CCM Data & Business Intelligence

Production Accidents and Influences on Agrochemical Industry in China

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1. Introduction

Last year, about the same period of time, pollution accident occurred in Lianyungang Chemical Industrial Park in Jiangsu Province; this year, the province underwent a major explosion accident.

It seems that Jiangsu always has to face challenges of serious safety problems in production. On 27 April, the provincial government officially issued the Improvement Scheme for Work Safety and Environmental Protection in Chemical Industry in Jiangsu Province. The previously issued consultation paper for this scheme proposed that the total number of chemical parks in the province shall be reduced to 20 from 50, chemical enterprises be cut down to 2,000 and eventually reduced to 1,000 by the end of 2020. Jiangsu being the largest pesticide supplier in China, measures taken by local government have attracted great attention in the industry.

The explosion accident in Xiangshui County has great impact on China's chemical industry, which brings about transformation in chemical market, enterprises and chemical parks. At present, various provinces are conducting safety investigation on almost all chemical parks. Meanwhile, many substandard enterprises are to be eliminated. Quite a few agrochemical products, especially some herbicides and fungicides, suffered from tight supply and saw rising prices. Undoubtedly, enterprises doing well in safety production will enjoy more favorable conditions, while enterprises lacking safety production specifications will inevitably go through rectification or be forced to shut down. The year 2019 will witness safety production becoming the top priority in the eyes of agrochemical enterprises. It is believed that these accidents will trigger a safety production reform in agrochemical industry.

In order to find out what causes the accidents and how those accidents are influencing on agrochemical industry, CCM has done a lot of research from the following aspects:

- ✓ Major accidents in chemical enterprises in March–April 2019
- ✓ Main causes of accidents in chemical enterprises
- ✓ Countermeasures of local governments
- ✓ Major influences on agrochemical enterprises
- ✓ Major influences on agrochemical products

2. Approach for this report

- Desk research

The sources of desk research are various, including published magazines, journals, government websites and statistics, industrial statistics, association seminars as well as information from the Internet. A lot of work has gone into the compilation and analysis of the obtained information.

- Internet

CCM visited government websites and contacted with players in the domestic agrochemical industry through B2B websites and software.

- Data processing and presentation

The data collected and compiled are sourced from:

- CCM's database
- Published articles in periodicals, magazines, journals and third-party databases
- Statistics from governments and international institutes
- Telephone interviews with domestic producers, joint ventures, service suppliers and governments
- Third-party data providers
- Comments from industrial experts
- Professional databases from other sources
- Information from the internet

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions were held in order to analyse the data and draw the conclusions.

3. Executive summary

The explosion accident in Xiangshui County has great impact on China's chemical industry, which brings about transformation in chemical market, enterprises and chemical parks. At present, various provinces are conducting safety investigation on almost all chemical parks. Meanwhile, many substandard enterprises are to be eliminated. Quite a few agrochemical products, especially some herbicides and fungicides, suffered from tight supply and saw rising prices. Undoubtedly, enterprises doing well in safety production will enjoy more favorable conditions, while enterprises lacking safety production specifications will inevitably go through rectification or be forced to shut down. The year 2019 will witness safety production becoming the top priority in the eyes of agrochemical enterprises. It is believed that these accidents will trigger a safety production reform in agrochemical industry.

Incomplete statistics show at least nine work safety accidents occurred in China from March to April 2019. In particular, XXX has attracted great attention in the industry. Other accidents worthy of attention were: the burst and fire in XXX, a fire blast in a chemical plant in XXX and a fire in XXX.

Although chemical enterprises incorporate safety production into their daily operations and management, work safety accidents still take place frequently every year. Main causes are: non-explosion-proof or damaged machinery equipment and electrical appliances, undemanding safety training among employees, dangerous production process and poor management system in some enterprises.

From March to April, accidents took place frequently in chemical enterprises, which have great influence on agrochemical enterprises, especially those located in industrial parks where explosion accidents happened. In fact, the aftermaths are so huge, that not only the enterprises weathering the misfortune, but also the surrounding enterprises or even many agrochemical enterprises in other parts of China all went through investigations and some faced production suspension and restriction. On 4 April, 2019, Yancheng City is set to permanently close the Xiangshui Chemical Industrial Park where an explosion occurred in Jiangsu Tianjiayi Chemical Co., Ltd. on 21 March. There are more than XXX agrochemical enterprises in the park and most of which are manufacturers of common pesticide technical as well as some other pesticides and intermediates. It is reported that many provinces have begun to shut down and cancel chemical parks. For the parks survived, requirements on green development shall be further enhanced. Environmental inspection must be conducted in enterprises in and out of the parks. More than XXX chemical parks may face rectification and shutdown. On 16 April, the Safety Production Commission of Zhejiang Province issued a notice stating the first batch of hazardous chemicals with major safety risks and their rectification tasks within a prescribed deadline. The 22 enterprises listed include pesticide and agrochemical intermediate producers like XXX and XXX.

4. What's in this report?

Note: Key data/information in this sample page is hidden, while in the report it is not.

1 Major accidents in chemical enterprises in March–April 2019

On 21 March, 2019, an explosion occurred in Jiangsu Tianjiayi Chemical Co., Ltd. (Tianjiayi Chemical), which is located in Chenjiagang Chemical Industrial Park, Yancheng City, Jiangsu Province. The accident draws extensive attention in the industry. As of 25 March, 78 people had died in the accident. It is benzene explosion that caused the accident. Established in April 2007, Tianjiayi Chemical covers an area of about 16.67 ha (220 mu) and has 195 employees, including 45 engineers and technicians. According to the National Enterprise Credit Information Publicity System, Tianjiayi Chemical has a registered capital of XXX and is engaged in production of 3-hydroxybenzoic acid, anisole, and 4-tert-butylchlorobenzene, etc. Meanwhile, Tianjiayi Chemical is the second largest producer of m-phenylenediamine, a kind of dye intermediate, with a capacity of XXX

Table 1-1 Major accidents in chemical enterprises in March–April 2019

No.	Time	Accident	Casualty
1	XXX	XXX	XXX
2	XXX	XXX	XXX
3	XXX	XXX	XXX
4	XXX	XXX	XXX
5	XXX	XXX	XXX
6	XXX	XXX	XXX
7	XXX	XXX	XXX
8	XXX	XXX	XXX
9	XXX	XXX	XXX

Source: CCM

2 Main causes of accidents in chemical enterprises

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3 Countermeasures of local governments

3.1 Jiangsu Province

The General Office of Jiangsu Provincial Committee officially issued *Improvement Scheme for Work Safety and Environmental Protection in Chemical Industry in Jiangsu Province,* putting forward severe measures in optimizing and upgrading industrial layout, rectifying and improving chemical parks (concentration zones) and restricting industry access.

- Optimizing and upgrading industrial layout

…

- Rectifying and improving chemical parks (concentration zones)

…

- Restricting industry access

…

4 Major influences on agrochemical industry

4.1 Agrochemical enterprises

4.1.1 Enterprises affected

Table 4.1.1-1 Major agrochemical enterprises and their main products in Xiangshui Chemical Industrial Park

No.	Enterprise	Main product and capacity
1	XXXX	XXXX
2	XXXX	XXXX
3	XXXX	XXXX
4	XXXX	XXXX
5	XXXX	XXXX
6	XXXX	XXXX
7	XXXX	XXXX
8	XXXX	XXXX
9	XXXX	XXXX
10	XXXX	XXXX
11	XXXX	XXXX
12	XXXX	XXXX
13	XXXX	XXXX
14	XXXX	XXXX
15	XXXX	XXXX

Source: CCM

4.1.2 Enterprises benefited

Table 4.1.2-1 Part of enterprises benefited from explosion accidents

No.	Enterprise	Business or product benefited
1	XXXX	XXXX
2	XXXX	XXXX
3	XXXX	XXXX
4	XXXX	XXXX
5	XXXX	XXXX
6	XXXX	XXXX
7	XXXX	XXXX
8	XXXX	XXXX

Source: CCM

4.2 Agrochemical products

4.2.1 Herbicides

The "3·21" explosion has relatively greater impact on herbicides fomesafen technical, mesotrione technical, bentazone technical and bispyribac-sodium technical. The ex-works price of fomesafen technical rose significantly after the explosion since the supply of its raw materials was affected…

- Fomesafen technical

Figure 4.2.1-1 Ex-works prices of 95% fomesafen technical in China, Jan.–May 2019

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If you want more information, please feel free to contact us
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