# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C., 20460 

OCT 222015

## MEMORANDUM

SUBJECT: Updated Screening Level Usage Analysis (SLUA) Report for Glyphosate Case PC \#s (103601, 103604, 103607, 103608, 103613, and 417300)
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This memorandum transmits an updated Screening Level Usage Analysis (SLUA) report for the glyphosate case (previously completed in 2007). The usage data in the updated SLUA (2015) are an amalgamation of USDA/NASS and Private Pesticide Market Research data from 2005 to 2014.

The new SLUA (2015) shows a decrease in usage, in terms of pounds a.i. and/or percent crop treated on apples, apricots, artichokes, avocados, broccoli, caneberries, cauliflower, grapefruit, garlic, nectarines, oranges, pasture, peaches, pears, pecans, and tangelos. The usage data did not change for cantaloupes, carrots, celery, lemons, oats, green beans, and pumpkins.

The new SLUA (2015) shows an increase in usage, in terms of pounds a.i. and/or percent crop treated on the remainder of the SLUA crops.

For questions, comments and other usage information requests, please contact me at 703-3088140.

## Glyphosate Case (103601, 103604, 103607, 103608, 103613, and 417300) <br> Screening Level Usage Analysis (SLUA) <br> Date: October 5, 2015

## What is a Screening Level Usage Analysis (SLUA)?

- Available estimates of pesticide usage data for a particular active ingredient that is used on agricultural crops in the United States.
- Pesticide usage data obtained from various sources. The data are then merged, averaged, and rounded so that the presented information is not proprietary, business confidential, or trade secret.


## What does it contain?

- Pesticide usage data for a single active ingredient only.
- Agricultural use sites (crops) that the pesticide is reported to be used on.
- Available pesticide usage information from U.S. states that produce $80 \%$ or more of a crop, in most cases, or less than $80 \%$, in rare cases, depending on the scope of the survey and available resources.
- Annual percent of crop treated (average \& maximum) for each agricultural crop.
- Average annual pounds of the pesticide applied for each agricultural crop (i.e., for the states surveyed, not for the entire United States).


## What assumptions can I make about the reported data?

- Average pounds of active ingredient applied - Values are calculated by merging pesticide usage data sources together; averaging across all observations, then rounding. Note: If the estimated value is less than 500, then that value is labeled $<500$. Estimated values between $500 \&<1,000,000$ are rounded to 1 significant digit. Estimated values of 1,000,000 or greater are rounded to 2 significant digits.)
- Average percent of crop treated - Values are calculated by merging data sources together; averaging by year, averaging across all years, \& rounding to the nearest multiple of 5. Note: If the estimated value is less than 2.5 , then the value is labeled $<2.5$. If the estimated value is less than 1 , then the value is labeled $<1$.
- Maximum percent of crop treated - Value is the single maximum value reported across all data sources, across all years, \& rounded up to the nearest multiple of 5. Note: If the estimated value is less than 2.5 , then the value is labeled $<2.5$.


## What are the data sources used?

- USDA-NASS (United States Department of Agriculture's National Agricultural Statistics Service) pesticide usage data from 2004 to 2013.
- Private pesticide market research - pesticide usage data from 2004 to 2013.
- California Department of Pesticide Regulation (DPR) Pesticide Use Reporting (PUR) data for 2004 to 2012.
What are the limitations to the data?
- Additional registered uses may exist but are not included because the available surveys do not report usage (e.g., small acreage crops).
- Lack of reported usage data for the pesticide on a crop does not imply zero usage.
- Usage data on a particular site may be noted in data sources, but not quantified. In these instances, the site would not be reported in the SLUA.
- Non-agricultural use sites (e.g., turf, post-harvest, mosquito control, etc.) are not reported in the SLUA. A separate request must be made to receive these estimates.
- Some sites show some use, even though they are not on the label. This usage could be due to various factors, including, but not limited to Section 18 requests, existing stocks of the chemical, data collection errors, and experimental use permits (EUPs).

Date: October 5, 2015
Screening Level Estimates of Agricultural Uses of Glyphosate Case (103601, 103604, 103607, 103608, 103613, and 417300)
Sorted Alphabetically
Reporting Years: 2004-2013

|  |  | Annual Average | Percent Crop Treated |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Crop | Lbs. A.I. | Average | Maximum |
| 1 | Alfalfa | 400,000 | <2.5 | 5 |
| 2 | Almonds | 2,100,000 | 85 | 95 |
| 3 | Apples | 400,000 | 55 | 70 |
| 4 | Apricots | 10,000 | 55 | 80 |
| 5 | Artichokes | 1,000 | 10 | 15 |
| 6 | Asparagus | 30,000 | 55 | 70 |
| 7 | Avocados | 80,000 | 45 | 65 |
| 8 | Barley | 600,000 | 25 | 40 |
| 9 | Beans, Green | 70,000 | 15 | 25 |
| 10 | Blueberries | 10,000 | 20 | 25 |
| 11 | Broccoli | 3,000 | <2.5 | <2.5 |
| 12 | Brussels Sprouts* | <500 | <1 | <2.5 |
| 13 | Cabbage | 20,000 | 10 | 25 |
| 14 | Caneberries | 4,000 | 10 | 25 |
| 15 | Canola | 500,000 | 65 | 80 |
| 16 | Cantaloupes | 20,000 | 10 | 25 |
| 17 | Carrots | 3,000 | 5 | 10 |
| 18 | Cauliflower | 1,000 | <2.5 | 5 |
| 19 | Celery | 1,000 | <2.5 | 10 |
| 20 | Cherries | 200,000 | 65 | 85 |
| 21 | Chicory* | $<500$ | <2.5 | <2.5 |
| 22 | Corn | 63,500,000 | 65 | 85 |
| 23 | Cotton | 18,400,000 | 85 | 95 |
| 24 | Cucumbers | 30,000 | 20 | 35 |
| 25 | Dates | 8,000 | 65 | 25 |
| 26 | Dry Beans/Peas | 600,000 | 30 | 45 |
| 27 | Fallow | 8,800,000 | 55 | 70 |
| 28 | Figs | 10,000 | 85 | 100 |
| 29 | Garlic | 4,000 | 10 | 25 |
| 30 | Grapefruit | 400,000 | 85 | 100 |
| 31 | Grapes | 1,500,000 | 70 | 80 |
| 32 | Hazelnuts | 30,000 | 65 | 90 |
| 33 | Kiwifruit | 5,000 | 70 | 95 |
| 34 | Lemons | 200,000 | 75 | 90 |
| 35 | Lettuce | 10,000 | 5 | 10 |
| 36 | Nectarines | 20,000 | 45 | 70 |
| 37 | Oats | 100,000 | 5 | 10 |
| 38 | Olives | 40,000 | 60 | 75 |


| 39 | Onions | 40,000 | 30 | 40 |
| :---: | :---: | :---: | :---: | :---: |
| 40 | Oranges | 3,200,000 | 90 | 95 |
| 41 | Pasture | 600,000 | $<2.5$ | <2.5 |
| 42 | Peaches | 100,000 | 55 | 70 |
| 43 | Peanuts | 300,000 | 25 | 35 |
| 44 | Pears | 100,000 | 65 | 90 |
| 45 | Peas, Green | 20,000 | 10 | 20 |
| 46 | Pecans | 400,000 | 35 | 45 |
| 47 | Peppers | 30,000 | 20 | 35 |
| 48 | Pistachios | 500,000 | 85 | 95 |
| 49 | Plums/Prunes | 200,000 | 70 | 85 |
| 50 | Pluots* | 1,000 | 65 | 90 |
| 51 | Pomegranates* | 40,000 | 70 | 90 |
| 52 | Potatoes | 90,000 | 10 | 20 |
| 53 | Pumpkins | 20,000 | 20 | 25 |
| 54 | Rice | 800,000 | 30 | 50 |
| 55 | Sorghum | 3,000,000 | 40 | 60 |
| 56 | Soybeans | 101,200,000 | 105 | 100 |
| 57 | Spinach | 1,000 | <2.5 | 10 |
| 58 | Squash | 10,000 | 20 | 40 |
| 59 | Strawberries | 10,000 | 10 | 20 |
| 60 | Sugar Beets | 1,300,000 | 60 | 100 |
| 61 | Sugarcane | 300,000 | 45 | 60 |
| 62 | Sunflowers | 1,100,000 | 60 | 75 |
| 63 | Sweet Corn | 100,000 | 15 | 25 |
| 64 | Tangelos | 9,000 | 55 | 80 |
| 65 | Tangerines | 60,000 | 65 | 80 |
| 66 | Tobacco | 10,000 | 5 | 10 |
| 67 | Tomatoes | 100,000 | 35 | 45 |
| 68 | Walnuts | 600,000 | 75 | 90 |
| 69 | Watermelons | 30,000 | 15 | 25 |
| 70 | Wheat | 8,600,000 | 25 | 70 |

All numbers are rounded.
$<500$ : less than 500 pounds of active ingredients.
$<2.5$ : less than 2.5 percent of crop is treated.
$<1$ : less than 1 percent of crop is treated.

* Based on CA DPR data only ( $80 \%$ or more of U.S. acres grown are in California).

SLUA data sources include:
USDA-NASS (United States Department of Agriculture's National Agricultural Statistics Service)
Private Pesticide Market Research
California DPR (Department of Pesticide Regulation)
These results reflect amalgamated data developed by the Agency and are releasable to the public.

