

**FOOD CONTAMINATION AND FORENSIC EVIDENCE IN MANUFACTURING DISPUTES:
CCS FOOD & BEVERAGE MANUFACTURING SDN BHD V HOT-CAN SDN BHD (2018)
MLJU 1166**

^{i,*} Muhammad Irfan Asyraf Ahmad

ⁱFaculty of Syariah and Law, Universiti Sains Islam Malaysia (USIM), 71800, Nilai, Negeri Sembilan, Malaysia

*(Corresponding author) e-mail: asyrafirfan305@gmail.com

Article history:

Submission date: 1 September 2022
Received in revised form: 30 October 2022
Acceptance date: 7 November 2022
Available online: 10 December 2022

Keywords:

Food contamination, forensic evidence, halal forensics, al-bayyinah, Evidence Act 1950

Funding:

This research did not receive any specific grant from funding agencies in the public, commercial, or non-profit sectors.

Competing interest:

The author(s) have declared that no competing interests exist.

Cite as:

Ahmad, M. I. A. (2022). Food contamination and forensic evidence in manufacturing disputes: CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd (2018) MLJU 1166. *INSLA E-Proceedings*, 5(1), 42-47.



© The authors (2022). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact penerbit@usim.edu.my.

ABSTRACT

The commercial conflict in the case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd [2018] MLJU 1166 presents a complex chain of issues in the food industry, ranging from allegations of product contamination, payment arrears, to document manipulation. Focusing on this case, this paper demonstrates the extent to which forensic evidence can unravel the liability of the disputing parties, while also examining the extent to which Islamic legal principles apply in such conflicts. Through a qualitative approach based on doctrinal analysis, an in-depth look is made at the judgment text, related statutes, and academic literature. The study findings show that the court placed significant emphasis on documentary evidence, physical evidence, and expert testimony in determining the true cause of food contamination and the authenticity of the disputed documents. As a result, the defendant's counterclaim was dismissed when it failed to pass the standard of proof (balance of probabilities) to link the plaintiff's negligence to the contamination. In addition, the forensic document expert analysis successfully proved that certain documents had been manipulated through the cut and paste technique, thus affecting the defendant's credibility. From an Islamic legal perspective, the court's decision was found to be in line with the principle of al-bayyinah which places the burden of proof on the party making the allegation, in line with Section 101 of the Evidence Act 1950. This study concludes that the integration between forensic science, civil law and Shariah principles is important to ensure fairness, transparency and integrity in the resolution of disputes related to the food industry, especially in the field of halal forensics.

Introduction

Food safety has become a major global concern due to the increasing incidence of foodborne diseases associated with contaminated food products. According to the World Health Organization (2026), more than 200 disease can be caused by unsafe food that being contaminated with harmful bacteria, viruses, parasites or chemical substances and poses a vital threat to public health worldwide.

Beside health implications, food contamination also can result in substantial economic losses, product recalls, reputational damage and legal disputes between manufacturers and business partners. Preserving product quality and safety is a fundamental responsibility of manufacturers in the food manufacturing industry. However, contamination may happen at various stages of the production process involving raw material handling, processing, packaging, storage and distribution or shipping. Determining the source and cause of contamination becomes crucial in establishing liability and protecting consumer trusts when contamination incidents arise. In such events, forensic science plays a significant role by providing scientific and objective evidence through laboratory analyses, expert witnesses and investigative procedures. According to Aitimus et al. (2024), food forensic tools and experienced personnel are critical to determine the root cause of both product failures and food tampering.

The application of forensic evidence is particularly important in manufacturing disagreements where parties may contest the source of contamination and the extent of responsibility. Through forensic investigations, the scientific findings can assist courts in evaluating evidence and reaching fair decisions based on factual and technical information. Consequently, the resolution of disputes involving contaminated food products is increasingly being supported by the integration of forensic science into food safety investigations.

This case review examines the case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd [2018] MLJU 1166, with particular emphasis on issues relating to food contamination, burden of proof and the role of forensic evidence in manufacturing disputes. The analysis aims to demonstrate how scientific evidence can assist the court in determining liability and ensuring accountability within the food manufacturing industry.

Facts of the Case

The case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd [2018] MLJU 1166 arose from a commercial dispute involving unpaid manufacturing services and allegations of product contamination. The plaintiff which is CCS Food & Beverage Manufacturing Sdn Bhd was a company providing canning services while the defendant, Hot-Can Sdn Bhd was a beverage manufacturer known for its specially designed self-heating beverage cans.

In 2008, the defendant engaged the plaintiff to provide canning services for several beverage products, including tea, coffee, milk chocolate and mocha drinks. Under the arrangement, the defendant supplied the specialized dual-chamber cans and beverage premixes while the plaintiff was responsible for filling the inner chamber of the cans with the beverage premix and sealing the top end. After the filling process was completed, the cans were returned to the defendant who will filled the outer chamber with a heating chemical and sealed the bottom end of the cans. Specific filling protocols and procedures provided by the defendant were required to be followed by the palintiff throughout the manufacturing process.

The disagreement began when the plaintiff claimed that the defendant had failed to pay several invoices for canning services rendered between 2013 and 2016. Consequently, the plaintiff initiated legal proceedings to recover the outstanding amount of RM312,478.60 together with late payment interest amounting to RM194,932.08. An outstanding amount of RM104,712.56 owed to the plaintiff was formally acknowledged by the defendant before the legal proceedings officially began.

In response, the defendant filed a substantial counterclaim amounting to RM1,205,368.18. The defendant alleged that the plaintiff had failed to comply with the specified filling protocols during the production of Milk Chocolate and Mocha drinks. According to the defendant, approximately 12,000 cans of the affected products were allegedly rendered unsellable, causing huge financial losses due to contamination by

Bacillus stearothermophilus, a thermophilic bacterium that caused the beverages to develop a “flat sour” taste.

The defendant further argued that it was entitled to recover these losses from the plaintiff through a back charge mechanism based on two documents known as the *Credit Claims Policy* and the *Chargeback Agreement*. These documents hypothetically authorized the defendant to charge the plaintiff for losses arising from manufacturing defects or contamination incidents but the plaintiff challenged that the authenticity of these documents and alleged that the signatures appearing on them had been forged. To support its accusation, the plaintiff called a forensic document examiner who testified that the signatures on the disputed documents had been digitally copied and pasted from an earlier proforma invoice using computer software. The expert’s analysis revealed that the signatures were identical in every aspect and had possibly been manipulated using Adobe Photoshop.

After evaluating all evidence, the High Court ruled that the defendant failed to prove the plaintiff’s manufacturing process caused the contamination. Instead, the court agreed with the plaintiff that the spoilage could have resulted from other factors such as defective cans, micro-leakage, issue with the beverage premix or faults during the defendant sealing process. Furthermore, based on expert forensic testimony, the court believed the Credit Claims Policy and Chargeback Agreement unreliable. The defendant’s credibility was severely damaged by its failure to produce the original copies of these documents. Thus, the plaintiff’s claim for unpaid invoices was granted excluding the unproven late payment interest. The defendant’s counterclaim was rejected entirely and the court ordered the defendant to pay legal costs of RM30,000 for the main claim and RM15,000 for the dismissed counterclaim.

Means of Evidence

In resolving disputes within the manufacturing companies or industry particularly those involving food contamination claims, the court constantly relies on three main forms of evidence which is documentary, physical and expert evidence. The importance of these three elements is clearly demonstrated in the case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd where the court evaluated each part of evidence to decide the parties liability based on the civil standard of proof specifically the balance of probabilities.

Documentary Evidence

One of the most important forms of evidence in commercial lawsuit is documentary evidence as it serves as an official record to prove the presence of a transaction, agreement or claim. In this case, the plaintiff’s main claim toward outstanding payments was supported by several debit notes or invoices (**Exhibit P11, P12 & P13**) issued between 2013 and 2016 amounting RM312,478.60. The court found that the documents are plausible as their validity was not significantly challenged by the defendant.

On the other hand, the defendant’s counterclaim depended mostly on two major documents which is Hot-Can Sdn Bhd Credit Claims Policy (**Exhibit P18**) and a letter entitled Chargeback Agreement for Supplier (**Exhibit P20**). These two documents gave the defendant the right to charge back the plaintiff for losses suffered due to product contamination. However, a significant issue arose when the defendant failed to display the original physical versions of both documents and only stated that the documents were stored in digital form. Due to this failure and coupled with the alleged forgery of signatures, the defendant’s credibility was seriously undermined.

In addition, to prove that the plaintiff failed to comply with the prescribed production procedures, the defendant also submitted a laboratory report. However, the court held that the report was prepared for audit and quality manufacturing purposes and was not meant to determine the actual cause of the product contamination.

Physical Evidence

Physical evidence typically involves examination of the product, packaging and raw material used. In this case, the defendant’s specially designed dual-chamber beverage cans were the focus of the technical arguments in court. The plaintiff argued that the contamination happened due to the quality of the cans supplied by a third party rather than from the filling process carried out by the plaintiff.

According to the evidence presented, the existence of micro-leaks in low-quality cans could have potentially allowed bacteria to enter the product and later cause damage and swelling of the can. In addition, seaming defects during the closing process of the bottom of the can by the defendant were also presented as one of the possible sources of contamination.

Beside of that, the beverage premix supplied by the defendant was also the subject of physical examination. The evidence was presented suggest that the *thermophilic bacterium Bacillus stearothermophilus* may have been present in the new chocolate premix supplied by the defendant's appointed supplier. Therefore, the court found that there were multiples possibilities that could have caused the contamination other than the plaintiff's negligence during the filling process.

Expert Witnesses

Expert testimony plays a very important role in heling the court to understand scientific and technical issues that are beyond the ordinary knowledge of a judge. In this case, two main forms of expertise were provided which expecially expertise in the field of forensic document examination and scientific expertise related to food microbiology.

For the aspect of forensic document examination, Mr. William Pang Chan Kok (PW7), an expert in the field of handwriting and signature identification with 19 years of experience were called by the plaintiff. By using the "layer" function in Adobe Photoshop software and a transparent sheet (**Exhibit P21**), PW7 was able to show that the signature on the disputed document was completely identical to the signature on a previous proforma invoice. Based on the analysis, he concluded that the signature had been manipulated using the "cut and paste" technique in computer software. The court accepted this expert testimony and ruled that the document not trustworthy.

Beside of that, the plaintiff also called Lim Sze Wei (PW1), the Research and Development (R&D) Manager of the plaintiff company who has a background in biotechnology. He provided scientific evidence on the ecology of microbes in the canning process and also explained how defects in the sealing process or the quality of the premix could have caused bacterial growth. His evidence raised a number of plausible possibilities as to the source of the contamination which the defendant failed to disprove.

Halal Forensic and Shariah Analysis

Application of the Principle of Burden of Proof (Al-Bayyinah) in Islamic Jurisprudence and the Evidence Act 1950

According to Wahbah al-Zuhayli (1985), the principle of the burden of proof in the Islamic legal system stipulates that in a disagreement in court, the party claiming or accuses (*al-mudai'ī*) is responsible for presenting evidence (*al-bayyinah*), while the accused (*al-mudda'ā 'alaihi*) is given the right to defend himself by oath if no evidence is presented. This approach aims to ensure justice in the judicial process and prevent any abuse of claims without a solid basis as well as fulfill the objectives of the Sharia (*Maqasid al-Shariah*) mainly preserving religion, life, mind, property and lineage (Mustapa et al., 2025).

This principle is in line with a hadith of the Prophet Muhammad (PBUH) as follows :

Meaning: Evidence against the person who claims, an oath against the person who denies the accusation against him. (Riwayat Al-Baihaqi)

This matter is further explained by al-Shawkani (1993), who emphasizes that the principle of the burden of proof in the Islamic judicial system obliges the party making the claim to present evidence, while the party denying the claim is given the right to swear as a form of self-defense.

Determining *al-muddai'ī* and *al-mudda'ā 'alaihi* is not an easy matter because the difference between the two is sometimes very subtle, hidden and not very clear when viewed at a glance. This is due to the fact that not all parties who initiate court action (plaintiffs) are automatically the *al-muddai'ī* party and the other party (defendant) is the *al-mudda'ā 'alaihi* party. Therefore, it is very important for the judge to determine the party responsible for presenting evidence in a dispute accurately. This can be done by

clearly identifying plaintiff and defendant on an issue or fact of question, so that the burden of proof is placed on the appropriate party.

This principle of al-Bayyinah is in line with the law practiced in Malaysia which is the Evidence Act 1950. Section 101 of the Evidence Act 1950 states that whoever intends for any court to give judgement on any right or liability at law, relying on the existence of a fact asserted by him, must prove that the fact exists. In addition, the same Section also states that when a person is bound to prove the existence of any fact, it is said that the burden of proof lies on that person. In this case, the defendant is the party who claims that the contamination is caused by the plaintiff's negligence. Therefore, according to Islamic principles and the Evidence Act 1950, the defendant failed to display sufficient scientific evidence to prove that the contamination was caused by the plaintiff's manufacturing process. As a result, the court's decision is in line with the principle of al-bayyinah which requires the party making the claim to provide authentic evidence before a claim is accepted.

Ethical Issues and Forgery from Islamic Perspective

According to Wan Ismail et al. (2021), document forgery is a major challenge in the use of documents as evidence in court as it can undermine the integrity of the legal system and cause injustice. In the case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd, the issue is the defendant failed to prove the authenticity of the documents submitted to support his counterclaim.

In the Islamic perspective, forgery is known as 'al-tawzir' which is the act of distorting the truth through false words or actions. The prohibition against this act is stated in Surah al-Hajj verse 30, Allah SWT said : "So avoid the impurity caused by idolatry and avoid false trade speech". This verse shows that forgery and lying are acts that are prohibited (haram) in Islam (Ibn Kathir, 2003). Beside that, according to al-Tabari, 'tawzir' is the act of changing something so that it appears true in order to hide the true reality. In addition, according to Al-Mausuah al-Fiqhiyyah, defines 'tawzir' as the act of obscuring the truth through words or actions such as forging a signature (Aniq Aiman, 2023).

In case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd [2018] MLJU 1166, the court accepted the testimony of a forensic expert who found that the signatures on the 'Credit Claims Policy' and 'Chargeback Agreement' documents had been manipulated using the cut and past technique. As a result, the documents did not have reliable evidentiary value and this act is contrary to the principles of trust (*amanah*), honesty (*sidq*) and integrity demanded in Islam.

Document forgery is also a form of fraud when done to deceive another party or obtain illegal benefits. Abdul Hadi and Paino (2016), stated that forgery includes the act of destroying, modifying or falsifying original documents with the intention of deceiving. Therefore, forging signatures, modifying the content of documents and presenting false evidence are prohibited in civil law and Islamic law.

Overall, the case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd shows that the authenticity of documents is very important in ensuring that justice can be upheld. From Islamic perspective, document forgery not only affects the evidentiary process, but also contradicts the principles of Sharia because it involves elements of fraud and betrayal of trust.

Conclusion

In conclusion, the case of CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd [2018] MLJU 1166 demonstrates the importance of forensic evidence in resolving disputes relating to food contamination in the manufacturing industry. This case demonstrates that an allegation cannot be based on mere assumptions, but rather needs to be supported by solid, authentic and scientifically based evidence. In this case, the court ruled that the defendant failed to prove that the contamination occurred as a result of the manufacturing process carried out by the plaintiff based on the balance of probabilities standard of proof.

In addition, the important role of various forms of evidence such as documentary evidence, physical evidence and expert evidence was also highlighted in this case to help the court identify the true cause of the contamination and determine the authenticity of the disputed documents. The court's acceptance of forensic document expert analysis also demonstrates that the integrity and authenticity of documents is a

very important aspect in commercial matters and the legal process. From an Islamic legal perspective, the court's decision in this case is in line with the principle of al-bayyinah which stipulates that evidence must be presented by the party making the claim to support its claim. This principle is also in line with the provisions of Section 101 of the Evidence Act 1950 which stipulates that the burden of proof is placed on the party asserting a fact.

Therefore, it can be shown through this case that the combination of forensic science, civil law and Islamic legal principles plays an important role in upholding justice, protecting the rights of contracting parties and ensuring integrity in the food manufacturing industry. This integrated approach is very relevant in the field of halal forensics to ensure that every decision is made based on authentic, accurate and integrity evidence.

References

- Aimutis, W., Mortenson, M., & Dong, J. (2024). *Food forensic investigation*. Springer. https://doi.org/10.1007/978-3-031-50643-7_35
- Al-Shawkānī, M. A. M. (1993). *Nayl al-awṭār fī sharḥ muntaqā al-akḥbār*. Dār al-Ḥadīth.
- Al-Zuhaylī, W. (1985). *Al-fiqh al-islāmī wa adillatuh*. Dār al-Fikr.
- CCS Food & Beverage Manufacturing Sdn Bhd v Hot-Can Sdn Bhd [2018] MLJU 1166.
- Ibn Kathīr, I. O. (2003). *Tafsīr Ibnu Katsir* (Jil. 1). Sinar Baru Algensindo.
- Malaysia. (1950). *Akta Keterangan 1950* (Akta 56).
- Mohamad Aniq Aiman, M. A. (2023). Pemalsuan dokumen dan kedudukannya dalam perundangan Syariah di Malaysia: Document falsification and its position in Shariah law in Malaysia. *Journal of Management and Muamalah*, 13(1), 31–43. <https://doi.org/10.53840/jmm.v13i1.142>
- Mustapa, I., Towpek, H., Saidon, R., & Latif, M. (2025). Penentuan beban pembuktian dalam penghakiman kes fasakh: Aplikasi mengikut undang-undang Islam. *Journal of Shariah Law Research*, 10(1), 63–88. <https://doi.org/10.22452/jslr.vol10no1.4>
- Wan Ismail, W. A. F., Baharuddin, A. S., Mutalib, L. A., & Alias, M. A. A. (2021). A systematic analysis on the admissibility of digital documents as evidence in Malaysian Syariah Courts. *Pertanika Journal of Social Sciences and Humanities*, 29(3), 1981–1996. <https://doi.org/10.47836/pjssh.29.3.26>
- World Health Organization. (2026). *Food safety*. <https://www.who.int/news-room/fact-sheets/detail/food-safety>