# ENVIRONMENT PROTECTION AUTHORITY NSW

# ENVIRONMENTALLY HAZARDOUS CHEMICALS ACT 1985 CHEMICAL CONTROL ORDER IN RELATION TO SCHEDULED CHEMICAL WASTES

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Commencement date: 11 June 2004

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# TITLE

1. This order may be cited as the "Scheduled Chemical Wastes Chemical Control Order 2004".

#### **AUTHORITY**

2. This order is made by the EPA under sections 22 and 23 of the *Environmentally Hazardous Chemicals Act 1995* on the recommendation of the Hazardous Chemicals Advisory Committee and is notified under section 21 of that Act. The terms of the Order follow.

Notes: This order repeals the "Scheduled Chemical Wastes Chemical Control Order 1994" and is remade in substantially the same way. The changes introduce new provisions for the use of scheduled chemical wastes including provisions that give effect to the recommendations of the national *Organochlorine Pesticides Waste Management Plan* (Australian and New Zealand Environment and Conservation Council 1999).

The scheduled chemical wastes regulated by this order include pesticides no longer registered for use within New South Wales or by-products of industrial practices no longer found in New South Wales. Current agricultural and industrial practices are therefore unlikely to directly produce further chemical wastes containing such chemicals, although these wastes would continue to be generated from activities such as the clean-up of former agricultural dip sites or former industrial properties.

This order does not cover the approval and registration of pesticides. Pesticides are registered or approved for use by the Australian Pesticides and Veterinary Medicines Authority.

#### COMMENCEMENT

3. This order commences on 11 June 2004.

#### **DEFINITIONS**

- 4. In this Order:
  - 4.1 *approved* means approved for the time being in writing by the EPA and explicitly for the purposes of this chemical control order;
  - 4.2 *article* means an object that is manufactured for use for a particular purpose, and contains one or more constituents, and is neither a chemical formulation nor a chemical container;
  - 4.3 concentration of the chemicals listed in Schedule A means the sum of the concentrations, if any, of all of the chemicals listed in Schedule A to this chemical control order;
  - 4.4 distribute means any of the following: to divide and bestow in shares, deal out, allot, to disperse through a space or over an area, spread, scatter or to divide into parts of distinct character;
  - 4.5 *environmentally sensitive area* means an area described in Schedule B to this chemical control order:
  - 4.6 EPA means the Environment Protection Authority, constituted by the Protection of the Environment Administration Act 1991 (NSW);

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- 4.7 harm has the same meaning as in the Contaminated Land Management Act 1997;
- 4.8 *licence* means a licence that is in force after having been granted under the Act, whether it is an original or a renewed licence;
- 4.9 liquid means any substance which is neither a solid nor a gas;
- 4.10 manufacturing includes the act of generating or producing scheduled chemical wastes;
- 4.11 *onsite* a reference to something being done in relation to scheduled chemical wastes onsite is a reference to that thing being done only on the premises on which the scheduled chemical wastes were generated;
- 4.12 *processing* means but is not limited to, an activity which transforms, destroys, recovers, separates or concentrates scheduled chemical wastes;
- 4.13 risk has the same meaning as in the Contaminated Land Management Act 1997;
- 4.14 scheduled chemical wastes means any liquid or solid waste that contains one or more of the chemicals listed in Schedule A to this chemical control order where the total concentration of those chemicals is more than two milligrams per kilogram;
- 4.15 solid means any substance that has an angle of repose of greater than five degrees (5°), has no free liquids, liberates no free liquids when transported, does not become free flowing at or below 60°C or when transported, and can be moved by spade at normal outdoor temperatures;
- 4.16 the Act means the Environmentally Hazardous Chemicals Act 1985;
- 4.17 waste has the same meaning as in the Protection of the Environment Operations Act 1997.

#### PROHIBITION OF PRESCRIBED ACTIVITIES

- 5. The act of manufacturing, processing, keeping, conveying, using, selling or disposing of scheduled chemical wastes, or any act related to any such act is prohibited unless it is otherwise permitted by, and carried out in accordance with the conditions of, this chemical control order.
- 6. Without limiting the generality of clause 5, manufacturing, processing, using or disposing of scheduled chemical waste includes the diluting of scheduled chemical wastes with any other substance to reduce the concentration of the chemicals listed in Schedule A of this chemical control order.

Note: This order is in addition to any other requirements under New South Wales and National legislation.

#### PRESCRIBED ACTIVITIES PERMITTED TO BE CARRIED ON

7. The following prescribed activities are permitted in accordance with the conditions set out in relation to each prescribed activity.

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# Manufacturing scheduled chemical wastes

- 8. The manufacture of scheduled chemical wastes is permitted subject to the conditions of this order.
- 9. The manufacture of scheduled chemical wastes is permitted by:
  - 9.1 processes that inevitably generate scheduled chemical wastes that are destroyed within the processes; or
  - 9.2 the removal of articles from service; or
  - 9.3 works associated with the remediation of contaminated sites; or
  - 9.4 works associated with the provision or maintenance of services (including, but not limited to, water, electricity, gas, sewerage and telecommunications) within the premises where the works are not associated with the remediation of the site; or
  - 9.5 the authority of and in accordance with the conditions of a licence.

# **Processing scheduled chemical wastes**

- 10. The processing of scheduled chemical wastes is permitted by:
  - 10.1 an approved method for the purposes of research and development; or
  - 10.2 an approved method under the authority of, and in accordance with, the conditions of a licence.

Notes: An approved method is a treatment process which has been assessed by the EPA to be consistent with the National Protocols for the treatment/disposal of Schedule X Wastes (Scheduled Wastes Management Group, 1994). All of the chemicals included in Schedule A of this order are also included in a list of persistent organic compounds referred to nationally as "Schedule X Wastes".

Processing for research and development purposes relates to benchscale work conducted under appropriate laboratory conditions involving small quantities of scheduled chemical waste.

- 11. The processing of scheduled chemical wastes must:
  - 11.1 leave only residues (including treated wastes) for which methods of disposal are available or options for use are permitted by this order; and
  - 11.2 minimise the release of wastes and emissions to the environment.
- 12. Any residue from the processing of scheduled chemical wastes, other than as permitted by clause 13, must contain a concentration of the chemicals listed in Schedule A of no more than two milligrams per kilogram, unless otherwise approved by the EPA.
- 13. Any residue from the processing of scheduled chemical wastes manufactured in accordance with clause 9.3, is permitted to contain a concentration of the chemicals listed in Schedule A that does not exceed fifty milligrams per kilogram, where the EPA provides an authorisation in writing that:

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- 13.1 in the EPA's opinion, the waste is co-contaminated with at least one chemical, not being a chemical listed in Schedule A; and
- 13.2 in the EPA's opinion, the concentration of the chemical that is not listed in Schedule A prevents the use of the waste onsite; and
- 13.3 in the EPA's opinion, it is not practicable to reduce the concentration of the chemical that is not listed in Schedule A to a level that would permit an acceptable onsite use.

# Keeping scheduled chemical wastes

- 14. The keeping of scheduled chemical wastes is permitted subject to the conditions of this order.
- 15. The occupier of any premises where, or in, or on which, scheduled chemical wastes are kept must ensure that any person handling scheduled chemical wastes is trained in handling scheduled chemical wastes and methods of containing scheduled chemical waste spills, and wears appropriate personal protective equipment.
- 16. All packages containing scheduled chemical wastes must be clearly marked to identify the scheduled chemical wastes that the package contains.
- 17. All packages containing scheduled chemical wastes must be maintained in good order. The contents of corroded or leaking packages must be immediately re-packed into sound packages, and any spillage immediately cleaned up.
- 18. Where more than 50 kilograms of scheduled chemical wastes in total is kept at any premises the occupier must ensure that:
  - 18.1 there is a clearly defined storage area for the scheduled chemical wastes; and
  - 18.2 conspicuous notices located on or adjacent to the storage area provide a warning that the storage area contains scheduled chemical wastes; and
  - 18.3 the scheduled chemical wastes storage area is sited and constructed to prevent any discharge of scheduled chemical wastes from the storage area into the external environment; and
  - 18.4 an adequate supply of appropriate personal protective equipment, clean-up material and equipment is readily available in a secure area external to the storage area.
- 19. Where one tonne or more of scheduled chemical wastes is kept at any premises it must be kept in an approved manner or in a storage facility under the authority of and in accordance with the conditions of a licence.
- 20. The occupier of a scheduled chemical wastes storage facility operated in accordance with clause 19 must ensure that:
  - 20.1 the storage facility is inspected at least monthly to determine whether any spill, leakage or unauthorised entry has occurred; and
  - 20.2 a log containing details of the personnel carrying out inspections, corresponding dates and reports of those inspections, is maintained at the storage facility.

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# Conveying scheduled chemical wastes

- 21. The conveying of scheduled chemical wastes is permitted subject to the conditions of this order.
- 22. A person must not convey scheduled chemical wastes in or on a vehicle, where the total concentration of the chemicals listed in Schedule A is 50 milligrams per kilogram or more, unless accompanying the vehicle there is personnel:
  - 22.1 trained in methods of containing spilled scheduled chemical wastes; and
  - 22.2 provided with appropriate personal protective equipment, clean-up material and equipment to deal with any spill.
- 23. The EPA must be notified as soon as is practicable, and in any case within 24 hours, by the person conveying the scheduled chemical wastes of any spill of scheduled chemical wastes occurring during the conveyance.
  - Note: These requirements are in addition to any obligations on waste transporters including under the *Protection of the Environment Operations Act 1997* and *Road and Rail Transport (Dangerous Goods) Act 1997* and their respective Regulations.

# Using scheduled chemical wastes

- 24. The use of scheduled chemical wastes is permitted subject to the conditions of this order.
- 25. The use of scheduled chemical wastes conducted in accordance with clauses 26, 27, 28 and 29 must not result in an unacceptable risk of harm to the environment or human health.
- 26. The use of scheduled chemical waste manufactured in accordance with clause 9.4 is permitted.
  - Note: Other requirements under the *Contaminated Land Management Act 1997* may apply, including notification under s.28 and s.60 or a covenant under s.29.
- 27. The use of scheduled chemical waste manufactured in accordance with clause 9.3 is permitted where the use is:
  - 27.1 subject of a notice or a voluntary remediation agreement and the conditions therein under the Contaminated Land Management Act 1997; or
  - 27.2 associated with a scheduled activity under the *Protection of the Environment Operations*Act 1997; or
  - 27.3 associated with a designated activity under the *Environmental Planning & Assessment Act* 1979.
- 28. The use of scheduled chemical waste manufactured in accordance with clause 9.3 and not covered by clauses 26 and 27 is permitted where the use is:
  - 28.1 onsite and is not in an environmentally sensitive area (see Schedule B); or
  - 28.2 onsite in an environmentally sensitive area (see Schedule B) and:

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- 28.2.1 the EPA forms the opinion that the basis for the site being an environmentally sensitive area has been satisfactorily addressed in determining the proposed use; or
- 28.2.2 the appropriate consent authority provides specific approval for the use having had regard to the requirements of this order.
- 29. Use of scheduled chemical waste other than those uses outlined in clauses 26, 27 and 28 is permitted by an approved method, under the authority of and in accordance with the conditions of a licence.

Note: Use includes use of soil containing scheduled chemical waste in a manner which does not necessitate the employment of barriers or other engineering structures which may be associated with the keeping or disposal of waste.

#### Selling scheduled chemical wastes

30. The sale of scheduled chemical wastes to an approved recipient is permitted.

#### Disposing of scheduled chemical wastes

31. The onsite disposal of scheduled chemical wastes is prohibited with the exception of solid scheduled chemical waste disposed of to a landfill lawfully permitted to receive such waste.

Note: The offsite disposal of scheduled chemical waste is regulated by the *Protection of the Environment Operations Act 1997*.

#### **REPEAL**

32. "Scheduled Chemical Wastes Chemical Control Order 1994" published in Government Gazette No. 139 of 14.10.1994 p. 6313 is repealed.

#### Savings and transitional

33. Any instrument issued under the Scheduled Chemical Wastes Chemical Control Order 1994 is taken to be issued under this Order and has effect according to its tenor.

Schedules A and B are part of the Scheduled Chemical Wastes Chemical Control Order 2004

# **SCHEDULE A**

Clauses that refer to schedule A include 4.3, 4.14, 12, 13, 13.1, 13.2, 13.3

Scheduled chemical wastes means any liquid or solid waste that contains one or more of the chemicals in the following list where the total concentration of those chemicals is more than two milligrams per kilogram.

CONSTITUENT (common name)	Chemical Abstract Registry Number
Aldrin	309-00-2
Benzene Hexachloride-α-isomer (α-BHC)	319-84-6
Benzene Hexachloride-β-isomer (β-BHC)	319-85-7
Benzene Hexachloride-γ-isomer (γ-BHC, Lindane)	58-89-9
Benzene Hexachloride-Δ-isomer (Δ-BHC)	319-86-8
Chlordane	57-74-9
4,4'-DDD (p,p'-DDD, DDD)	72-54-8
4,4'-DDE (p,p'-DDE, DDE)	72-55-9
4,4'-DDT (p,p'-DDT, DDT)	50-29-3
Dieldrin	60-57-1
Endrin	72-20-8
Endrin aldehyde	7421-93-4
Heptachlor	76-44-8
Heptachlor epoxide	1024-57-3
Hexachlorobenzene	118-74-1
Hexachlorophene	70-30-4
Isodrin	465-73-6
Pentachlorobenzene	608-93-5
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
1,2,4,5-Tetrachlorobenzene	95-94-3
2,3,4,6-Tetrachlorophenol	58-90-2
1,2,4-Trichlorobenzene	120-82-1
2,4,5-Trichlorophenoxy-acetic acid, salts and esters (2,4,5-T)	93-76-5

#### **SCHEDULE B**

Clauses that refer to schedule "B" include 4.5, 28.1, 28.2

#### **ENVIRONMENTALLY SENSITIVE AREAS**

#### Part A: Vulnerable areas

- A site in or within 250 m of an area of significant environmental or conservation value, as identified under relevant legislation, including areas reserved or dedicated in the National Parks and Wildlife Act 1974 (NP&W Act) such as:
  - National parks
  - Nature reserves
  - Historic sites
  - Areas covered by a conservation agreement
  - Other areas protected under this Act
- World heritage areas
- Wilderness areas identified or declared under the Wilderness Act 1987
- Items included on the register of national estate
- Marine reserves, aquatic reserves, marine national parks or nature reserves
- A site within an identified sensitive location within a drinking water catchment, being any site declared by an order under s.44 of the *Sydney Catchment Management Act* 1998 to be a 'special area'
- Lands within 3 km from the top of the water level of the following storages:
  - Wingecarribee Reservoir
  - Fitzroy Falls Reservoir
  - Tallowa Dam
- Any lands nominated as 'special areas' (or similar wording) by local government authorities (e.g. councils)
- A site within an area zoned under an environmental planning instrument for environmental protection purposes, e.g. high conservation, scenic, scientific, cultural or heritage value
- Areas mapped or identified for special protection under an environmental planning instrument including:
  - SEPP 14: Coastal Wetlands
  - SEPP 26: Littoral Rainforests
  - SEPP 58: Sydney Water Supply
  - SEPP 71: Coastal Protection
  - areas mapped as wetlands under REP 20: Hawkesbury-Nepean River
  - areas identified as core koala habitat under SEPP 44: Koala Habitat Protection; or

#### areas similarly protected

- A site located in a permanent or intermittent waterbody and/or in an area overlying an aquifer which contains groundwater which has high or very high vulnerability to pollution
- A site within a karst region (either protected under the NP&W Act or not), or with substrata which are prone
  to slippage
- An area within a floodway that may be subject to washout and/or inundation during a flood event that is up to a magnitude that reaches the 1 in 100 year contour in the applicable local flood map unless the area is protected by its own levee which is higher than the 1 in 100 year contour

#### Part B: Residential areas

A site within 250 m of:

- a residential zone
- a dwelling, school or hospital.

#### **Notes**

#### 1. Groundwater which has high or very high vulnerability to pollution

The Department of Infrastructure, Planning and Natural Resources (DIPNR) should be consulted to determine if the area which contains the site has been assessed as having high or very high vulnerability to groundwater pollution. For areas of the state that the DIPNR has not assessed, the vulnerability of the groundwater at a site should be assessed using the USEPA DRASTIC model (USEPA, 1987) and advice from the DIPNR.

#### 2. Definitions

Drainage depression means a level to gently inclined shallow, open depression with smoothly concave cross-section, rising to moderately inclined hillslopes.

Drainage line means a channel down which surface water naturally concentrates and flows which exhibit one or a combination of the following features:

- (a) evidence of active erosion or deposition, such as gravel, pebble, rock, sandbed, scour hole, nick points; or
- (b) an incised channel of more than 30 centimetres depth with defined bed and banks.

Dwelling means a room or suite of rooms occupied or used or so constructed or adapted to be capable of being occupied or used as a separate domicile.

Residential zone means land identified in an environmental planning instrument as being predominantly for residential use, including urban, village or living area zones, but excluding rural residential zones. Waterbody means

- (a) A natural water, including
  - i) a lake or lagoon either naturally formed or artificially modified; or
  - ii) a river or stream, whether perennial or intermittent, flowing in a natural channel with an established bed or in a natural channel artificially modifying the course of the stream
  - iii) a drainage line but excluding a drainage depression;
  - iv) tidal waters including any bay, estuary or inlet; or
- (b) an artificial waterbody, including any constructed waterway, canal, inlet, bay, channel, dam, pond or lake, but not including a dry detention basin or other construction that is only intended to hold water intermittently or an artificial waterbody associated with the facility; or
- (c) a natural wetland including marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a shallow waterbody (up to 2m in depth) when inundated cyclically, intermittently or permanently with fresh, brackish or salt water, and where the inundation determines the type and productivity of the soils and the plant and animal communities, or
- (d) an artificial wetland including marshes, swamps, wet meadows, sedgelands or wet heathlands that form a shallow waterbody (up to 2m in depth) when inundated cyclically, intermittently or permanently with water, and are constructed and vegetated with wetland plant communities, but does not include an artificial wetland associated with the site.

# 3. How distances are measured for the purposes of this Schedule

#### Site

In order to determine the boundary of a site, the area of the site is taken to be:

- (a) in relation to a site which is the subject of a development consent
  - i) the whole of the land to which the development consent applies, or
  - ii) if the development consent identifies part only of the land as the actual site, the part of the land so identified, or
- (b) in relation to a site which is not the subject of a development consent, all areas of the site where scheduled chemical waste is present or will be used.

# Environmentally sensitive areas

The distance from an environmentally sensitive area is to be measured as the shortest distance between the boundary of the area and the boundary of the site.

#### Waterbody

The distance from a waterbody is to be measured as the shortest distance between:

- (a) the top of the high bank, if present, or
- (b) if no high bank is present, then:
  - i) the mean high water mark in tidal waters; or
  - ii) the mean water level in non-tidal waters; or
  - iii) in the case of a wetland, the edge of vegetation communities dominated by wetland species; and the boundary of the site.