## Appendix E. Example Output from T-REX and T-HERPS

## 1. T-REX: Summary of Risk Quotient Calculations Based on Upper-Bound Kenaga EECs

Table X. Upper Bound Kenaga, Acute Avian Dose-Based Risk Quotients

|                       |                  |         |       |            |      | EECs and                        | RQs  |   |      |            |      |
|-----------------------|------------------|---------|-------|------------|------|---------------------------------|------|---|------|------------|------|
| Size Class<br>(grams) | Adjusted<br>LD50 | Short ( | Grass | Tall Grass |      | Broadleaf Plants/ Small Insects |      | Fruits/Pods/<br>Seeds/<br>Large Insects |      | Grani vore |      |
|                       |                  | EEC     | RQ    | EEC        | RQ   | EEC                             | RQ   | EEC                                     | RQ   | EEC        | RQ   |
|                       |                  |         |       |            |      |                                 |      |   |      |            |      |
| 20                    | 1038.45          | 2310.14 | 2.22  | 1058.82    | 1.02 | 1299.46                         | 1.25 | 144.38                                  | 0.14 | 32.09      | 0.03 |
| 100                   | 1322.00          | 1317.34 | 1.00  | 603.78     | 0.46 | 741.01                          | 0.56 | 82.33                                   | 0.06 | 18.30      | 0.01 |
|                       |                  |         |       |            |      |                                 |      |   |      |            |      |
| 1000                  | 1867.37          | 589.79  | 0.32  | 270.32     | 0.14 | 331.76                          | 0.18 | 36.86                                   | 0.02 | 8.19       | 0.00 |

| Table? | X. Upper B | Sound Kena | <u> </u> | cute Avia<br>ECs and |         | y Based R                  | Risk Quot              | ients |
|--------|------------|------------|----------|----------------------|---------|----------------------------|------------------------|-------|
|        | Short      | Grass      | Tall (   | Grass                | Pla     | adleaf<br>ints/<br>Insects | Fruits<br>See<br>Large |       |
| LC50   | EEC        | RQ         | EEC      | RQ                   | EEC     | RQ                         | EEC                    | RQ    |
| 501    | 2028.40    | 4.05       | 929.68   | 1.86                 | 1140.98 | 2.28                       | 126.78                 | 0.25  |

Size class not used for dietary risk quotients

| Table          | X. Upper l | Bound Ken | aga, Chro | nic Avia | n Dietary | Based R                    | isk Quoti | ents                      |
|----------------|------------|-----------|-----------|----------|-----------|----------------------------|-----------|---------------------------|
|                |            |           | E         | ECs and  | RQs       |                            |           |                           |
|                | Short      | Grass     | Tall (    | Grass    | Pla       | ndleaf<br>ints/<br>Insects | See       | /Pods/<br>eds/<br>Insects |
| NOAEC<br>(ppm) | EEC        | RQ        | EEC       | RQ       | EEC       | RQ                         | EEC       | RQ                        |
| 60             | 2028.40    | 33.81     | 929.68    | 15.49    | 1140.98   | 19.02                      | 126.78    | 2.11                      |

Size class not used for dietary risk quotients

|                       | Table            | X. Upper I | Bound Ke | en aga, Ac | ute Mar | nmalian D                | ose-Bas | ed Risk (              | Quotient | s          |      |
|-----------------------|------------------|------------|----------|------------|---------|--------------------------|---------|------------------------|----------|------------|------|
|                       |                  |            |          |            |         | EECs and                 | RQs     |                        |          |            |      |
| Size Class<br>(grams) | Adjusted<br>LD50 | Short (    | Grass    | Tall (     | Grass   | Broad<br>Plan<br>Small I | nts/    | Fruits<br>See<br>Large |          | Grani vore |      |
|                       |                  | EEC        | RQ       | EEC        | RQ      | EEC                      | RQ      | EEC                    | RQ       | EEC        | RQ   |
| 15                    | 248.35           | 1933.92    | 7.79     | 886.38     | 3.57    | 1087.83                  | 4.38    | 120.87                 | 0.49     | 26.86      | 0.11 |
| 35                    | 200.95           | 1336.60    | 6.65     | 612.61     | 3.05    | 751.84                   | 3.74    | 83.54                  | 0.42     | 18.56      | 0.09 |
| 1000                  | 86.92            | 309.90     | 3.57     | 142.04     | 1.63    | 174.32                   | 2.01    | 19.37                  | 0.22     | 4.30       | 0.05 |

| Table X | . Upper Bo | und Kenag |        | Mammali<br>ECs and |         | ry Based 1                 | Risk Quo | otients                   |
|---------|------------|-----------|--------|--------------------|---------|----------------------------|----------|---------------------------|
| LC50    | Short      | Grass     | Tall ( | Grass              | Pla     | adleaf<br>ints/<br>Insects | Sec      | /Pods/<br>eds/<br>Insects |
| (ppm)   | EEC        | RQ        | EEC    | RQ                 | EEC     | RQ                         | EEC      | RQ                        |
|         |            |           |        |                    |         |                            |          |                           |
| 0       | 2028.40    | #DIV/0!   | 929.68 | #DIV/0!            | 1140.98 | #DIV/0!                    | 126.78   | #DIV/0!                   |

Size class not used for dietary risk quotients

| Table X. | Upper Bou | nd Kenaga | , Chronic | Mamma   | lian Diet | ary Based | l Risk Qu | otients |
|----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|---------|
| NOAEC    |           |           | E         | ECs and | RQs       |           |           |         |
|          | Short     | Grass     | Tall (    | Grass   | Broa      | adleaf    | Fruits    | /Pods/  |
| (ppm)    | EEC       | RQ        | EEC       | RQ      | EEC       | RQ        | EEC       | RQ      |
| 30       | 2028.40   | 67.61     | 929.68    | 30.99   | 1140.98   | 38.03     | 126.78    | 4.23    |

Size class not used for dietary risk quotients

|                       | Table             | X. Upper F | Bound Ke | naga, Ch | ronic Ma | ammalian                | Dose-Ba | sed Risk                                | Quotien | ts        |      |
|-----------------------|-------------------|------------|----------|----------|----------|-------------------------|---------|---|---------|-----------|------|
|                       |                   |            |          |          |          | EECs and                | l RQs   |   |         |           |      |
| Size Class<br>(grams) | Adjusted<br>NOAEL | Short (    | Grass    | Tall (   | Grass    | Broa<br>Plai<br>Small l | nts/    | Fruits/Pods/<br>Seeds/<br>Large Insects |         | Granivore |      |
|                       |                   | EEC        | RQ       | EEC      | RQ       | EEC                     | RQ      | EEC                                     | RQ      | EEC       | RQ   |
| 15                    | 3.30              | 1933.92    | 586.62   | 886.38   | 268.87   | 1087.83                 | 329.97  | 120.87                                  | 36.66   | 26.86     | 8.15 |
| 35                    | 2.67              | 1336.60    | 501.08   | 612.61   | 229.66   | 751.84                  | 281.86  | 83.54                                   | 31.32   | 18.56     | 6.96 |
| 1000                  | 1.15              | 309.90     | 268.60   | 142.04   | 123.11   | 174.32                  | 151.09  | 19.37                                   | 16.79   | 4.30      | 3.73 |

## 2. T-HERPS: Summary of Risk Quotient Calculations Based on Upper Bound Kenaga ${\rm EECs}^{1,2}$

|                              |  | I                                     |                              |  |  | FFCs 2                        | nd RQs                |                       |                          |               |         |
|------------------------------|--|---------------------------------------|------------------------------|--|--|-------------------------------|-----------------------|-----------------------|--------------------------|---------------|---------|
| Size Class<br>(grams)        | Adjusted<br>LD50                                 | Broadleaf<br>Plants/<br>Small Insects |                              | Fruits/<br>See<br>Large I                                      | ds/  | Herbi<br>Mam                  | ivore                 | Insec<br>Man          | tivore<br>umal           | АнфІ          | nihians |
|                              |  | EEC                                   | RQ                           | EEC  | RQ   | EEC                           | RQ                    | EEC                   | RQ                       | EEC           | RQ      |
| 0.0                          | #NUM!  | #DIV/0!                               | #####                        | #DIV/0!  | #DIV/0!                                    | #DIV/0!                       | #####                 | #DIV/0!               | #DIV/0!                  | #DIV/0!       | #DIV/0! |
| 20                           | 0.00   | 42.18                                 | #####                        | 4.69   | #DIV/0!                                    | 1523.62                       | #####                 | 95.23                 | #DIV/0!                  | 30.83         | #DIV/0! |
| 0                            | #NUM!  | #DIV/0!                               | #####                        | #DIV/0!  | #DIV/0!                                    | #DIV/0!                       | #####                 | #DIV/0!               | #DIV/0!                  | #DIV/0!       | #DIV/0! |
| 1.050                        | D 17 . 4   | PD1                                   | Fruit                        | ts/Pods/   | ECs and                                    |                               |                       |                       |                          |               |         |
| LC50<br>(ррж)                | Broadleaf<br>Small b                             |                                       | Se                           |  | Herh                                       | ivore<br>ımals                |                       | tivore<br>umals       | Анфһ                     | ibians        |         |
|                              |  |                                       | Se                           | ts/Pods/<br>eeds/  | Herh                                       | ivore                         |                       |                       | Анфh<br>EEC              | ibians<br>RQ  |         |
| <b>(ррж)</b><br>501          | Small b<br>EEC<br>1280.9                         | RQ 2.6                                | Large<br>EEC<br>142.3        | ts/Pods/<br>eeds/<br>Insects<br>RQ<br>0.3                      | Herb<br>Man                                | ivore<br>umals                | Ман                   | unals                 |                          |               |         |
| <b>(ррж)</b><br>501          | Small b  | RQ 2.6                                | Large<br>EEC<br>142.3        | ts/Pods/<br>eeds/<br>Insects<br>RQ<br>0.3                      | Herb<br>Man                                | vivore<br>umals               | Man<br>EEC            | ımals<br>RQ           | EEC                      | RQ            |         |
| (pp:m) 501 Size class n      | Small b<br>EEC<br>1280.9                         | RQ<br>2.6<br>ietary risk              | EEC<br>142.3<br>quotient     | ts/Pods/ eeds/ e Insects  RQ  0.3 s                            | Herb Man EEC 2285.4                        | RQ<br>4.56                    | <b>Man EEC</b> 142.8  | RQ<br>0.3             | <b>EEC</b> 46.2          | <b>RQ</b> 0.1 |         |
| (ppm) 501 Size class n Table | EEC 1280.9 ot used for d                         | RQ 2.6 ietary risk und Kenag          | EEC 142.3 quotient  a, Chron | ts/Pods/ eeds/ e Insects  RQ  0.3 s                            | Herb Man EEC 2285.4 rial Herp ECs and Herb | RQ<br>4.56                    | Man EEC 142.8 Dietary | RQ<br>0.3             | EEC<br>46.2<br>sk Quotie | <b>RQ</b> 0.1 |         |
| (ppm) 501 Size class n       | EEC 1280.9 ot used for d  X. Upper Bo  Broadleaf | RQ 2.6 ietary risk und Kenag          | EEC 142.3 quotient  a, Chron | ts/Pods/ eeds/ e Insects  RQ 0.3 s tic Terrest Its/Pods/ eeds/ | Herb Man EEC 2285.4 rial Herp ECs and Herb | RQ<br>4.56<br>etofauna<br>RQs | Man EEC 142.8 Dietary | RQ<br>0.3<br>Based Ri | EEC<br>46.2<br>sk Quotie | RQ<br>0.1     |         |

Size class is not used for dietary-based (i.e., not dose-adjusted) EECs and RQs.

<sup>&</sup>lt;sup>2</sup> Although dose-based expsoure estimates were calculated for a 20 g terrestrial-phase CTS, dose-based RQs were not calculated because the dose-based toxicity endpoint for birds (as a surrogate for terrestrial-phase amphibians) was non-definitive (*i.e.*, "#####" or "#DIV/0!").