INSTRUCTIONS for California Pesticide Illness Query (CalPIQ)

This document explains how CalPIQ options work together to define an output report. Users first enter choices that determine which cases the report includes, then select which type of report to produce. By default, CalPIQ returns a report in which each row displays details of one case. The alternative is to produce a summary report. Summary reports provide case totals subdivided by additional user-selected variables.

CalPIQ makes available all cases evaluated by DPR scientists as definitely, probably, or possibly related to pesticide exposure.

A **case** is the PISP's representation of a pesticide exposure and its apparent effects on one individual's health.

A **possible** relationship indicates that health effects correspond generally to the reported exposure, but evidence is not available to support a relationship.

A **probable** relationship indicates that limited or circumstantial evidence supports a relationship to pesticide exposure.

A **definite** relationship indicates that both physical and medical evidence document exposure and consequent health effects.

When users make selections among the options presented, CalPIQ limits retrievals to cases that match the options selected. Users may select as many or as few criteria as needed to identify cases of interest.

USER OPTIONS

NOTE: Click on any variable name, and a box will appear on the right side of the page to display its definition and explanations of its available options.

CalPIQ will retrieve only records that match the criteria selected from the following list:

<u>Start Year and End Year</u>

Select a *Start Year* and an *End Year* to set the years from which to retrieve data. If you set both *Start Year* and *End Year* to the same year, CalPIQ will retrieve only data for that year. If you set *Start Year* more recent than *End Year*, no records will be retrieved. The drop-down menus display all the years for which data are available.

Each case has an ID number composed of the year it was reported and a case number (assigned sequentially from '1' each year.) In any given year, there are typically some

reports of exposures that occurred late the preceding year. On rare occasions, reports may be delayed for more than a year.

Annual case totals represent the number of cases reported per year, which may differ from the number of exposures that occurred. Group episodes introduce a further complication. When a single event exposes several people, health effect reports may not reach DPR together; occasionally they arrive across more than one year. PISP assigns case numbers based on the year the reports arrived, but CalPIQ counts all the cases of each group episode in the year that the episode came to DPR's attention. For instance, three cases received during 1998 resulted from exposure episodes identified during 1997. CalPIQ will retrieve those three cases for reports that request 1997 data, but not for reports limited to 1998.

Agricultural (Ag) or Non-Agricultural (Non-Ag) sources of exposure?

If **Ag** is selected for the question "Agricultural (Ag) or Non-Agricultural (Non-Ag) sources of exposure?", the output will be limited to cases of exposure to pesticides intended to contribute to the production of agricultural commodities. Choosing **Non-Ag** retrieves cases from other exposure situations, such as manufacture, transport, sales, domestic use, etc. Choosing **Both** retrieves both **Ag** and **Non-Ag** cases.

County

Selecting a county (or several counties) limits retrievals to exposures that occurred in the selected county or counties. To select multiple counties, hold down the control (Ctrl) key and click on the county names. To delete a county while keeping other selections, hold down the control (Ctrl) key and click on the name of the county to drop. If you do not select a county (or counties), CalPIQ will search records from ALL counties.

Pesticide Criteria

Pesticide Category, *Pesticide Name* and *Intended Use* are mutually exclusive options for selecting records.

Pesticide Category: Major pesticide category such as insecticides or fumigants.

<u>Pesticide Active Ingredient</u>: DPR regulates pesticide products by their active ingredient, listed here by their common name. To find out what the active ingredient is in a brand-name product, you can search DPR's <u>product/label database</u>. A link to the database is available from the definition displayed on the input screen in response to clicking on the *Pesticide Active Ingredient* heading.

Intended Use: Function intended for the pesticide at the time of exposure. These are similar to pesticide categories but more detailed, including options such as "insect growth regulator" and "pheromone."

CalPIQ supports selection of multiple entries for *Pesticide Name* or *Intended Use*. Selection of multiple entries works the same as described for counties: Hold down the control (Ctrl) key and click entries to select or de-select them. Only one *Pesticide Category*, however, may be selected for a query.

If *Pesticide Name* is used, the *Only Implicated Pesticide?* box appears. Checking this box retrieves only cases in which DPR scientists identified (one of) the user-selected pesticide(s) as the only credible pesticide contributor to ill health.

Incident Setting, Application Site, Exposure Type and Activity

CalPIQ supports selection of multiple values for each of these variables. To select multiple criteria, hold down the control (Ctrl) key and click entries to select or de-select them. The options for *Exposure* and *Activity* are all included in the definitions displayed by clicking on those headings. If no selections are entered for these variables, CalPIQ will retrieve all records eligible based on other criteria.

NOTE: Most selection criteria default to "ALL". Not making a selection from these criteria retrieves the maximum number of case records, and may slow processing.

OUTPUT OPTIONS

Detailed Listing

Unless *Generate Summary Report* is selected, CalPIQ returns a case list that includes:

- The year the case was identified,
- The case number, PISP case numbers are assigned sequentially from "1" each year.
- The county where exposure occurred,
- The relationship between pesticide exposure and illness, A **possible** relationship indicates that health effects correspond generally to the reported exposure, but evidence is not available to support a relationship.

A **probable** relationship indicates that limited or circumstantial evidence supports a relationship to pesticide exposure.

A **definite** relationship indicates that both physical and medical evidence document exposure and consequent health effects.

• The number of workdays lost and the number of days hospitalized, Only full days are counted to determine the number of days lost from work or spent in a hospital. An entry of **Indeterminate** indicates that workdays were lost or hospitalization occurred, but the time period is not known.

An entry of **Unknown** indicates that case investigation did not supply information on workdays lost or hospitalization incurred.

- Whether the case is agricultural (Ag) or non-agricultural (Non-Ag), The abbreviation 'Ag' stands for 'Agricultural' and indicates pesticide use intended to contribute to production of an agricultural commodity. All other situations are designated 'Non-Ag'.
- The pesticide(s) involved,
- The application site(s),
- A medical description of health effects, and
- A brief narrative description.

Explanatory information is also provided as footnotes at the end of every Detailed Listing.

Summary Reports

Selecting *Generate Summary Report* summarizes data based on criteria selected from the *Available Variables* box. Clicking the '>' arrow transfers highlighted variables to the *Selected Variables* box. Variables may be transferred back to the *Available Variables* box by highlighting them and clicking the '<' arrow.

For each value or unique combination of values of the selected variables, the summary report will display:

- The total numbers of cases,
- The number of cases with disability days,
- The number of cases with hospitalization,
- The total days of disability, and
- The total days of hospitalization.

For hospitalization and disability, cases identified as **Indeterminate** will be counted as one day. Cases identified as **Unknown** will not be counted as having spent time hospitalized or away from work.

When *year* is the only summary variable selected, the output will also include the number of each year's events (whether one person was affected or many) that met report inclusion criteria. This cannot be provided for other summary variables, because the same event could qualify in more than one output category (e.g., drift could affect both field workers and passers by).

If a single summary variable is selected, the output will consist of a row for each value of the selected variable. Rows will be in alphabetical order by the values of the summary variable. For instance, in reports that summarize by activity, the first row displays totals of cases in which **applicators** were affected, followed by a row for affected **emergency responders**. If a second summary variable is added, rows display totals for each unique combination of values. For example, if data are summarized by activity and type of

exposure, the first row is for **applicators** exposed to **direct spray**. The next is **applicators** exposed to **drift**, and so on. If exposure type is selected first, followed by activity, the first row still contains **direct spray** exposures of **applicators**. The next, however, would be **direct spray** of **emergency responders** (if any occurred).

Output Format

Unless *Format output for MS Excel* is selected, results are provided in html format. This applies both to detailed reports and to summary reports.