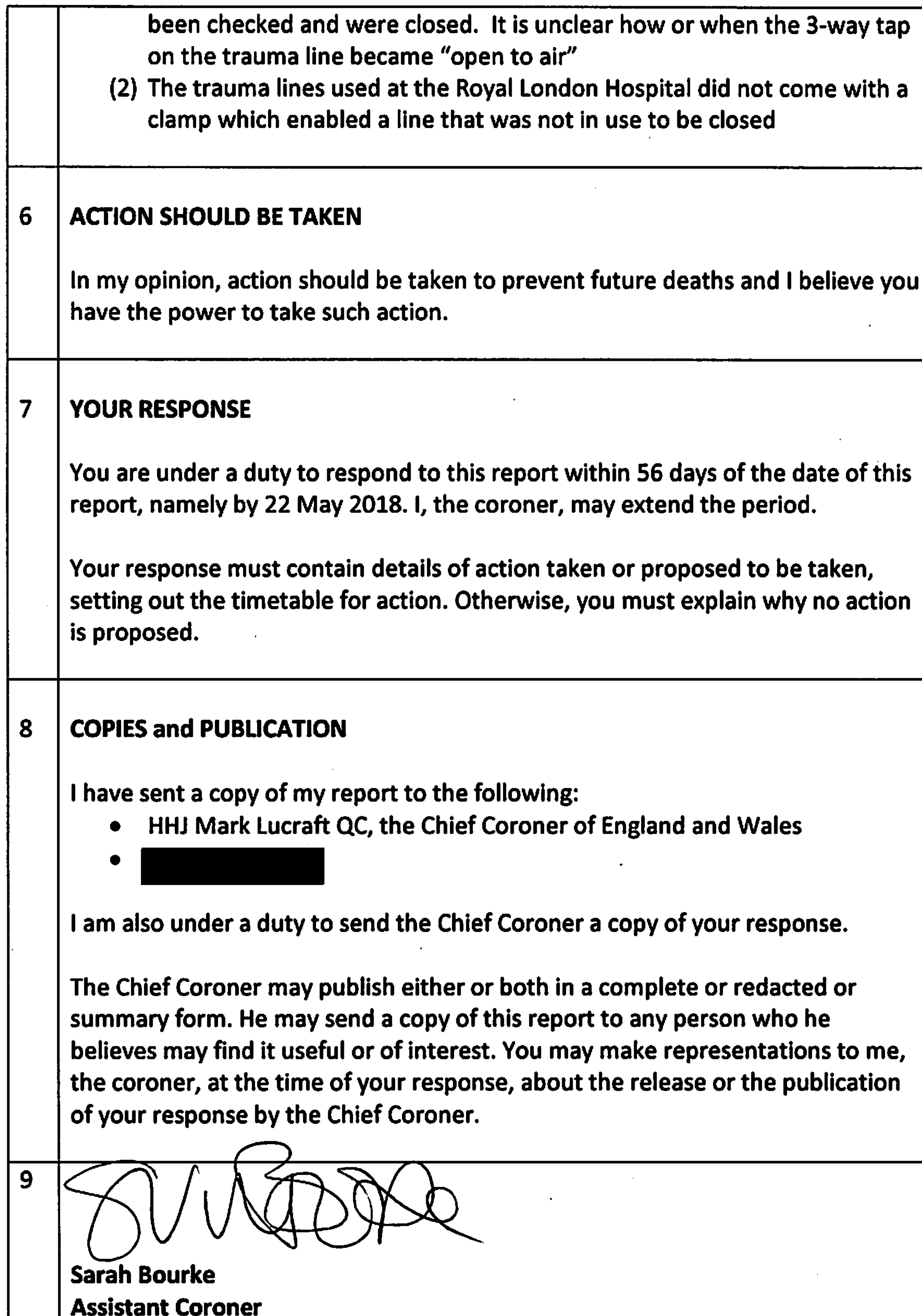
Coroner ME Hassell
HM Senior Coroner
Inner North London

REGULATION 28: REPORT TO PREVENT FUTURE DEATHS

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** Sharon Drake Director of Clinical Quality and Research Royal College of Anaesthetists Churchill House 35 Red Lion Square London WC1R 4SG Simon Harrod Medical Director Barts Health NHS Trust The Royal London Hospital 80 Newark Street London E1 2ES
1	**CORONER** I am: Assistant Coroner Sarah Bourke Inner North London Poplar Coroner's Court 127 Poplar High Street London E14 0AE
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.

3	**INVESTIGATION and INQUEST** On 6 November 2017, Coroner Hassell commenced an investigation into the death of Mike Fell who was born on 24 July 1952. The investigation concluded at the end of the inquest, which was conducted by me on 5 March 2018. The conclusion of the inquest was a narrative conclusion. I recorded a medical cause of death of: 1a Intracerebral haemorrhage 1b Cerebral air embolism 1c Elective abdominal aortic aneurysm repair performed on 26 October 2017
4	**CIRCUMSTANCES OF THE DEATH** Mr Fell had an elective abdominal aortic aneurysm repair by way of an open surgical procedure at the Royal London Hospital on 26 October 2017. He was slightly acidotic following surgery. He was transferred to the Adult Critical Care Unit whilst sedated and ventilated with a trauma line in place. The trauma line had a 3-way tap connected. Within an hour of arriving in the ACCU, the IV fluid line was removed from the trauma line and the connector was capped with a white bung. It was noted that there was no clamp on the trauma line. Mr Fell went into cardiac arrest about 3 hours after surgery. Immediately prior to cardiac arrest, there was a rapid fall in his end-tidal carbon dioxide levels. During CPR, it was noted that the 3-way tap on the trauma line was "open to air" and it was sealed. It is unclear how or when the tap became "open to air". Mr Fell's heart started beating after 20 minutes of resuscitation but he remained very unstable. It was noted that he had a fixed, dilated right pupil. An emergency CT scan showed a large intracerebral bleed and air in his brain, liver and kidneys. Neurosurgeons advised that Mr Fell's brain injury was unsurvivable. Mr Fell died at the hospital in the early hours of 27 October 2017. The evidence before me was that the air embolism was most likely to be the result of the 3-way tap on the trauma line being "open to air". The Royal London Hospital is in the process of revising its procedures regarding the use of trauma lines outside of operating theatres in light of the issues raised by Mr Fell's death.
5	**CORONER'S CONCERNS** During the course of the inquest, the evidence revealed matters giving rise to concern. In my opinion, there is a risk that future deaths could occur unless action is taken. In the circumstances, it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows. – (1) Whilst it is a matter of routine care to check that unused taps are "closed to air", it is not recorded in Mr Fell's notes that the taps had

	been checked and were closed. It is unclear how or when the 3-way tap on the trauma line became "open to air" (2) The trauma lines used at the Royal London Hospital did not come with a clamp which enabled a line that was not in use to be closed
6	**ACTION SHOULD BE TAKEN** In my opinion, action should be taken to prevent future deaths and I believe you have the power to take such action.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 22 May 2018. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise, you must explain why no action is proposed.
8	**COPIES and PUBLICATION** I have sent a copy of my report to the following: • HHJ Mark Lucraft QC, the Chief Coroner of England and Wales • [redacted] I am also under a duty to send the Chief Coroner a copy of your response. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	 **Sarah Bourke** **Assistant Coroner**