

## Heavy Metals Labeling Aid

- ❖ If your product guarantees **Phosphate** (or Phosphoric Acid), **Iron**, **Manganese**, or **Zinc** from an inorganic source, you must include one of the following statements on the product label:
  1. “**Information regarding the contents and levels of metals in this product is available on the internet at [www.aapfco.org/metals.html](http://www.aapfco.org/metals.html)**” OR
  2. “**Information regarding the contents and levels of heavy metals in this product is available on the internet at [your own website]**”
    - Provide the URL of a website **free of advertising** which directs consumers to the product’s heavy metals data. **OR**
  3. “**Information regarding the contents and levels of heavy metals in this product is available by calling 1-800-XXX-XXXX**”
    - Provide a **toll free** number from which consumers can obtain the product’s heavy metals data.
  
- ❖ If your product label refers to **aapfco.org/metals.html** or another web site which directs consumers to California’s database for heavy metals, you must submit a copy of a heavy metals analysis, regardless of whether the product contains phosphate, iron, manganese, or zinc from an inorganic source. To be acceptable under California laws and regulations, heavy metals analyses must
  - Include values for Arsenic, Cadmium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, and Selenium, and
  - Be performed within the last **five** years, and
  - Be performed using sample preparation method 3050B or 3051 and using analytical methods described in US EPA Publication SW-846.

# NON-NUTRITIVE STANDARDS

## Maximum Allowable Concentration of Non-Nutritive Metals

### Arsenic, Cadmium, and Lead

- ❖ If your product is a **Specialty Fertilizer** that guarantees 6% or more available phosphate, or a **Commercial Fertilizer**, or an **Agricultural Mineral**, the following concentration limits apply:
  - **For each percent** available phosphate ( $P_2O_5$ ), the fertilizing material shall not exceed the following concentrations of non-nutrient metals: arsenic, 2 parts per million (ppm); cadmium, 4 ppm; lead, 20 ppm.
    - Example: A product with 52% phosphate will have the following limits: arsenic 104 ppm (2 ppm times 52); cadmium 208 ppm (4 ppm times 52); and lead 1,040 ppm (20 ppm times 52).
  - **For each percent** of iron, manganese or zinc, the fertilizing material shall not exceed the following concentrations of non-nutrient metals: arsenic, 13 parts per million (ppm); cadmium, 12 ppm; lead, 140 ppm.
    - Example: A product with 12% iron will have the following limits: arsenic, 156 ppm (13 ppm times 12); cadmium, 144 ppm (12 ppm times 12); and lead, 1,680 ppm (140 ppm times 12).
- ❖ If your product is a **Specialty Fertilizer** that guarantees less than 6% available phosphate ( $P_2O_5$ ), and makes **NO** micronutrient claim, the following concentration limits apply:
  - The maximum allowable concentrations of non-nutrient metals shall not exceed: arsenic, 10 parts per million (ppm); cadmium, 20 ppm; and lead, 100 ppm.
- ❖ If your product is a **Specialty Fertilizer** that guarantees less than 6% available phosphate ( $P_2O_5$ ) and **does make** a micronutrient claim, the following concentration limits apply:
  - Multiply the guaranteed percentage iron, manganese or zinc by: arsenic, 13 parts per million (ppm); cadmium, 12 ppm; lead, 140 ppm, and **add** the following values to that total: arsenic, 10 ppm; cadmium, 20 ppm; and lead 100 ppm.
    - Example: A product with 3% phosphate ( $P_2O_5$ ) and 2% zinc will have the following limits: arsenic maximum is 36 ppm total, (13 ppm times 2% zinc = 26 ppm, + 10 ppm); cadmium maximum is 44 ppm total, (12 ppm times 2% zinc = 24 ppm, + 20 ppm); and lead, 380 ppm total, (140 ppm times 2 zinc = 280 ppm, + 100 ppm).