APPENDIX 4

FORMAT FOR COMPILATION OF *Tier I* QUALITY CHECKS

PART 1

SUMMARY REPORT- APPROPRIATE FOR STUDIES CONDUCTED IN ACCORDANCE WITH THE TEST GUIDELINES CURRENTLY SPECIFIED

EXAMPLE 1

1. Data requirement(s)	OECD point number: IIA 5.2.2 **Acute toxicity - dermal**
2. Reference point (location) in dossier	Section 3, point IIA 5.2.2 / 01
3. Authors (year) **Title** **Owner, Date**	F Keller (1991c) XXXX – Study of acute dermal toxicity in the rat. Organics Inc, unpublished report No 20417, July 05 1991 (c)
4. Testing facility	Organics Inc, Institute of Toxicology, Castlebar, Ireland, Report 10564
5. Dates of work	October 28, 1990 - December 4, 1990
6. Test substance	ISO common name: XXXX, Batch number: 17002/90, Purity: 93.6 %, Specification number 4 (Document J)
7. Test method	OECD 402 ≅ FIFRA § 81-2 ≅ EEC B.3 Deviations – analytical confirmation of the composition of the formulation was not available at the start of the study.
8. GLP	Yes (laboratory certified by the Irish Laboratory Accreditation Board, Glasnevin, Dublin 7, Ireland)

EXAMPLE 2

1. Data requirement(s)	OECD point number: IIA 5.2.3 **Acute toxicity - inhalation**
2. Reference point (location) in dossier	Section 3, point IIA 5.2.3 / 04
3. Authors (year) **Title** **Owner, Date**	J Parker (1990) XXXX – Study of acute inhalation toxicity in the rat. Organics Inc, unpublished report No 19806, December 12 1990
4. Testing facility	Organics Inc, Institute of Toxicology, Castlebar, Ireland, Report 9,703
5. Dates of work	May 29, 1990 to June 19, 1990
6. Test substance	ISO common name: XXXX, Batch number: 17002/90, Purity: 94.6 %, Specification number 4 (Document J)
7. Test method	OECD 403 ≅ EEC B.2 Deviations – Statistics: AP Rosiello JM Essigmann and GN Wogan (1977), modified by Pauluhn (1983), based on the CI Bliss Maximum Likelihood method (1938)
8. GLP	Yes (laboratory certified by the Irish Laboratory Accreditation Board, Glasnevin, Dublin 7, Ireland) Glasnevin, Dublin 7, Ireland)

EXAMPLE 3

1. Data requirement(s)	OECD point number: IIA 5.3.2 **Subchronic toxicity in rats**
2. Reference point (location) in dossier	Section 3, point IIA 5.3.2 / 02
3. Authors (year) **Title** **Owner, Date**	Eiben R and E Hartmann (1992) XXXX – Subchronic toxicity study in wistar rats (thirteen-week administration in the diet with a four-week recovery period). Organics Inc, unpublished report No 21627, August 18 1992
4. Testing facility	Organics Inc, Institute of Toxicology, Castlebar, Ireland, Report No 11,204
5. Dates of work	October 10, 1990 - February 04, 1991
6. Test substance	ISO common name: XXXX, Batch number: 17002/90, Purity: 93.6 %, Specification number 4 (Document J)
7. Test method	OECD 408 ≅ FIFRA § 83-1 ≅ EEC Directive 88/302/EEC, OJ No L 133 of 30 May 1988 Deviations – none
8. GLP	Yes (laboratory certified by the Irish Laboratory Accreditation Board, Glasnevin, Dublin 7, Ireland)

EXAMPLE 4

1. Data requirement(s)	OECD point number: IIA 5.3.3 **Subchronic toxicity - dog**
2. Reference point (location) in dossier	Section 3, point IIA 5.3.3 / 04
3. Authors (year) **Title** **Owner, Date**	R D Jones and L E Elcock (1994) XXXX: 13-Week subchronic feeding study in beagle dogs. Organics Inc, unpublished report No MR7442, December 07 1994
4. Testing facility	Organics Inc, Institute of Toxicology, Castlebar, Ireland, Report No 13,256
5. Dates of work	November 05, 1991 - February 06, 1992
6. Test substance	ISO common name: XXXX, Batch number: 17002/90, Purity: 93.5 % - 94.9 %, Specification number 4 (Document J)
7. Test method	FIFRA § 82-1 ≅ OECD 409 ≅ EEC Directive 88/302/EEC, Part B, OJ No L 133 of 30 May 1988 Deviations – none
8. GLP	Yes (laboratory certified by the Irish Laboratory Accreditation Board, Glasnevin, Dublin 7, Ireland)

EXAMPLE 5

1. Data requirement(s)	OECD point number: IIA 8.1.2 **Short term toxicity to birds**
2. Reference point (location) in dossier	Section 6, point IIA 8.1.2 / 03
3. Authors (year) **Title** **Owner, Date**	R Grandy (1995) XXXX technical – 5-day dietary LC_{50} to mallard duck Organics Inc, unpublished report No GMU/VE-006, April 5 1995
4. Testing facility	Organics Inc, Institute for Environmental Research, Goresbridge, County Kilkenny, Ireland, Report 24,123
5. Dates of work	May 12 – 20, 1994
6. Test substance	ISO common name: XXXX, Batch No. 898114002, Purity: 96.6 %, Specification number 3 (Document J)
7. Test method	OECD 205 ≅ EPA 71-2 Deviations – none
8. GLP	Yes (laboratory certified by the Irish Laboratory Accreditation Board, Glasnevin, Dublin 7, Ireland)

EXAMPLE 6

1. Data requirement(s)	OECD point number: IIA 8.10.1 **Effects on soil non-target micro-organisms**
2. Reference point (location) in dossier	Section 6, point IIA 8.10.1 / 03
3. Authors (year) **Title** **Owner, Date**	J Nielson (1993) Influence of XXXX SC 400 on microbial nitrogen mineralization in soil. Organics Inc, unpublished report No. AJO/113193, December 13 1993
4. Testing facility	Organics Inc, Institute for Environmental Research, Goresbridge, County Kilkenny, Ireland, Report 23,123
5. Dates of work	September 13, 1993 to November 9, 1993
6. Test substance	XXXX SC 400, Batch 089A from 04023/0021, contents 424.0 g as/l, Specification number 3 (Document J)
7. Test method	1. Guidelines for the Official Testing of Plant Protectants, Part VI, 1-1 "Influence on the Activity of the Soil Microflora", BBA Braunschweig, Germany, March 1990 (2nd ed.). 2. ISO/DIS 1036-6: 1992, Soil Quality - Sampling - Part 6: Guidance on the Collection, Handling and Storage of Soil for the Assessment of Aerobic Microbial Processes in the Laboratory Deviations – none
8. GLP	Yes (laboratory certified by the Irish Laboratory Accreditation Board, Glasnevin, Dublin 7, Ireland)

PART 2

DETAILED REPORT - APPROPRIATE FOR STUDIES NOT CONDUCTED IN ACCORDANCE WITH THE TEST GUIDELINES CURRENTLY SPECIFIED

EXAMPLE 1

Active Substance: XXX 1111	**OECD data point addressed:** IIA 5.2.2	**Acute toxicity - percutaneous**

Note: The report contains data on acute toxicity using different routes of application. In the dossier it is filed in each relevant section - ..... (oral toxicity); ..... (dermal toxicity); ..... (inhalation toxicity); ..... (skin irritation); ..... (eye irritation); ..... (subcutaneous toxicity); ..... (intraperitoneal toxicity).

2 Reference point: Section 3, point IIA 5.2.2 / 03

3.1 Authors: Report: X Xxxxxxx, X Xxxxxxxxxxxx
Summary: X Xxxxxxxxxxx

3.2 Title: XXX 1111 - Acute Toxicity Studies

3.3 Owner: xxxxxxxx

3.4 Published: no

3.5 Report No: xxxxx file No 0000

3.6 Date of report: January 7 1980

4.1 Testing facility: Xxxxxxxxx, Xxxxxxxxxxxx, Xxxxxxxxxxxxxx, Xxxxxxxxx

4.2 Lab. report No: xxxxxxxx

5.1 Dates of experimental work: February 1979 - August 1979

5.2 Objectives: Investigation of acute dermal toxicity in rats

6.1 Test substance: XXX 1111, active substance as manufactured, 97.5 % pure, batch number: xxx

6.2 Specification: as given in document J - specification number 5

Example 1 Acute toxicity - percutaneous

6.3 Storage stability: not applicable (single treatment only)

6.4 Stability in vehicle: not applicable

6.5 Homogeneity in vehicle: not applicable

6.6 Validity: not applicable

6.7 Physical form: oily, viscous mass with crystalline parts

6.8 Vehicle/solvent: none (undiluted application)

7.1 Test method: In house method according to the method of Noakes and Sanderson, 1969. At the time the study was performed, no particular method was compulsory. For details on the method used see description below.

7.2 Justification: The experiment was performed and complied to a great extent to then in force EPA Guidelines (Proposed Guidelines for Registering Pesticides in the US, Federal Register, Vol 43, No 163, August 22, 1978). The method used differs from the prescribed method (OECD 402) in the following respects ...., differences which do not compromise the scientific validity of the results obtained.

7.3 Copy of method: a description of method is included in study report

7.4 Choice of method: not applicable

7.5 Deviations: see details below

8.1 Certified laboratory: not applicable

8.2 Certifying authority: not applicable

8.3 GLP: no

8.4 Justification: When the study was performed, GLP was not compulsory.

9.1 GEP: not applicable

9.2 Type of Facility (official or officially recognized): not applicable

Example 1 Acute toxicity - percutaneous

9.3 Justification: not applicable

10 Test system:

Animal species:	Wistar rat (TNO/W 74)
Source:	Winkelmann, Borchen, Germany
Number of animals:	10 male, 15 female (5 / 10 per group)
Dosage:	2500 and 5000 mg/kg bw
Administration:	dermal over 24 hours - removal of the compound from the skin with lukewarm tap water and soap.
General observations:	After administration, all animals were kept under observation for 14 days.
Recording periods:	0 - 14 days, body weight: day 0, 7, 14

11 Statistics: not applicable

12.1 References: Noakes and Sanderson, 1969

13 Unpublished data: no unpublished data cited in this summary

EXAMPLE 2

Active substance: XXX 1111 **OECD data point addressed:** IIA 5.3.2 **Short term oral toxicity - 90 day**

2	**Reference point:**	Section 3, point IIA 5.3.2 / 01
3.1	**Authors:**	Report: X Xxxxxxxxx X Xxxxxxxxxxx Addendum: X Xxxxxx Summary: X Xxxxxxxxxxxx
3.2	**Title:**	XXX 1111 sub-chronic toxicity study on rats (three-month feeding experiment), and histopathological addendum
3.3	**Owner**	xxxxxxxxx
3.4	**Published:**	no
3.5	**Report No:**	xxxxxxx file No 0000 (report), 0000 (addendum)
3.6	**Date of report:**	June 4 1980 (report), January 29 1981 (addendum)
4.1	**Testing facility:**	Xxxxxxxxxxxx, Xxxxxxxxxxxxx, Xxxxxxxxxxxxxxxxxxxxxxx, Xxxxxxxxxx
4.2	**Lab. report No:**	xxxxx
5.1	**Dates of experimental work:**	November 1979 - February 1980
5.2	**Objectives:**	as title
6.1	**Test substance:**	XXX 1111, active substance as manufactured, 97.5 % pure, batch number: xxx
6.2	**Specification:**	as given in document J - specification number 4
6.3	**Storage stability:**	analysis performed at the beginning and at the end of the experimental phase, demonstrated that the active substance was stable.
6.4	**Stability in vehicle:**	analysis of diet conducted at the beginning of the study and twice during the experimental phase confirmed the stability of the active substance in the diet.
6.5	**Homogeneity in vehicle:**	Confirmed by concentration check: several sub-samples were measured and compared.
6.6	**Validity:**	not applicable

6.7 Physical form: pulverised chow

6.8 Vehicle / solvent: 50% premix in Wessalon S (= silica, CAS 7631-86-9) followed by dietary admixture to the food Altromin®

7.1 Test method: The method used was an in-house method. For details on the method used, see the description under 12 below.

7.2 Justification: When the study was performed, no particular method was compulsory. The method used complied to a great extent to then in force EPA Guidelines (Proposed Guidelines for Registering Pesticides in the US Federal Register, Vol. 43, No. 163, August 22, 1978). The method used differs from the prescribed method (OECD 408) in the following respects - brain weight was not recorded, skin and parathyroid were not investigated histologically. These deviations do not limit or impair the scientific validity of the study. The study design permits an accurate setting of a NOAEL and an elucidation of all relevant toxic effects.

7.3 Copy of method: Description of method used is included in the report. For details see also description below at point 12.

7.4 Choice of method: not applicable

7.5 Deviations: not applicable

8.1 Certified laboratory: not applicable

8.2 Certifying authority: not applicable

8.3 GLP: no

8.4 Justification: When the study was performed, GLP was not compulsory.

9.1 GEP: not applicable

9.2 Type of Facility (official or officially recognized): not applicable

9.3 Justification: not applicable

Example 2 Short term oral toxicity - 90 day

10 Test system -	**Animal species:**	Wistar rats (TNO W. 74)
	Source:	Winkelmann, Borchen, Germany
	Number of animals:	120 male, 120 female (30 per dosage group including two satellite groups of 5 animals each for testing possible enzyme induction at 7 and 28 days)
	Dosage (as):	0, 50, 100 and 500 ppm corresponding to: 3.24, 8.39 and 28.52 mg/kg bw/day in males, and 3.70, 9.83 and 32.97 mg/kg bw/day in females
	Administration:	oral by feeding
	Duration:	3 months
	General observations:	daily check for mortality and moribundity, daily cage-side observations for toxic signs (all animals)
	Food consumption:	measured weekly
	Body weight:	measured weekly
	Haematology:	erythrocyte count, leucocyte count, haemoglobin, MCV, MCH, MCHC, thrombocyte count, haematocrit, differential blood count, thromboplastin time (1, 3 months after initiation of treatment; 5 male and 5 female per group)
	Clinical chemistry:	alkaline phosphatase, aspartate aminotransferase, (blood) alanine aminotransferase, creatinine, urea, blood sugar, cholesterol, bilirubin, total protein (1, 3 months after initiation of treatment), glutamate dehydrogenase (only at termination of study; 5 male and 5 female per group)
	Enzyme induction assays:	N-demethylase activity, O-demethylase activity, cytochrome P 450 content (7 days, 28 days, 3 months; 5 male and 5 female per group)
	Urinalysis:	glucose, blood, protein, pH, ketone bodies, bilirubin, deposits (1, 3 months after initiating of the study; 5 male and 5 female per group)
	Gross pathology:	all animals which died during the study and all surviving rats; sacrifice via exsanguination in deep diethyl ether anaesthesia
	Organ weights:	thyroid, thymus, heart, lungs, liver, spleen, kidneys, adrenals, testes, ovaries (end of treatment; all animals)

Histopathology: heart, lungs, liver, spleen, kidneys, pancreas, pituitary, thyroid, adrenals, testes, epididymides, prostate, seminal vesicles, ovaries, uterus, salivary glands, oesophagus, stomach, intestines (4 sections), lymph nodes, thymus, urinary bladder, brain, eyes, aorta, trachea, skeletal muscle, femur, bone marrow.

Histopathology was performed on 19 males and 20 females of the control group as well as on 20 males and 20 females of the highest dose group. The livers of 15 males and 15 females in the 30 ppm group and 15 males and 14 females in the mid group (100 ppm) were also examined.

11 Statistics: The values of the treated groups were compared with the control values by the Wilcoxon-Mann-Whitney U-test at the levels of significance $\alpha = 5\%$ and $\alpha = 1\%$.

12.1 References: no publications cited in this summary

13 Unpublished data: no unpublished data cited in this summary

EXAMPLE 3

Active substance: XXX 1111 **OECD data point addressed:** IIA 6.2.1 **Metabolism, distribution and expression of residue in plants**

2 Reference point: Section 4, point IIA 6.2.1 / 03

3.1 Authors: Report: XX Xxxxxxx XX Xxxxx Summary: X Xxxxxxxxx

3.2 Title: Metabolism of XXX 1111 in potatoes

3.3 Owner: xxxxxxx

3.4 Published: no

3.5 Report No: xxxxxxxx File No.: 123456

3.6 Date of report: November 22, 1983, revised December 1, 1986

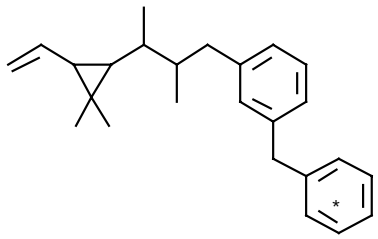
4.1 Testing facility: Xxxxxxxxx Xxxxxxxxxxx Xxxxx, Xxxxxxxxx, Xxxxxx

4.2 Lab. report No: not applicable

5.1 Dates of experimental work: September, 1982 to April, 1983

5.2 Objectives: To determine the overall fate of XXX 1111 in mature potato plants; only the fluorophenoxy-benzyl portion of the compound was investigated since this portion is unique to XXX 1111

6.1 Test substance: ISO common name: XXX 1111, 99.8 % pure, batch number xxxx
Label: phenyl-UL-^{14}C



* indicates label position

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6.2 Specification: Radiochemical purity: 99 %, 23.65 mCi/mmole

The compound used was a mixture of 4 diastereoisomeric enantiomers and had a *cis / trans* ratio of approximately 00/00, similar to that of the commercial material, which is approximately 00/00.

6.3 Storage stability: not applicable

6.4 Stability in vehicle: not applicable

6.5 Homogeneity in vehicle: not applicable

6.6 Validity: not applicable

6.7 Physical form: emulsifiable concentrate

6.8 Vehicle/solvent: 200 EC xylene formulation carrier

7.1 Test method: In house method. Guidelines were not available at the time the test was performed.

7.2 Justification: The method was developed following discussions with regulatory officials from several European authorities and from EPA. The method used is consistent in all important respects to the methodology currently employed.

7.3 Copy of method: description of methods included in report

7.4 Choice of method: not applicable

7.5 Deviations: not applicable

8.1 Certified laboratory: not applicable

8.2 Certifying authority: not applicable

8.3 GLP: no

8.4 Justification: when the study was performed, GLP was not required

9.1 GEP: not applicable

9.2 Type of Facility (official or officially recognized): not applicable

9.3 Justification: not applicable

Appendix 4	Format for Compilation of *Tier 1* Quality Checks	Part 2	Detailed Report - appropriate for studies not conducted in accordance with the test guidelines currently specified

Example 3 Metabolism, distribution and expression of residues in plants

Company name	Month and year	Active Substance (XXX 1111)	OECD data point: IIA 6.2 page of

10 Test system:	**Test plants:**	seed potatoes (*Solanum tuberosum*)
	Test conditions:	greenhouse
	Time of treatment:	60 days after planting (initiation of blooming)
	Method of application:	spray (soil surface covered during treatment)
	Applied rate:	40 g as/40 l/ha (20.1 mg of [^{14}C] XXX 1111 in 0.1 ml of 200 EC xylene carrier dissolved in 19 ml of water)
	corresponding to:	approx. 100 g as/100 l/ha
	Sampling:	0, 42, 52, 80 and 98 days post treatment
	Analytical methods:	extraction with xxxx, filtered, liquid liquid extraction into xxxx, florisil column chromatography, followed by thin-layer chromatography and co-chromatography of standards, one-dimension on silica gel plates
	Radioactive areas on plates:	autoradiography
	Non-radioactive standards:	fluorescence quenching under short wavelength ultraviolet light.
	Radioassay:	Triton X-100 scintillation fluid, liquid scintillation spectrometer.
11 Statistics:	not applicable	
12.1 References:	no publications cited in this summary	
13 Unpublished data:	no unpublished data cited in this summary	

EXAMPLE 4

Active substance: XXX 1111 **OECD data point addressed:** IIA 7.4.5 **Aged residue column leaching study**

2 Reference point: Section 5, point IIA 7.4.5 / 01

3.1 Authors: Report: X Xxxxxxxx X Xxxxxxxxxxx
Summary: X Xxxxxxx

3.2 Title: Leaching characteristics of substance aged in soil

3.3 Owner: xxxxxxxx

3.4 Published: no

3.5 Report No: Company file No: 00000

3.6 Date of report: September 27, 1985

4.1 Testing facility: Xxxxxxxxxxxxxx, Xxxxxxxxxxxxxx, Xxxxxxxx, Xxxxxxxxxxxxxx

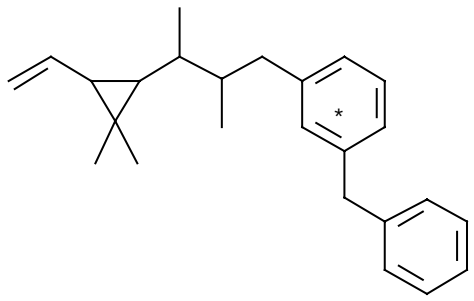
4.2 Lab. report No: not applicable

5.1 Dates of experimental work: August 1984 to January 1985

5.2 Objectives: as title

6.1 Test substance: ISO common name: XXX 1111,

a) radiolabelled: fluorobenzene-U-^{14}C, 99.8 % pure, batch number xxx.
Radiochemical purity: >00 %, 00 µCi/mg



* indicates label position

2

b) non-labelled: XXX 1111, as manufactured - used to increase the volume of the radiolabelled test material, 97.5 % pure, batch number xxxxxx

Example 4 Aged residue column leaching study

6.2 Specification:

a) radiolabelled: The compound used was a mixture of 4 diastereoisomeric enantiomers and had a *cis / trans* ratio of 00/00, similar to that of the commercial material, which is approximately 00/00.

b) non-labelled: as given in document J - specification No. 7

6.3 Storage stability: not applicable

6.4 Stability in vehicle: not applicable

6.5 Homogeneity in vehicle: not applicable (solution)

6.6 Validity: not applicable

6.7 Physical form: solution

6.8 Vehicle/solvent: acetone

7.1 Test method: Merkblatt (Bulletin) No 37 of BBA - corresponds with the recommended SETAC method

7.2 Justification: not applicable

7.3 Copy of method: not relevant

7.4 Choice of method: not applicable

7.5 Deviations: none

8.1 Certified laboratory: no

8.2 Certifying authority: not applicable

8.3 GLP: no

8.4 Justification: When the study was performed, GLP was not required.

9.1 GEP: no

9.2 Type of Facility (official or officially recognized): not applicable

9.3 Justification: not applicable

10 Test system:

BBA standard soil 2.1:	(pH 7.0; 0.69 % org. C; 10.7 % fine particles < 20µ) 22 °C, 40 % maximum water holding capacity
Concentration:	0.5 mg as/ kg soil
Sampling:	0, 30 and 90 days
Thin-layer-chromatography and co-chromatography of standards:	one-dimension on silica gel plates
Radioactivity measurement:	liquid scintillation counting (fluids), linear analyzer (plates) or combustion (soil)

11 Statistics: none

12.1 References: no publications data cited in this summary

13 Unpublished data: no unpublished data cited in this summary