

Chrome International

investment at what cost?

On 11 February 1997, CISA celebrated its 'ground breaking' ceremony at Newcastle, KwaZulu-Natal.

The new factory will produce sodium dichromate and chromic acid, which are used in the manufacture of paints, tanning materials, computer discs, dyes, varnishes and chrome plating. Production is expected to start in July this year.

CISA is a 50:50 joint venture between two companies: Bayer and Sentrachem. Bayer is a large, German transnational corporation (TNC) with operations around the world. Sentrachem is a smaller, South African chemical company which was recently bought by Dow Chemical, an American TNC. Bayer will be responsible for marketing CISA's products, 80% of which will be for export.

The initiative has been welcomed by many in this economically depressed area. The construction stage will provide jobs for 1 200 workers. Construction costs are estimated at more than R400-million. There will be obvious spin-offs for local industry.

Once completed, however, the plant is expected to provide only 100 permanent jobs. In the longer term, residents may find that the disadvantages of the development far outweigh any advantages.

Sodium dichromate and chromic acid have extremely high toxic levels. They are known to be carcinogenic (causing cancer) and pose a risk to workers,

Chrome International South Africa (CISA), a subsidiary of the giant transnational company, Bayer, is building a new plant in Newcastle, KwaZulu-Natal. The chemicals it will be manufacturing pose a potentially deadly risk to workers and surrounding communities. Neil Newman asks whether this is the kind of investment South Africa needs.

surrounding communities and the environment. Bayer's track record in South Africa and other countries does not bode well for the future of workers at Newcastle. Unions, community and environmental groups will need to keep a close watch on developments.

Bayer in South Africa

Bayer was one of the TNC's which openly violated calls for sanctions against the apartheid regime. It maintained a strong South African presence throughout the apartheid era. Critics allege this was in line with the parent company's collaboration with the fascist Hitler regime during the

1930s. They maintain that Bayer used slave labour from the concentration camps during the Second World War.

In 1991, Chrome Chemicals South Africa (CCSA) - which had been taken over by Bayer in 1974 - at Merebank, Durban, was closed down after a long struggle by the CWIU to secure compensation for workers.

For three decades, workers at the plant had been breathing in dangerous levels of highly toxic chromate dust. The union found that workers suffered from diseases caused by the dust on a scale never before recorded.

In April 1991, 215 workers were retrenched when a major part of the operation was closed down. The Industrial Health Unit (IHU), an NGO working in the health field, was asked by the union to investigate the medical status of the retrenched workers. The IHU found that:

- 34% of the workers had complete nasal septum perforation (NSP) - a hole in the cartilage plate that divides the nose into two parts. Some workers had holes so large that they could put a finger in one nostril, through the hole, and out the other nostril.
- Related symptoms were also recorded. These included chronic sinusitis, rhinorrhoea (runny nose), continuous nasal blockage and a whistling nose when breathing.
- Between 1986 and 1989 at least three workers had contracted lung cancer. All three had their services terminated and died soon after without any compensation.
- Out of a staff of between 20 and 25 white employees, five were reported to have died of lung cancer.

The problem [at CCSA] had a long history. A 1976 government commission found that "75% of workers at CCSA had active lesions in their nasal passages and 46% had

complete nasal septum perforation". The commission noted that "these findings are...extremely disturbing and would appear to indicate a lack of concern regarding the physical welfare of the workers..."

Despite this report, little was done to force the company to take responsibility for the problems. All the workers were assessed as being 3% disabled and typical compensation was a R200 to R400 once-off lump sum payment. Workers were laid off when they became sick and died soon afterwards. Since the latency period for the cancer which the dust causes is about 20 years, many workers only became ill after they had retired.

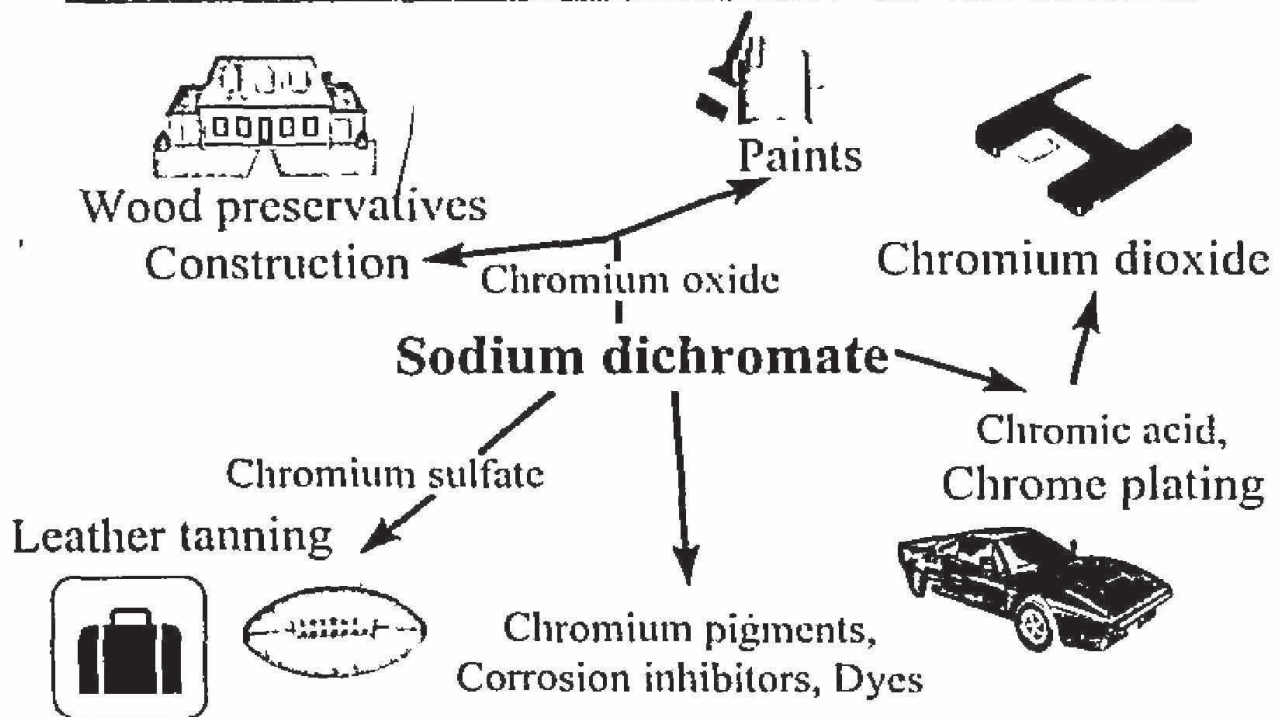
Risks

The short- and long-term consequences of exposure to chrome chemicals are well documented. Bayer itself is well aware of these. A 'Safety and Data' sheet produced by the company in November last year states that exposure to chronic acid and sodium dichromate can "cause cancer by inhalation. Contact with combustible materials may cause fire. Also toxic if swallowed. Causes severe burns. May cause sensitisation by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment."

Waste disposal is a major problem. If waste is left untreated and unprotected, the dust can blow into the air. Heavy rainfall can result in the waste seeping into rivers or wells. Surrounding communities and animal and plant life are then at risk.

For every 70 tonnes of sodium dichromate produced, about 90 tonnes of toxic waste has to be disposed of. The production capacity of the Newcastle plant is expected to be 70 000 tonnes per year. This will translate into 90 000 tonnes of waste a year. Where will this waste be stored? What safety measures will be put in place? How safe will the surrounding area be?

Use of Chromium Compounds



Protection

Technology to prevent workers being exposed to chromate dust was available at the time. In fact, it was being used at Bayer's production plant in Leverkusen in Germany. The German plant was virtually dust free. There have been no recorded cases of dust-related diseases at the plant for more than 20 years. Bayer did not install such technology in South Africa because it would have increased production costs.

There are two main reasons for Bayer's decision to open the Newcastle plant:

- According to the company, the Leverkusen plant in Germany has become 'uneconomic'. Bayer hopes to achieve lower production costs and higher profits in South Africa.
- Bayer already owns the Rustenberg Chrome Mine in South Africa. Locating its production facility closer to its source of raw materials will also save the company money.

South Africa is not the only country in which Bayer has a bad track record.

Brazil

The Bayer chrome chemical production plant at Belford Roxo, Brazil has caused both occupational health and environmental problems. Waste was dumped on the premises of the production site without adequate protection. The wind carried the dust to a nearby settlement, causing community members to suffer skin and respiratory problems.

The community demanded that Bayer at least cover the waste. Then it was discovered that Bayer had disposed of an average three tonnes of untreated waste per year in the nearby river during the 1980s. The maximum legal level of waste was 0,5mg/l, but a reading of more than 12mg/l was measured.

In 1996, five workers in the packaging sector of the plant were diagnosed with

nasal septum perforation as a result of inhaling sodium dichromate, chromic acid and chromosol. Only one of the workers was in a condition to receive corrective surgery. The damage to the other four was permanent. The Workers' Compensation Form was filled in and sent to the relevant government department (the INSS). However, the INSS denied any connection between the disease and the workplace and declared the workers 'fit for work'. No compensation was granted. The worker who underwent surgery was dismissed when he returned to work.

Mexico

A chrome chemical production plant (Cromatos) in Lecheria, Mexico which was owned by Bayer, had similar problems. In 1978, it was estimated that 46% of the workers suffered from nasal septum perforation. Other symptoms were skin ulcers and respiratory problems. A nearby school was abandoned after waste from the plant seeped into the school's water supply. It was reported that the waste, mixed with mud was used to fill potholes in the streets. The plant was closed in 1978.

Spain

In Barcelona, Spain, the water company sued Bayer after contamination of water wells by chromium forced the closure of the wells. It was alleged that Bayer attempted to bribe the manager of the water company to drop the case, without success. The water company took Bayer to court. While the court proceedings were still on, the government passed legislation declaring Bayer's dumping procedures legal and the water company lost the case.

Challenges

The production of chrome chemicals at Newcastle introduces the risk of

contamination and exposure to workers well as to the surrounding communities and environment. It is crucial that all interested parties get together to ensure that the potential for the disasters that have followed the company around the world, are eliminated at Newcastle.

Trade unions, environmental groups and community based organisations must ensure that CISA puts adequate health and safety measures in place before production begins.

The law

A key aspect of any campaign would be to put pressure on government to impose stricter controls on companies producing hazardous materials.

In other countries, Threshold Limit Values (TLVs) are used to lay down the legally permissible levels of exposure of hazardous materials. They may apply to levels in the air, or in substances like water or food.

Depending on the interests they represent, different agencies tend to set different levels. Scientific or medical agencies support very low values, while business groups would like much higher levels. Governments often try to find a balance between these different interests. The result is that TLVs are the outcome of political negotiations rather than scientifically determined values. In Germany and the United States, for example, TLVs are negotiated between government, business and labour.

In South Africa, TLVs are called Occupational Exposure Limits (OELs). In 1995 the government adopted regulations for the control of hazardous substances. The OELs for chromium compounds laid down in these regulations are much higher than in other countries. The permissible level for chromic acid, for example, is 100 times higher than in America.



Pic: Neil Newman

Delegates at the solidarity workshop, November 1997.

Waste disposal

Methods of waste disposal will determine the health of the community and the surrounding environment. CISA must be asked to spell out the methods it proposes using. Research must be conducted into the most appropriate measures available. Safe waste storage and disposal must be demanded, irrespective of the costs involved. Government must pass new legislation to ensure that the company falls in line. Legislation is, however, useless unless it is enforced. Regular inspections by government and independent inspectors must be carried out to see that the company is sticking to the letter of the law. Workers should also insist on medical check-ups at least twice a year.

South Africa needs foreign investment. We do not need investment that will cost us dearly in terms of our peoples' health.

TNCs are constantly in search of profit. They threaten governments that they will not invest if conditions are imposed which threaten profit maximisation. They go where labour costs are low and environmental standards are compromised.

The Newcastle community can learn a great deal from communities in the other parts of the world where Bayer operates.

International solidarity is a crucial part of the campaign for acceptable health and environmental standards. The TNCs need to be made aware that it does not matter where in the world they go, workers will demand their right to a safe working environment. A start to this process was made in November last year. Shopstewards from Bayer in Germany, the CWIU and the South African Chemical Workers' Union (SACWU) came together in a workshop on chrome chemical production.

Once the new plant at Newcastle is up and running, it will be far more difficult to make changes. Unions and other groupings need to take action now to ensure that the CISA plant is safe for both workers and the communities living in its environs. ★

Neil Newman is a former SARHWU official. He currently co-ordinates ILRIG's Transnational Corporations Project, focussing on the political and economic influence of TNCs and monitoring the development of EPZs in the region. Acknowledgement: Much of the information on the experience at Merebank was taken from an article written for Critical Health entitled "Occupational diseases at Chrome Chemicals", by Mark Colvin.