# Format for submitting pursuant to Article 8 of the Stockholm Convention the information specified in Annex E of the Convention

| Introductory information   |   |  |  |
|--|---|--|--|
| Name of the submitting Party/observer  | Switzerland   |  |  |
| Contact details<br>(name, telephone,<br>e-mail) of the<br>submitting<br>Party/observer | Federal Office for the Environment<br>Substances, Soil and Biotechnology Division<br>Contact: Bettina Hitzfeld / Georg Karlaganis<br>bettina.hitzfeld@bafu.admin.ch / georg.karlaganis@bafu.admin.ch<br>+41 31 32 31768 |  |  |
| Chemical name (as used by the POPS Review Committee (POPRC))                           | Alpha hexachlorocyclohexane   |  |  |
| Date of submission   | 7 February 2007   |  |  |

| (a) Sources, including as appropriate (provide summary information and relevant references) |  |  |
|---|--|--|
| (i) Production data:  |  |  |
| Quantity  | No production  |  |
| Location  |  |  |
| Other   |  |  |
| (ii) Uses   | The only allowed use of any hexachlorocyclohexane isomer is gamma hexachlorocyclohexane (lindane) for medicinal purpose (see (f)). |  |
| (iii) Releases:   |  |  |
| Discharges  | No known releases  |  |
| Losses  |  |  |
| Emissions   |  |  |
| Other   |  |  |

| (b) Hazard assessment for endpoints of concern, including consideration of toxicological interactions involving multiple chemicals (provide summary information and relevant references) |
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| (c) Environmental fate (   | provide summary information and relevant references) |
|--|--|
| Chemical/physical properties   |  |
| Persistence  |  |
| How are chemical/physical properties and persistence linked to environmental transport, transfer within and between environmental compartments, degradation and transformation to other chemicals? |  |
| Bio-concentration or bio-<br>accumulation factor,<br>based on measured<br>values (unless<br>monitoring data are<br>judged to meet this need)   |  |

## (d) Monitoring data (provide summary information and relevant references)

Passive biomonitoring using lichen (*Parmelia sulcata*) in Switzerland See also file: HCHs\_Lichen study 2002 (map, graphical representation of values)

 $\mu g/kg dry substance (mean \pm SD)$ 

| Location                          | α-НСН         |
|-----------------------------------|---------------|
|                                   |               |
| Zurich (city)                     | $0.6 \pm 0.1$ |
| Lucerne (city)                    | $1.6 \pm 0.5$ |
| Lugano (city)                     | $0.8 \pm 0.2$ |
| St. Gallen (city)                 | $2.5 \pm 1.0$ |
| Duebendorf (urban agglomeration)  | $1.2 \pm 0.2$ |
| Basel (urban agglomeration)       | $1.3 \pm 0.4$ |
| Wallisellen (urban agglomeration) | $1.5 \pm 0.4$ |
| Wil (small town)                  | $0.9 \pm 0.5$ |
| Rorschach (small town)            | $4.0 \pm 3.8$ |
| Gossau (small town)               | $0.6 \pm 0.3$ |
| Thörishaus (industry)             | $1.6 \pm 0.6$ |
| Berne (industry)                  | $0.8 \pm 0.6$ |
| Zurich-North (industry)           | $0.7 \pm 0.3$ |
| Erstfeld (traffic)                | $1.5 \pm 1.1$ |
| Piotta (traffic)                  | $1.0 \pm 0.3$ |
| Schoenbuehl-Grauholz (traffic)    | $2.0 \pm 0.7$ |
| Haerkingen (traffic)              | $1.4 \pm 1.1$ |
| Haerkingen (away from traffic)    | $0.9 \pm 0.3$ |
| Thoerishaus-West (traffic)        | $1.8 \pm 2.2$ |
| Taenikon (rural)                  | $1.2 \pm 0.8$ |
| Payerne (rural)                   | $1.1 \pm 0.3$ |
| Hemmental (rural)                 | $3.8 \pm 2.9$ |
| Forst-Neuenegg (background)       | $0.5 \pm 0.2$ |
| Hagen-Randen (background)         | $1.1 \pm 0.3$ |
| Davos (alpine background)         | $1.1 \pm 0.5$ |

<u>Reference</u>: R. Herzig & C. Bieri: Persistente organische Luftschadstoffe (POPs) in der Schweiz. Umwelt-Materialien Nr. 146 Luft (2002). Publ.: Swiss Agency for the Environment, Forests and Landscape (now Federal Office for the Environment). German, English summary.

 $\frac{\text{http://www.bafu.admin.ch/publikationen/index.html?action=show\_publ\&lang=D\&id\_thema=18\&series=UM\&nr\_publ=146}$ 

| (e) Exposure in local areas (provide summary information and relevant references) |  |  |  |  |
|---|--|--|--|--|
| - general   |  |  |  |  |
| - as a result of<br>long-range<br>environmental<br>transport                      |  |  |  |  |
| - information<br>regarding bio-<br>availability                                   |  |  |  |  |

(f) National and international risk evaluations, assessments or profiles and labelling information and hazard classifications, as available (provide summary information and relevant references)

### Alpha hexachlorocyclohexane is prohibited in Switzerland

See also: http://www.bafu.admin.ch/chemikalien/01410/01411/index.html?lang=en

The following is an excerpt from the:

Ordinance on Risk Reduction related to the use of certain particularly dangerous substances, preparations and articles (Ordinance on Risk Reduction related to Chemical Products (ORRChem) of 18 May 2005

#### Annex 1.1

(Art. 3)

#### Halogenated organic compounds

#### 1 Prohibitions

#### 1.1 Substances and preparations

It is prohibited to manufacture, place on the market, import in a private capacity, or use:

- a. halogenated organic compounds within the meaning of section 3;
- b. substances and preparations that contain halogenated organic compounds within the meaning of section 3 that are not merely unavoidable impurities.

#### 3 List of prohibited halogenated organic compounds

- a. Aliphatic monocyclic systems
  - hexachlorocyclohexane (HCH, all isomers), with the exception of gamma-hexachlorocyclohexane (lindane, CAS no.15 58-89-9) in medicinal products.

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| (g) Status of the chemical under international conventions |   |  |  |
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