issue central to the hoax defence of the defendants other than Asiedu. The issue was not, however, whether the peroxide had been cooked to 70%. That was clearly established by documents and bottle labels left behind at Curtis House, and was expressly common ground at the trial. The issue was whether there had *subsequently* been a re-dilution by adding to the concentrated peroxide the same volume of tap water, thus reducing the concentration from 70% to 35%, or thereabouts. The case of the other defendants, given in evidence by Ibrahim, was that only 12 of the bottles of 70% concentrate had been used, leaving lots more of it unused and thrown away after the event. Dr Black's evidence went to this contention directly and in two ways. First his original and addendum reports derived a concentration in the devices of about 54-72%, from isotopic and to an extent from trace element work. Secondly, when the re-dilution assertion was raised, late, in the course of the trial, it was he who was asked to consider it. His evidence was that the trace element and isotopic evidence was not consistent with such re-dilution with London tap water, for which he had used published chemical data. The scale of the difference between what was found and what would have been involved if tap water had been used as alleged by the defendants was very large.

52. The matters raised by the FEL documents (point (v) above) necessarily went to the first of these two areas of evidence, since re-dilution had not then been raised by the defendants. Moreover, they, or the other points discussed above, might be relevant to Dr Black's scientific standing and thus to the reliability of his later conclusions about re-dilution. However, his conclusions that re-dilution had not occurred appear to have been fully supported by the trace element analysis, never mind any isotopic analysis. Chiefly, this established that tin, which originated from one of the two brands of peroxide bought by the defendants, was present in the final mixtures in quantities which were consistent with the total peroxide bought and used and **not** consistent with re-dilution and the throwing away of much of the concentrate. Nor (although this was not the defence case) could all the re-diluted concentrate have been used, because there would then be too much volume for the devices. On the face of it this evidence, combined as it was with the absurdity of first taking a great deal of trouble to concentrate the peroxide only to re-dilute it, with the compellingly late appearance of any suggestion of re-dilution, and with the considerable body of other evidence that

what was intended were real bombs, fully supported Asiedu's contention at the trial that the hoax assertion was false.

53. In any event, the re-dilution and hoax assertions formed no part of Asiedu's case either at trial or when he pleaded guilty at his re-trial. He positively disclaimed them at trial. When he pleaded guilty, it was his own intention that he was admitting, not anyone else's.

Point (vi): paragraph 6.5.2

54. This appears to add nothing of significance. So far as can be seen, there was nothing suspect about the observation that the moist and dry residue scene samples both pointed to a peroxide concentration in the region of 54-72% and that the differences between them were not significant. In due course Dr Black's evidence in answer to cross examination was that his conclusions were based on comparing like with like, viz dry with dry. Fractionation **was** an issue and has been considered above. In any event, the question was not whether 54-72% was less than perfectly accurate, but whether it was double the true concentration, and that depended on whether re-dilution was a live possibility or not (see above).

Conclusions relating to the scientific evidence

55. We have not, as explained, embarked on any re-hearing of the scientific evidence. But nevertheless, for the reasons given, and making the assumptions in favour of Asiedu which can properly be made, we reach the following conclusions. Whilst there may well be criticisms which can properly be made of Dr Black in the presentation of a report for forensic purposes, and in the giving of expert evidence, the matters raised in the FEL documents do not appear to undermine his conclusions on the topics on which there was an issue at the trial. In any event, the failure of disclosure had no impact on Asiedu's case, nor can it have affected the voluntary nature of his confession by way of plea of guilty.

Disposal of application

56. It follows that this application for leave to appeal must be refused.