What are the facts on 2,4-D?

What is 2,4-D?
2,4-D is a member of the phenoxy group of herbicides and was the first successful selective herbicide developed. It is a chemical analogue of a natural plant growth regulator. 2,4-D has been used for weed control in Australia since the 1960s.

What is 2,4-D used for?
2,4-D is a crucial tool for Australian farmers to protect their crops and for land managers to protect public areas like national parks from broadleaf weeds that compete with native vegetation. 2,4-D is used by farmers, environmental land managers and local councils to control a wide range of weeds.

Are chemicals like 2,4-D adequately researched?
More is known about 2,4-D and how it works than almost any other agricultural chemical. 2,4-D has been used for over 60 years and is the most widely used herbicide worldwide. Over six decades, this has resulted in an enormous amount of research on 2,4-D across the globe.

The 2,4-D toxicology database alone exceeds 4,000 peer-reviewed, published studies. There are now more than 160 peer-reviewed, published epidemiologic (human) studies pertinent to 2,4-D.

Soil dissipation of 2,4-D is well understood. The recent data from 30 soil dissipation studies on various soil types illustrates a median 2,4-D half-life of 5.6 days. 2,4-D is classified as non-persistent to slightly persistent in soil and natural water because of rapid microbial break down.

How are pesticides regulated in Australia?
Agricultural chemicals in Australia are regulated jointly by the Commonwealth and states and territories. At the Commonwealth level, an independent regulator, the Australian Pesticides and Veterinary Medicines Authority (APVMA) conducts thorough risk assessments for every chemical product before it can be sold or used. These risk assessments require companies to provide extensive data from testing the product in a wide variety of relevant conditions before it can be approved for sale. Once a chemical is on the market, any new information on the way it is being used, or its effect on health or the environment must be reported to the APVMA so it can consider whether additional action is necessary to protect the community and the environment.

States and territories separately are responsible for controlling the use of products once registered. This includes administering and enforcing rules with respect to training, licensing, access and use.

Why do we need herbicides like 2,4-D?
One application of herbicides for weed control in a single field is worth the hand labour of tens to hundreds of workers. Across our country, to maintain the same area of cropping land would require hundreds of millions of hours and millions of workers willing to participate in a worker culture that migrates from farm to farm. This land would be able to produce 20 – 50 per cent less than what it produces today. As climactic conditions become more and more variable and rainfall less predictable, the dramatically improved retention of water in the soil that comes from the use of herbicides to control weeds is vital for the sustainability of farming in many parts of Australia.

Is 2,4-D safe for farmers to use?
Provided it is used in accordance with label instructions, 2,4-D products from reputable manufacturers present almost no risk to farmers. In Australia, farmers are provided with detailed label instructions on how to safely and sustainably use a product. These instructions must be followed by users to ensure that there are no unanticipated health, safety or environmental impacts. Compliance with the United Nations International Code of Conduct on the Distribution and Use of Pesticides is mandatory for all CropLife member companies, requiring commitment to high standards of safety, stewardship and product quality.

Does quality 2,4-D present any health concerns?
The US Environmental Protection Agency (EPA) considered this question in both its 2005 registration eligibility decision and its most recent response to the National Resources Defence Council (NRDC) petition. In both instances, the EPA determined that 2,4-D was not an endocrine disruptor.
Worldwide, no pesticide regulatory agency classifies 2,4-D as a human or animal carcinogen.
In issuing the Order Denying NRDC's Petition to Revoke Tolerances in April 2012, the EPA stated:
"A part of this cancer assessment was the review of data bearing on 2,4-D's potential mutagenicity. EPA has consistently found that these data do not support classification of 2,4-D as a carcinogen. This view was concurred in by the Joint Committee of Science Advisory Board (SAB) and the Scientific Advisory Panel (SAP)"

What is the status of 2,4-D high volatile esters (HVEs) in Australia?
The APVMA has advised that it intends to cancel the registration of some 2,4-D products, most of which have been suspended from sale for many years. This decision was made based on information received by the regulator that the risks posed by these products could no longer be managed effectively. 2,4-D is still the most widely used herbicide in the world and Australian farmers depend upon it to protect their crops.

Why are some products available in some countries, but not others?
Some people have claimed that 2,4-D HVEs were banned in the USA. 2,4-D HVEs were not banned in the USA, registrations were voluntarily withdrawn for commercial reasons. The unique agricultural systems, geography and climate of each country mean that certain products may be appropriate to use in one country but not in another. These conditions and the way that farmers use products are constantly changing, which is why it is so important to have an independent, responsive, scientific regulator to protect the community and the environment and to make sure farmers have the tools they need to produce enough safe food and fibre for our growing population.

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July 2013