



GM Rice Contamination – Bt63 from China EU Issues Emergency Measures from 15 April 2008

Briefing for UK Businesses – 10 March 2008

This briefing has been prepared by Friends of the Earth and GM Freeze in response to the news that the EU has issued an Emergency Measure¹, which must be implemented by EU member states to prevent further illegal imports of GM rice Bt63 from China. Rice products containing unauthorised Bt63 have been detected in a number of countries in Europe, including the UK. The Emergency Decision will come into force from 15 April 2008. In the UK, the Food Standards Agency (FSA) is leading on the response to this incident.

If need be we will issue follow-up briefings as the Bt63 contamination incident develops. This will not be necessary if controls imposed by the EU prove to be effective from the outset.

1. What is Bt63 Rice?

Bt63 rice is GM variety modified to resist particular insect pests. The GM genes produce a protein throughout the plant that is toxic to the larvae of moth species. It has been developed in China using state funding and has been cultivated in experimental trials there. Bt63 rice is not approved for commercial production anywhere in the world. At present the GM insecticide in Bt63 is not contained in any GM crop licensed for import into the EU.

2. Are there any health risks?

The GM protein in Bt63 rice has not been fully identified. It either contains Cry1Ac or a fusion of Cry1Ab/Cry1Ac. The genes inserted into the rice come from a soil bacterium. The Cry1Ac protein has produced allergic-like reactions in mice. Concerns have been expressed about its presence in the food chain, particularly as rice is often consumed unprocessed and in large quantities.

There is an urgent need for an independent assessment of the potential allergenicity of Bt63 rice. However, at the FSA's scoping meeting on Bt63 rice², an official confirmed that the European Food safety Authority (EFSA) would not be carrying out a food safety risk assessment because there was inadequate data available on Bt63 on which to base such an assessment.

The reason for the delay in implementing the Emergency Decision (by 15 April) is unclear. Given this lack of safety data, Friends of the Earth and GM Freeze are calling on the EU and FSA to adopt a precautionary approach and seek to remove all contaminated rice and rice products from the EU food chain as quickly as possible.

¹<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/219&format=HTML&aged=0&language=EN>

² FSA scoping meeting on Bt63 rice held on 22 February 2008

3. What is the origin of the contamination and who is responsible?

Bt63 rice was developed at the Huazhong Agricultural University in Wuhan in the south central Chinese province of Hubei, where it was grown in large-scale field trials. Greenpeace researchers have tracked down the source of the contamination to this university. A company owned by the University (the New Technology Company of Huarzhong Agriculture University) advertised two GM rice samples.

Bt63 contamination was first found in China by Greenpeace from August 2005, including in unpackaged rice at a Carrefour store and at a seeds market in Wuhan. Contamination of wholesale rice was also found in Guangzhou close to Hong Kong. In March 2006 contaminated Heinz baby food cereals were found in Beijing (1500 miles north of the source of the contamination), Guangzhou and Hong Kong. It appears that the contamination is widespread in China³.

4. Have any contaminated foods been detected in the UK and Europe?

Yes. Friends of the Earth and Greenpeace had a number of Chinese rice products tested by an independent laboratory in 2006. Foods contaminated with Bt63 were detected in September 2006 in the UK, France, and Germany. The contaminated products were processed rice-based foods such as rice sticks and vermicelli (rice based pasta).

Despite efforts by the Chinese government to destroy contaminated crops and prevent the sale of contaminated seeds, further Bt63 contamination was found imported Chinese noodles and Sweden and Germany in November 2007. It was this discovery that prompted the EU to introduce the Emergency Measure in February 2008.

5. What is an Emergency Measure in the EU?

If food and feed supplied within the EU does not meet the legal EU safety and legal requirements, the EU can introduce Emergency Measures under Article 53 of the General Food Law – EC Regulation 178/2002⁴.

The Emergency Measure on Bt63 rice seeks to prevent further contaminated rice products being imported into the EU (in the UK this will be enforced by import controls at ports of entry). They also require member states to take action to verify the absence of contaminated products already on the market (such as through testing of products on sale).

In the case of Bt63 rice the Emergency Decision was agreed on 12 February 2008, although it will not enter into force until 15 April 2008. The reason for delaying the implementation of the Emergency Decision is not clear. At the scoping meeting the FSA stated that it was to allow member states time to prepare. On previous occasions when GM contamination was detected (eg Bt10 maize in 2005 and LL601 rice in 2006) Emergency Decisions under Regulation 178/2002 were implemented immediately. Given this, concerns expressed about the allergenicity of the GM protein, the lack of any safety data for Bt63 rice and the fact that certain section of the UK population could be disproportionately exposed to Bt63 by virtue of their diet, the decision to delay is very surprising.

6. Who is responsible for implementing the Emergency measure in the UK?

The FSA is the competent authority for enforcing the General Food Law in the UK and the implementation of the Emergency Decisions taken under Article 35 of the EC Regulation 178/2002. They are also responsible for ensuring that the results of any positive tests are reported to the European Commission.

³ Full briefing can be found at www.greenpeace.org/china/en/news/contaminated-chinese-rice-four

⁴ See http://ec.europa.eu/food/food/foodlaw/traceability/index_en.htm

Local authorities (Trading Standards and Environmental Health Departments) have duties for enforcement and monitoring at local level. However, they take their lead from the FSA. The FSA is due to publish advice to local authorities in due course.

It is our view that because the Emergency Measure requires action regarding rice products already on the market, local authorities should ensure that testing of potentially affected products is carried out in their areas. The most effective way to ensure this happens is for the FSA to issue a food alert, along with guidance on a testing protocol.

However, limited local authority staff time and budgets can hamper the activity undertaken to enforce of Emergency Decisions at local level, as well as general monitoring and enforcement.

7. What products are at risk of contamination?

At present it is believed that only rice and processed rice products imported from China are at risk of contamination from Bt63.

Imports data from HM Customs and Excise for 2007 show the following rice imports direct into the UK from China in descending order by weight:

Rice based pastas	968.371 tonnes
Milled and semi milled long grain rice	26.629 tonnes
Pre-cooked rice	23.882 tonnes
Husked brown long grain rice	22.100 tonnes
Milled and semi milled round grain rice	20.000 tonnes
Prepared foods containing rice	7.223 tonnes
Milled and semi milled medium gain rice	1.319 tonnes
Milled and semi milled log grain rice	0.816 tonnes

In addition the UK imported 60.162 tonnes of rice peptones from China in 2007.

8. Are products from other countries likely to be contaminated?

There is a considerable amount of rice and rice products imported into the UK from other EU countries. Some of this could have originated in China. The extent to which rice and rice products from China might be transshipped in this way is not known at present. The same applies to European Countries outside the EU and to other countries which could import rice from China and then re-export rice products to the UK or EU.

Another area of uncertainty in regards to potential routes for contamination is whether contaminated rice seed from China could be grown in third countries and then exported as rice, or rice products, to the UK and EU.

The FSA needs to investigate the transshipment of Chinese rice and rice products, seeds and the export of Chinese-sourced rice and rice products as soon as possible in order to provide a more complete picture of where contaminated products could be coming in to the UK, in order to help target enforcement action.

9. What is the legal position of companies importing, manufacturing or selling rice or rice products from China?

Retail or food manufacture

It is illegal to sell foods contaminated with Bt63 rice in the EU regardless of what level of contamination is present in the food on sale. Under the EC Food and Feed Regulation (1829/2003), genetically modified foods have to pass through a strict risk assessment for food safety and environmental impact before they can be granted a consent to be marketed. In the UK, the maximum penalties for marketing unauthorized GMOs is a £5,000 fine or 6 months in prison

(if convicted in a magistrates court), or 2 years in prison and an unspecified fine (if convicted in a crown court)⁵.

Importing companies

Under the Emergency Measure announced by the EC, all rice imports from China must be accompanied by a certificate of analysis to show that Bt63 is not present. Cargoes without certification will not be permitted to be landed.

10. What should we do as a company?

Companies such as retailers, wholesalers and restaurants/hotels have a duty under General Food Law and GMO legislation to sell only products that have been approved for marketing in the EU. In order to ensure they are not illegally handling rice products contaminated with Bt63, companies should commission testing by an accredited laboratory. Any foods found to be contaminated, at any level, should be withdrawn, along with all products in that batch. By demonstrating that such action is being taken to prevent the illegal sale of Bt63 your company would be able to avoid enforcement or legal action.

11. What should be done with any contaminated products?

Any contaminated products would have to be withdrawn from sales and disposed of in an approved manner. The FSA will be issuing guidance shortly which should include approved disposal methods.

12. Who will pay if my products are contaminated?

Who will be liable for cleaning up rice supply chains is not clear. Logically those responsible for the contamination in China should be liable, but there is no legislation to require this. It would therefore appear complicated and costly to pursue and may not bring about a satisfactory conclusion. Often the exact cause of contamination is not clear and this can further muddy the waters.

In the case of the contamination of US long grain rice with LL601, Bayer CropScience is still being pursued in the courts by US rice farmers.

In the case of Bt63 contamination it would be logical for businesses to lobby the Government to pursue compensation with the Chinese authorities directly and in the meantime request that the Government pays compensation to those affected. The argument for this is strengthened by the fact that the Government (FSA) failed to respond to the 2006 warnings when GM Bt63 rice was found in the UK.

13. What can we do to prevent similar contamination in the future?

GM contamination is likely to increase in view of the fact that around 170 different plants have been genetically engineered around the world. Most of these have only been tested on a relatively small scale and therefore controlling contamination should be possible (commercial cultivation is limited mainly to GM soya, maize, cotton and oilseed rape).

GM Freeze and Friends of the Earth believe that in order to protect the businesses importing and selling food from countries growing GM crops that are not authorised in the EU, the UK Government and European Commission should start an ongoing program of proactive monitoring of incoming cargoes from at risk crops and countries before they are unloaded. This will require the EU to obtain information and the necessary reference materials for GMOs being trialled or grown commercially around the world to enable testing to be accurate and reliable. Unapproved GM products should not be re-exported for sale elsewhere but destroyed at the importer's expense.

⁵ www.food.gov.uk/multimedia/pdfs/gmguidance.pdf