DEQ says chromium is No. 2 air toxic

By BOB ANDERSON
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Sure, everybody knows asbestos is bad news, but chromium, that’s just the stuff shiny wheels are made of—right?

Interestingly enough, when the Department of Environmental Quality put its list of 100 toxic air pollutants together, the cancer-causing agent found to have the biggest potential danger to the people of Louisiana, next to asbestos, was chromium VI and related compounds.

Among the cancer-causing agents, asbestos was listed as presenting the greatest danger here, followed in order by chromium VI, ethylene oxide, benzene and arsenic.

In determining the ranking, DEQ used a formula that considered not only relative toxicity, but the quantities emitted, the number of people exposed and the environmental persistence.

"Chromium is a very prevalent urban carcinogen," and since it is a metal it tends to stay around a long time, said Mike McDaniel, DEQ’s assistant secretary in charge of air quality.

In addition to use in industry, chromium is widely used as a water treatment agent that gets released from the cooling towers of large buildings.

From the three lists, DEQ formed a list of 100 toxic air chemicals it proposes to regulate. Among the acute toxics—the materials that are most likely to cause immediate death or injury in a large accident—chlorine was found to have the most potential to harm the public in Louisiana.

Other chemicals topping that most dangerous list were sulfuric acid, ammonia, hydrochloric acid, hydrogen sulfide and nitric acid.

Chlorine ranked first mainly because of the large quantities of the material that are located in so many places in Louisiana, McDaniel said. It can be found not only in huge quantities at many plants, but also in smaller quantities at most waste water treatment plants.

Ammonia also presents a widespread danger because it is used in the fertilizer industry, is present in tanks on farms and is moved in rail cars and barges, McDaniel said.

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Class 2, which represents reproductive toxins and suspected carcinogens, was topped by 1,2-dichloroethane; chloroform; 1,2-butadiene; carbon tetrachloride and dichloromethane.

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tetrachloroethylene. The list and the upcoming regulations are a result of a toxic air pollution control law passed by the Legislature last year. The list of chemicals will be published in the State Register later this month and will be the subject of a public hearing in late March.

DEQ is working on regulations spelling out what controls will be put on the listed chemicals and hopes to have those regulations ready this summer. After publication and hearings, both the list and the regulations will go together to a legislative oversight committee, which has the power to approve or disapprove the program.

The list does not include any pesticides, because the regulation of those substances has long been considered the responsibility of the Department of Agriculture, McDaniel said.

DEQ did consider toxics from various other sources, including automobiles, in estimating the total amounts of toxics released and the resulting exposure, he said, noting that it did not just concentrate on industry.

However, the numbers did not take in all releases, he said, noting that a huge, but undetermined amount of asbestos, for instance, is released during demolition, renovations and from friable materials contained in buildings.

The agency started out looking at the more than 300 toxic substances for which industries are required by federal law to report the emissions each year. It weeded out those which are not used to any great extent in Louisiana and compared the relative risks posed by the others in coming up with the list of 100, which was the maximum number of chemicals the legislation allows to be listed at this time.