

REPUBLIC OF THE MARSHALL ISLANDS



ENVIRONMENTAL PROTECTION AUTHORITY

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PESTICIDES AND PERSISTENT ORGANIC POLLUTANTS (POPS) REGULATIONS

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REPUBLIC OF THE MARSHALL ISLANDS

ENVIRONMENTAL PROTECTION AUTHORITY

PESTICIDES AND TOXIC CHEMICAL SUBSTANCES REGULATIONS 2004

PART I – GENERAL PROVISIONS

1. Authority

a) These regulations are promulgated by the Republic of the Marshall Islands Environmental Protection Authority with the approval of the President pursuant to Sections 21 and 63 of the National Environmental Protection Act 1984.

b) These regulations supersede all previous publications and repeal 63 Trust Territory Chapter 13, Subchapter IV, Trust Territory Pesticides Regulations.

c) These regulations have the force and effect of law.

2. Purpose

The purpose of these regulations is to establish a system of control over the importation, distribution, sale, and use of pesticides by persons within the Republic of the Marshall Islands, and further, to restrict the use of twelve of the world's most highly toxic persistent organic pollutants ("POPS"), 9 of which are pesticides, one of which is an industrial chemical, and two of which are unintentional chemical by-products, all targeted by the United Nations Stockholm Convention on Persistent Organic Pollutants.

3. Effective Date

These regulations shall come into force one day after their approval by the Cabinet.

4. Interpretation

In these regulations, unless the context otherwise requires:

a) "Active ingredient" means:

- (i) in the case of a pesticide other than a plant regulator, defoliant, or desiccant, an ingredient which will prevent, destroy, repel, or mitigate any pest;
- (ii) in the case of a plant regulator, an ingredient which, through physiological action, accelerate or retard the rate of growth or rate of maturation or otherwise alter the behavior of ornamental or crop plants or their product;
- (iii) in the case of a defoliant, an ingredient which will cause the leaves or foliage to fall from a plant;
- (iv) in the case of a desiccant, an ingredient which will artificially accelerate the drying of a plant tissue.

b) "Adulterated" means any pesticide if its strength or purity falls below the professed standard of quality expressed on the labeling under which it is sold, or if any substance has been substituted wholly or in part for the pesticide, or if any valuable constituent of the pesticide has been wholly or in part abstracted.

c) "Agricultural commodity" means any plant, or part of a plant, or animal product, produced by a person (including farmers, ranchers, plant propagators, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by humans or animals.

- d) "Approved Plan" means a program for the certification of pesticide applicators which has approved by the Authority as meeting the requirements set forth in Regulation .
- e) "Authority" means the Republic of the Marshall Islands Environmental Protection Authority or its authorized representative.
- f) "Banned pesticide" means any pesticide, the use of which for any purpose is prohibited by the Authority.
- g) "Banned use" means any use which is prohibited by the Authority, or any use which is suspended or cancelled by the Authority.
- h) "Certified Pesticide Applicator" means any individual who is certified by the Chairman of the Authority to apply or supervise the use of any pesticide classified as a restricted use pesticide.
- i) "Chairman" means the Chairman of the Republic of the Marshall Islands Environmental Protection Authority or an authorized representative.
- j) "Commercial Applicator" means a certified applicator (whether or not he or she is a professional applicator with respect to some uses) who uses or supervises the use of any pesticide which is classified as a restricted use for any purpose or on any property other than as provided by paragraph (ff).
- k) "Competent" means properly qualified to perform functions associated with pesticide application, the degree of capability required being directly related to the nature of the activity and the associated responsibility.
- l) "Defoliant" means any substance or mixture of substances intended for causing the leaves or foliage to drop from a plant, with or without causing abscission.
- m) "Desiccant" means any substance or mixture of substances intended for artificially accelerating the drying of plant tissue.
- n) "Environment" means the physical factors of the surroundings of human beings and include the land, soil, water, atmosphere, climate, sound, odors, tastes and the biological factors of animals and plants of every description.
- o) "Fungus" means all non-chlorophyll-bearing thallophytes including rusts, smuts, mildews, bacteria, molds and yeast, except those on or living in foods, beverages, or pharmaceuticals.
- p) "General use pesticide" means a pesticide other than one designated as a restricted use pesticide.
- q) "Hazard" means a situation where there exists a probability that a given pesticide will cause injury or have an adverse effect on the environment.
- r) "Importation" means causing to be brought into the Republic of the Marshall Islands.
- s) "Inert ingredient" means an ingredient which is not an active ingredient.
- t) "Ingredient statement" means the name and percentage of each active ingredient, and the percentage of all inert ingredients in the pesticide.
- u) "Insect" means invertebrate animals belonging to the class Insecta or other allied classes such as Arachnida and Chilopoda.
- v) "Label" means the written, printed, or graphic matter on, or attached to, the pesticide container or device or any of its containers or wrappers.
- w) "Labeling" means all labels and all other written, printed, or graphic matter accompanying a pesticide, or to which reference is made on the label or in literature accompanying the pesticide.

x) "Licensed dealer" means any person who is licensed by the Authority to sell or distribute restricted use pesticides.

y) "Misbranded" means any pesticide if:

- (i) its labeling bears any statement, design, or graphic representation relative to it or ingredients which is false or misleading in any particular;
- (ii) its labeling bears instructions for a banned use;
- (iii) it is contained in a package or other container or wrapping which does not conform to standards established by the Authority;
- (iv) it is an imitation of, or is offered for sale under the name of, another pesticide;
- (v) its label does not bear the Authority registration number;
- (vi) the label accompanying it does not contain, in English and Marshallese, instructions for use which are necessary, proper, and adequate for the protection of the public;
- (vii) the label does not contain warning or caution statements in English and Marshallese which if complied with are adequate to protect health and the environment;
- (viii) the label does not bear an ingredient statement on the immediate container, or on the outside container or wrapper if such outside container or wrapper does not allow the ingredient statement on the immediate container to be clearly read;
- (ix) any additional label which may be required by the Chairman is not conspicuously displayed on each container.

z) "Nematode" means unsegmented roundworms of the class Nematoda which inhabit soil, plants, or plant parts.

aa) "Person" means any individual, corporation, company, association, partnership, agency, authority, commission, foundation, the Republic of the Marshall Islands government or its political subdivisions, or any local, state, or foreign government or municipality, or other institution or entity, whether public or private.

bb) "Pest" means any insect, rodent, nematode, fungus, weed, or any other form of terrestrial or aquatic plant or animal life, or virus, bacteria, or other microorganism which the Chairman declares to be a pest.

cc) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

dd) "Plant regulator" means any substance or mixture of substances intended, through its physiological action, for accelerating or retarding the rate of growth or rate of maturation, or for otherwise altering the behavior of plants or plant products, but shall not include substances to the extent that they are intended as plant nutrients, trace elements, nutritional chemicals, plant inoculants, and soil amendments. Also, the term "plant regulator" shall not include any of those nutrient mixtures or soil amendments commonly known as vitamin-hormone horticultural products, intended for improvement, maintenance, survival, health, and propagation of plants, and not for pest destruction, and are non-toxic and non-poisonous in the undiluted packaged concentration.

ee) "POP(S)" means the twelve persistent organic pollutants set forth in Appendix B of these regulations, which are targeted by the United Nations Stockholm Convention on Persistent Organic Pollutants as posing a significant threat to health and the environment, and which share the properties of being highly toxic, persistent in the environment, evaporative and able to travel long distances through the air and water, and subject to bioaccumulation.

ff) "Restricted application" means a pesticide which is registered for use only on certain crops, plants, or animals, or in certain areas, and which is not to be used in a manner that would result in the pesticide being applied to other crops, plants, or animals, or in other areas, than those specified on the label.

ii) "Private applicator" means a certified applicator who uses or supervises the use of pesticide which is classified for restricted use for purposes of producing any agricultural commodity property owned or rented by him or her, or (if applied without compensation other than trading of pest services between producers of agricultural commodities) on the property of another person.

gg) "Restricted use pesticide" means a pesticide, one or more uses of which have been restricted by the Authority under these regulations, and which bears on its label the phrase "restricted use pesticide"

hh) "Rodent" means mammals of the order Rodentia, such as rats and mice.

ii) "Sell or distribute" means to distribute, sell, solicit, offer for sale, hold for sale, ship, or deliver for shipment within the Republic of the Marshall Islands.

jj) "Virus" means any of a group of microscopic infective agents which cause diseases in plants and animals.

kk) "Weed" means any plant growing where it is not wanted.

5. Severability

In the event any provision of these regulations or the application of any provision of these regulations to any person or circumstances is held invalid, the application of such provision to other persons or circumstances and the remainder of these regulations shall not be affected.

PART II - UNLAWFUL ACTS

6. General

a) Except as otherwise exempted in Regulation 7, it shall be unlawful for any person to import, sell or distribute, or receive and (having so received) deliver or offer to deliver, to any person:

- (i) any pesticide or POP which is adulterated or misbranded;
- (ii) any banned pesticide or POP.

b) It shall be unlawful for any person:

- (i) to detach, alter, deface, or destroy, in whole or in part, any labeling, unless such action is taken with the approval of the Authority to correct an improper label or labeling;
- (ii) to refuse to keep any records required under these regulations, or to refuse to allow inspection of any records or establishment in accordance with these regulations, refuse to allow the Authority to observe pesticide use, investigate pesticide misuse, or to take a sample of any pesticide in accordance with these regulations;
- (iii) to use any pesticide or POP in a manner inconsistent with its labeling, unless such use is authorized by the Authority under the provisions of an experimental use permit;
- (iv) to use any pesticide under an experimental use permit in a manner contrary to the provisions of such permit;
- (v) to violate any order issued under these regulations;
- (vi) to violate any ban or prohibition issued under these regulations;
- (vii) to knowingly falsify all or part of any application for certification, license, or experimental use permit, or any records required to be maintained under these regulations;

- (viii) to sell or distribute restricted use pesticides unless licensed under these regulation
- (ix) to sell or distribute any restricted use pesticide to any person other than a lic dealer or a certified applicator;
- (x) to use, store, transport, mix, or discard any pesticide or POP or the containers of pesticide or POP in such a way as to pose a hazard to human health c environment;
- (xi) to use or apply restricted use pesticides unless certified under these regulatic unless acting under the supervision of a certified applicator;

7. Exemptions

The penalties provided for a violation of Regulation 6 shall not apply to:

- (i) any carrier while lawfully shipping, transporting, or delivering for shipmen pesticide or POP, if such carrier upon request of any person duly designated t Authority shall permit such person to copy all of its records concerning such pes or POP;
- (ii) any public official while engaged in the performance of his or her official duties;
- (iii) any person importing a pesticide for use under an experimental use permit, pro that the requirements of the experimental use permit are met before the use of pesticide;
- (iv) any person possessing, receiving, shipping or delivering to another person pesticide or POP while acting under the written instructions of or with the ex written approval of the Authority.

PART III - CERTIFICATION OF APPLICATORS

8. General Requirement

Competence in the use and handling of pesticides shall be determined by written examination o by the Authority and, as appropriate, by demonstration by the applicator, based upon standards which or exceed those set forth in this Part.

9. Classes of applicators

A certified applicator shall be classified as either a commercial applicator or a private applicator.

a) Any person who uses or supervises the use of restricted use pesticides for the producti agricultural commodities, unless such use is in accordance with subregulation (b) below, shall be classif a commercial applicator in the category of agricultural pest control, which includes commercial appli using or supervising the use of restricted use pesticides in the production of agricultural crops, incl vegetables, small fruits, tree fruits and nuts, as well as on grass lands and non-crop agricultural lands.

b) Any person who uses or supervises the use of restricted use pesticides for the purpo producing any agricultural commodity on property owned or rented by him or her, or (if applied w compensation other than trading of personal services between producers of agricultural commodities) c property of another person shall be classified as a private applicator.

10. Determination of Competency

a) Application for certification as a commercial applicator shall be made to the Authority form provided for that purpose. As a minimum qualification for certification, the applicant must pass a written examination at a time and place designated by the Authority. The examination will be based on standards contained in Regulation 11.

b) Application for certification as a private applicator shall be made to the Authority on a form provided for that purpose. The applicant may qualify for certification by passing a written examination satisfactorily demonstrating the ability to use pesticides and application equipment correctly and by passing an oral examination. Such examinations and demonstration requirements shall be based on standards contained in Regulation 12.

11. Standards for certification of commercial applicators

Commercial applicators must demonstrate theoretical and practical knowledge in the following areas of expertise:

- a) Label and labeling comprehension, including:
 - (i) the general format and terminology of pesticides labels and labeling;
 - (ii) the understanding of instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels;
 - (iii) classification of the product, general or restricted;
 - (iv) necessity for use consistent with the label.
- b) Safety, including:
 - (i) pesticide toxicity, hazard to human beings, and common exposure routes;
 - (ii) common types and causes of pesticide accidents;
 - (iii) precautions necessary to guard against injury to applicators and other individuals near treated areas;
 - (iv) need for and use of protective clothing and equipment;
 - (v) symptoms of pesticide poisoning;
 - (vi) first aid and other procedures to be followed in case of a pesticide accident;
 - (vii) proper identification, storage, transport, handling, mixing procedures, and disposal methods for pesticides and used pesticide containers, including precaution to be taken to prevent children from having access to pesticides and pesticide containers.
- c) The potential environmental consequences of the use and misuse of pesticides as modified or influenced by such factors as:
 - (i) weather and other climatic conditions;
 - (ii) types of terrain, soil, or other substrate;
 - (iii) presence of fish, wildlife, and other non-target organisms;
 - (iv) drainage patterns.
- d) Pests, including:

- (i) common features of pest organisms and characteristics of damage needed for recognition;
 - (ii) recognition of relevant pests;
 - (iii) pest development and biology as it may be relevant to problem identification and control.
- e) Pesticides, including:
- (i) types of pesticides;
 - (ii) types of formulations;
 - (iii) compatibility, synergism, persistence, and animal and plant toxicity of formulations;
 - (iv) hazards and residues associated with use;
 - (v) factors which influence effectiveness or lead to such problems as resistant pests;
 - (vi) dilution procedures.
- f) Equipment, including:
- (i) types of equipment and advantages and limitations of each type;
 - (ii) uses, maintenance and calibration.
- g) Application techniques, including:
- (i) methods used to apply various formulations of pesticides, together with a knowledge of which technique of application to use in a given situation;
 - (ii) relationship of discharge and placement of pesticides to proper use, unnecessary and misuse;
 - (iii) prevention of drift and pesticide loss into the environment.
- h) Pertinent laws and regulations.
- i) Agricultural pest control, including:
- (i) crops grown and the specific pests of those crops;
 - (ii) soil and water problems;
 - (iii) pre-harvest intervals;
 - (iv) re-entry intervals;
 - (v) phytotoxicity;
 - (vi) potential for environmental contamination, non-target injury, and community problems resulting from the use of restricted use pesticides in agricultural areas.

Provided, however, that the above standards do not apply to persons conducting laboratory tests involving restricted use pesticides.

12. Standards for certification of private applicators.

As a minimum requirement for certification, a private applicator must show that he or she possesses practical knowledge of the pest problems and pest control practices associated with agricultural operations, the proper storage, use, handling, and disposal of the pesticides and containers, and of his or her related responsibility. This practical knowledge includes the ability to:

- a) Recognize common pests to be controlled and damage caused by them.
- b) Read and understand the label and labeling information, including the common name of the pesticides to be applied, pest(s) to be controlled, timing and methods of application, safety precautions, pre-harvest or re-entry restrictions, and any specific disposal procedures.
- c) Apply pesticides in accordance with label instructions and warnings, including the ability to prepare the proper concentration of pesticide to be used under particular circumstances taking into account such factors as area to be covered and the quantity dispersed in a given period of operation.
- d) Recognize local environmental situations that must be considered during application to avoid contamination.
- e) Recognize poisoning symptoms and procedures to follow in case of a pesticide accident.

13. Duration of certification and renewals

All certificates shall be valid for a period of three (3) years from the date of issuance unless they are suspended or revoked by the Authority. Application for renewal shall be made to the Authority on a form provided for that purpose. The applicant shall be required to pass another examination and/or give a demonstration of proficiency in order to ensure that certified applicators continue to meet the requirements of changing technology and to assure a continuing level of competency and ability to use pesticides safely and properly.

14. Standards for supervision

Restricted use pesticides may be applied by a non-certified but competent person acting under the direct supervision of a certified applicator. The availability of the certified applicator must be directly related to the hazard of the situation. In situations where the certified applicator is not required to be physically present, "direct supervision" shall include verifiable instruction to the competent person including, but not limited to, detailed guidance for applying the pesticide properly and provisions for contacting the certified applicator in the event he or she is needed. In other situations, and as required by the label, the physical presence of a certified applicator may be required when application is made by a non-certified applicator. In either situation, responsibility for proper application shall remain with the certified applicator.

15. Denial, suspension and revocation

- a) The Authority may deny certification to:
 - (i) any person who is not a resident of the Marshall Islands;
 - (ii) any person whose certificate is suspended or revoked;
 - (iii) any person who has been found to be in violation of any part of these Regulations.
- b) Any certificate issued under this Part may be suspended or revoked by the Authority in the event of a violation of any condition of the certificate or of these regulations.

PART IV - PERMIT TO DEAL IN RESTRICTED USE PESTICIDES

16. Permit required

Every person engaged in the sale or distribution of restricted use pesticides and every person importing restricted use pesticides who is not a certified applicator shall obtain a permit from the Authority.

17. Application for permit

a) Application for a permit shall be made by any person to the Authority on a form provided for that purpose and shall be accompanied by a processing fee of \$100.00, which is non-refundable.

b) Each permit shall expire at the end of the calendar year in which it is issued, and must be renewed annually for subsequent calendar years.

18. Suspension or revocation

A permit to deal in restricted use pesticides may be suspended or revoked by the Authority for a violation of these regulations whether committed by the dealer or an employee of the dealer. Any violation during the three (3) years preceding the date of application for a permit may serve as ground for denial or rejection of the permit.

PART V - RECORDS

19. Records to be kept by commercial applicators

Each certified commercial applicator shall keep and maintain for a period of not less than two (2) years true and accurate records of the use and application of restricted use pesticides, including the following information:

- a) At the time of purchase or receipt of a restricted use pesticide, a record of:
 - (i) the brand name, quantity, and registration number of the product;
 - (ii) the name and address of the person from whom purchased or received;
 - (iii) the date of purchase or receipt.
- b) At the time of application of a restricted use pesticide, a record of:
 - (i) the brand name and registration number of the product, and the date of purchase or receipt;
 - (ii) the amount of product used and, if the product is to be mixed with another substance before use, the name of the other substance and the total amount of mixture prepared;
 - (iii) the site of use and purpose of use;
 - (iv) the date and time of application;
 - (v) the signature of the certified applicator and, if the pesticide is used under supervision of the certified applicator, the name of user.
- c) At the time of disposal of a restricted use pesticide product, container, or mixture, a record of:

- (i) the brand name and registration number of the product, and the date of purchase receipt;
- (ii) the amount of product or mixture disposed, or the number and type of containers disposed, and, if a mixture, the concentration of active ingredients;
- (iii) the date, site, and method of disposal.

20. Records to be kept by a licensed dealer

Each licensed dealer shall keep and maintain for a period of not less than two (2) years true and accurate records of the receipt and sale or distribution of restricted use pesticides, including the following information:

- a) Upon receipt of a restricted use pesticide, a record of:
 - (i) the brand name, registration number, and number of containers;
 - (ii) the net weight of each container, and the type of container construction, for instance, glass, metal, paper carton, paper bag or hard plastic;
 - (iii) the name and address of the person from whom purchased or received;
 - (iv) the date of receipt.
- b) Upon sale or distribution of a restricted use pesticide, a record of:
 - (i) the name, address, and certification number or dealer's permit number of the person purchasing or receiving the pesticide;
 - (ii) the date of sale or distribution;
 - (iii) the brand name, registration number, and the quantity of product sold or distributed;
 - (iv) the signature of the person selling or distributing the pesticide.

21. Additional records

Additional records, as found to be necessary for the enforcement of these regulations, may be required by the Authority.

22. Access to records

The Authority shall have access to all records identified in this Part at any reasonable time to examine, copy, or make copies of such records for the purpose of carrying out the provisions of these regulations. Unless required for the enforcement of the regulations, such information shall be confidential, and, if summarized, shall not identify an individual person.

PART VI - IMPORTATION

23. Notice of Intent

Persons desiring to import a pesticide or POP into the Republic of the Marshall Islands shall submit

notice of intent to the Authority on a form provided for that purpose before the arrival of the pesticide or POP shipment. The Authority shall then issue instructions as to the disposition of the shipment. Such instructions may include, but are not limited to, directions to release the shipment to the consignee, detain the shipment for sampling, deny delivery to the consignee, or impound the shipment.

24. Inspection

Upon arrival of the shipment, the Authority's representative shall inspect the pesticide or POP shipment. The Authority shall then compare the results of the inspection and the entry papers for the shipment with the information provided by the importer on the notice of intent. If no discrepancies are noted and the Authority has not been instructed to the contrary, the shipment shall be released. However, any discrepancies shall be reported to the Authority, and the shipment may be detained until such discrepancies are resolved.

25. Shipments arriving without notice

When a shipment of pesticides or POPS arrives in the Republic of the Marshall Islands and an authorized representative of the Authority has not been provided with instructions for disposition, the shipment shall be detained and the Authority shall be notified.

The Authority shall then determine whether a notice of intent to import pesticides or POPS has been submitted and shall provide instructions for disposition of the shipment.

26. Detained, denied, and impounded shipments

a) All expenses arising from detainment of a pesticide or POP shipment due to failure of the importer to submit a notice of intent to the Authority in a timely manner shall be payable by the importer. Failure of the importer to pay assessed costs may result in impoundment of the shipment or of any future importations made by the importer.

b) Any pesticide or POP shipment for which delivery is denied shall be disposed of by the Authority if not exported by the consignee within ninety (90) days of denial of delivery. All expenses for storage, cartage, labor, and shipping shall be payable by the consignee and in default of such payment shall constitute a lien against any further importation made by the importer.

c) If the owner of an impounded pesticide or POP shipment does not satisfy any and all liens against such shipment within ninety (90) days after notification in writing of the amount of said liens, the Authority shall enter into such action as may be necessary to effect transfer of ownership of the shipment to the Authority for satisfaction of said liens.

PART VII - RESTRICTING AND BANNING OF PESTICIDES AND POPS

27. Restriction of Pesticides and POPS

The Authority may restrict any use of any pesticide listed in Appendix A or any POP listed in Appendix B to application by a certified applicator or a person acting under the supervision of a certified applicator when misuse by non-certified applicators has produced or is deemed likely to produce substantial adverse effects on human health or the environment. Any such restriction shall be set forth in a written document signed by the Chairman of the Authority and published in the Marshall Islands Journal before coming into effect.

28. Banning of Pesticides and POPS

The Authority may prohibit the importation, sale, distribution, and use of any pesticide listed in Appendix A or any POP listed in Appendix B or prohibit a specific use or uses of any pesticide or POP if such use or uses has produced or is deemed likely to produce substantial adverse effects on human health.

the environment. Any such restriction shall be set forth in a written document signed by the Chairman Authority and published in the Marshall Islands Journal before coming into effect.

PART VIII - EXPERIMENTAL USE PERMITS

29. Application for permit

Persons wishing to conduct small scale laboratory or field tests of an unregistered pesticide use obtain an experimental use permit before conducting such tests. The application for the experimental permit must contain:

- (i) the name, address, and qualifications of the applicant;
- (ii) a description of the proposed experiment, including the amount of pesticide to be used, the type of pest or organism to be experimented with, the crop or animal for which the pesticide is to be used, the location at which it is proposed to conduct the experiment and the duration of the testing program;
- (iii) the brand name or designation of the pesticide, ingredient statement, name and address of the manufacturer, and amount of pesticide to be purchased or requested;
- (iv) data regarding the toxicity of the product, precautions to be taken for the protection of those who may handle or be exposed to the experimental formulations, instructions for the treatment of poisoning or injury resulting from ingestion, inhalation, or other exposure to the pesticide;
- (v) if the pesticide is to be tested in any place likely to be frequented by people directly associated with the testing, a description of the measures that will be taken to prevent exposure of such people to the pesticide;
- (vi) when food or feed is likely to be contaminated, either a full statement of the measures which will be taken to prevent the food or feed from being consumed, except for laboratory or experimental animals, or convincing evidence that the proposed use will not result in residue which would be hazardous to human beings, other animals, or the environment;
- (vii) data regarding the environmental hazards associated with the proposed use of the pesticide, including its biological half-life, and a description of the precautions taken for the protection of the environment;
- (viii) a statement that the pesticide will be used for experimental purposes only;
- (ix) a statement indicating the method of disposal of any unused experimental pesticide.

30. Restrictions

The Authority may limit the quantity of pesticide to be purchased or requested for experimental use and may make such other restrictions to the permit as it may determine to be necessary for the protection of the public and the environment.

31. Denial

The Authority may refuse to issue an experimental use permit if any information required in Regulation 10.01 is not furnished in the application for such permit, or if the information furnished is deemed insufficient to insure that adequate precautions will be taken for the protection of the public and the environment, or

ensure that adequate precautions will be taken for the protection of the public and the environment, or Authority determines that the applicant is not qualified by education or experience to undertake the program.

32. Duration

Unless revoked by the Authority, an experimental use permit shall be effective for a specified period of time. The duration of the permit shall be determined by the nature of the proposed testing program and may be extended upon request if circumstances warrant.

33. Special label requirements

Labels shall be affixed as necessary so that the following information is displayed clearly in English and Marshallese on the outside of each container of experimental formulation:

- (i) the prominent statement "For Experiment Use Only";
- (ii) a warning or caution statement which, if complied with, is adequate for the protection of those who may handle or be exposed to the experimental formulation;
- (iii) the name and address of the holder of the experimental use permit;
- (iv) the name or designation of the experimental formulation;
- (v) such other statements or information as may be required by the experimental use permit.

34. Reports

The holder of an experimental use permit shall report to the Authority:

- (i) immediately, incidents of adverse effects on human health or the environment resulting from use of or exposure to a pesticide formulation covered by the permit;
- (ii) within thirty (30) days after termination of experimental use, that such use has terminated;
- (iii) within thirty (30) days after disposal of unused experimental pesticide, the method and site of disposal, and the quantity of pesticide discarded.

35. Revocation

The Authority may revoke an experimental use permit at any time upon finding of violation of the terms or conditions of such permits or upon finding that the terms or conditions are inadequate to protect the public from an unreasonable risk to human health or the environment.

PART IX - ENFORCEMENT

36. Violations

a) A person who commits any unlawful acts under Part II of these regulations or who violates any provision of these regulations or any permit, requirement or order issued thereunder, shall be subject to enforcement action by the Authority.

b) The enforcement action may be any or all of the following:

- (i) revocation of a permit issued under these regulations;

- (ii) the making of a cease and desist order in relation to the subject matter of the violation;
- (iii) the imposition of a civil penalty, fixed by the Authority, not exceeding \$10,000.00 each day on which the violation continues; and
- (iv) any other action authorized by the National Environmental Protection Act 1984 or any other law.

37. Public hearing

a) When the Authority revokes a permit under Regulation 36(b)(i) or makes a cease and desist order under Regulation 36 (b)(ii), a public hearing shall be conducted by the Authority to determine the authenticity of the facts upon which the order was made.

b) Adequate notice of the hearing, and an adequate opportunity to appear and be heard at the hearing, shall be given to all interested persons.

38. Right to enter

For the purposes of enforcing the provisions of these regulations, the Authority or its authorized representative may:

a) enter, at reasonable times, any establishment or other place where pesticides or POPs are stored, held for distribution or sale, or used, for the purpose of:

- (i) inspecting any pesticide or POP, pesticide or POP container, labels and labeling, and application equipment;
- (ii) collecting samples of any pesticide or POP, suspected pesticide or POP, or pesticide or POP labeling;
- (iii) observing operations involving the use or disposal of any pesticide or POP, or the disposal of any pesticide or POP containers;
- (iv) investigating suspected misuse of any pesticide or POP.

b) enter any premises at any time if there is substantial reason to believe that any pesticide or POP used, stored, or otherwise present on such premises is, through accident, carelessness, or other circumstance, producing adverse effects on human health or the environment, for the purpose of taking action as may be necessary to prevent or mitigate further adverse effects.

39. Penalty for lack of permit

Any person required to have a permit under these regulations and engaged in an activity without a permit shall be subject to a civil penalty of \$500.00 per day the activity is conducted without a permit.

Adopted by the Authority on 10 June, 2004.

Philip Kabua, Chairman
Environmental Protection Authority
Republic of the Marshall Islands

Approved by the President on _____, 2004.

His Excellency Kessai H. Note
President
Republic of the Marshall Islands

APPENDIX A

Restricted Use Pesticides

The following pesticide products containing the chemical name specified are classified for restricted use. Such restrictions, and the below-listed criteria influencing those restrictions, are taken from June, 2003 USEPA Restricted Use Products Report.

<u>Chemical Name</u>	<u>Criteria Influencing Restriction</u>
Acetamide	Groundwater and surface water concerns.
Acetic acid	N/A
Acetochlor	N/A
Acrolein	Inhalation hazard to humans. Residue effects on avian species and aquatic organisms.
Acrylonitrile	Accident history of both acrylonitrile and carbon tetrachloride products.
Alachlor	Oncogenic potential.

Aldicarb	Accident history.
Aldrin	Persistent Organic Pollutant pesticide (applied to soils to kill ten grasshoppers, corn rootworm, and other insect pests).
Allyl alcohol	Acute dermal toxicity.
Alpha-chlorohydrin	N/A
Aluminum phosphide	Inhalation hazard to humans.
Amitraz Amitrol	Possible oncogenicity. Carcinogenic potential.
Arsenic acid	Oncogenicity, muta, repro/fetotoxicity.
Arsenic pentoxide	Possible oncogenic, mutagenic, reproductive and/or fetotoxic effects.
Atrazine	Groundwater contamination potential and worker exposure.
Avermectin	Toxic to fish, mammals and aquatic organisms.
Avitrol	Hazard to fish and non-target birds.
Azinphos-methyl	Human inhalation hazard, acute toxicity, hazard to avian, aquatic mammalian species.
Bendiocarb	Toxicity to aquatic and avian species.
Benzoic acid	N/A
Biphenthrin	Toxic to fish and aquatic organisms.
Bis(tributyltin) oxide	Toxicity to aquatic organisms including shellfish.
Brodifacoum	Hazard to non-target organisms
Butylate	N/A
Cadmium chloride	Kidney effects.
Calcium cyanide	Human inhalation hazard.
Carbofuran	Acute inhalation toxicity, avian toxicity in granular formulations.
Carbon dioxide	N/A
Carbon tetrachloride	Oncogenicity, acute and subacute poisoning risks.
Chlordane	Persistent Organic Pollutant; Probable human Oncogenicity, chronic liver effects, toxicity to avian and aquatic organisms.
Chlordimeform	Causes cancer in laboratory animals.
Chlorfenvinphos	Acute dermal toxicity.
Chlorobenzilate	Oncogenicity, adverse testicular effects.

Chlorophacinone	human hazard, potential for food contamination, Possible inhalation hazard.
Chloropicrin	Acute inhalation toxicity with all formulations greater than 2%. H to non-target organisms with use of all formulations for rodent cor
Chlorothalonil	N/A
Chlorothoxyfos	Acute human, avian and aquatic invertebrate toxicity.
Chlorpyrifos	Avian and aquatic toxicity.
Chromic acid	Oncogenicity, mutagenicity, teratogenicity, and fetotoxic Effects.
Clofentezine	Restricted use status given to allow new uses – additional Data required to remove the restriction.
Coal tar	Oncogenicity, mutagenicity.
Coal tar creosote	Possible oncogenic and mutagenic effects.
Copper oxychloride	N/A
Coumaphos	Acute oral toxicity hazards.
Creosote	Oncogenicity, mutagenicity
Creosote oil	Possibly oncogenic and mutagenic effects.
Cube resins other than rote	Chronic eye effects and inhalation effects.
Cupric oxide	N/A
Cuprous oxide	N/A
Cyanazine	Teratogenicity, fetotoxicity.
Cycloheximide	Acute dermal toxicity.
Cyfluthrin	Acute toxicity to applicators, fish and other aquatic organisms.
Cyhalothrin	Requires more environmental data.
Cypermethrin	Oncogenicity, hazard to non-target organisms.
DBCP	All products cancelled except for pineapple use, oncogenicity, mutagenicity.
DDT	Persistent Organic Pollutant (applied against mosquitoes to c malaria).
Deltamethrin	High toxicity to aquatic organisms.
Demeton	With 1% fertilizer formulation and granular formations: Domestic uses – acute oral toxicity; acute dermal toxicity. Nondomestic outdoor uses – residue effects on avian and mamn species.
Diallate	Oncogenicity, mutagenicity.

Diazinon	Avian and aquatic toxicity.
Dichloenil	Conditional.
Dichloropropene	Probable human carcinogen, oncogenic, acutely toxic by the Oral and inhalation routes of exposure.
Diclofop methyl	Oncogenicity.
Dicrotophos	Acute dermal toxicity, residue effects on avian species.
Dieldrin	Persistent Organic Pollutant (used principally to control termite textile pests, also used to control insect-borne diseases and is living in agricultural soils).
Diflubenzuron	Hazard to wildlife.
Dioxathion	Acute dermal toxicity.
Diphacinone	N/A
Disulfoton	Acute dermal toxicity, inhalation toxicity.
Dodemorph	Corrosive to eye tissue.
E-mevinphos	N/A
Emamectin benzoate	Toxicity to fish.
Endrin	Persistent Organic Pollutant; acute dermal toxicity, hazard to non organisms.
EPN	Acute dermal toxicity. Acute inhalation toxicity. Residue effects on avian species. Effects on aquatic organisms with aquatic uses.
EPTC	N/A
Ethion	Acute toxicity.
Ethoprop	Acute dermal toxicity.
Ethyl parathion	Inhalation hazard to humans. Acute dermal toxicity. Residue effects on mammalian, aquatic, and avian species. Human inhalation history.
Ethylene dibromide	Risks to workers from occupational exposure.
Fenamiphos	Acute dermal toxicity, avian acute oral toxicity, acute inhalation toxicity.
Fenbutatin-oxide	Restricted due to very high toxicity to aquatic organisms.
Fenitrothion	Potential adverse effects on aquatic and avian species.
Fenpropathrin	Toxic to fish and aquatic organisms.
Fensulfothion	Acute dermal toxicity, acute inhalation toxicity.
Fenthion	Very high acute toxicity to birds, fish and aquatic invertebrates.

Fenvalerate	Possible adverse effects on aquatic organisms.
Fipronal	Conditional amended.
Flucythrinate	Possible adverse effects on aquatic organisms.
Fluoroacetamide	Acute oral toxicity.
Fluvalinate	Highly toxic to aquatic organisms.
Fonofos	Acute dermal toxicity.
Heptachlor	Persistent Organic Pollutant (primarily employed to kill soil insect termites, also used to kill cotton insects, grasshoppers, other crop and malaria-carrying mosquitoes).
Hexachlorobenzene	Persistent Organic Pollutant (kills fungi that affect food crops released as a byproduct during the manufacture of certain cher and as a result of the processes that give rise to dioxins and furans)
Hydrocyanic acid	Inhalation hazard to humans.
Hydrogen cyanamide	Corrosive effects to skin and eyes.
Imazaquin	N/A
Isazofos	Avian fish and aquatic organism toxicity.
Lambda-cyhalothrin	Toxicity to fish and aquatic invertebrates.
Lindane	Possibly oncogenic.
Magnesium phosphide	Inhalation hazard.
Methamidophos	Acute dermal toxicity and residue effects on avian species.
Methidathion	Residue effects on avian species.
Methiocarb	Possible hazard to avian, fish and other aquatic organisms.
Methyl bromide	Acute toxicity and accident history.
Methyl isothiocyanate	Exceeds U.S. classification criteria of 40 CFR 152.170.
Methyl parathion	Accident history. All foliar applications restricted based on re effects on mammalian and avian species. Hazard to bees, acute d toxicity.
Metolachlor	N/A
Mevinphos	Acute dermal toxicity. Residue effects on mammalian and species.
Mirex	Persistent Organic Pollutant (an insecticide applied mainly to cc fire ants, other ants and termites, also used as a fire retarder plastics, rubber and electrical goods).
Monocrotophos	Residue effects on avian species. Residue effects on mamm species, acute dermal toxicity.
Niclosamide	Acute inhalation toxicity, effects on aquatic organisms.

Nicotine	Acute inhalation toxicity with indoor use of liquid and dry formul: 14% and above. Effects on aquatic organisms.
Nitrogen (liquid)	Highly corrosive on contact with skin and eyes.
Oxamyl	Acute oral toxicity, acute inhalation toxicity, avail oral toxicity.
Oxydematon methyl	Reproductive effects.
Paraquat	Use and accident history. Human toxicological data.
Pentachlorophenol	Possible oncogenic, teratogenic and fetotoxic effects.
Permethrin	Highly toxic to aquatic organisms.
Phorate	Acute oral and dermal toxicity for granulars, residue effect mammalian and avian species (applies to foliar application of formulation only). Effects on aquatic organisms.
Phosacetim	Hazard to non-target species. Residue effects on mammalian and species.
Phosalone	Aquatic toxicity.
Phosphamidon	Acute dermal toxicity. Residue effects on mammalian and species.
Picloram	Hazard to non-target organisms (specifically non-target plants both and non-crop).
Picloram, potassium salt	Hazard to non-target organisms (specifically non-target plants crop and non-crop).
Picloram, triisopropanolami	Hazard to non-target organisms (specifically non-target plants both and non-crop).
Piperonyl butoxide	N/A
Potassium pentachlorophenat	Possible oncogenic, mutagenic, and reproductive and/or fet effects.
Profenophos	Corrosive to eyes.
Pronamide	N/A
Propanoic acid	N/A
Propetamphos	N/A
Pyrethrins	Restricted due to chronic eye effects.
Resmethrin	Acute fish toxicity.
Rotenone	Chronic eye effects and inhalation effects.
S-fenvalerate	Possible adverse effects on aquatic organisms.
Simazine	N/A
Sodium arsenate	Possible oncogenic, mutagenic and reproductive and/or fet effects.

Sodium cyanide	Inhalation hazard to humans, hazard to non-target species.
Sodium dichromate	Oncogenicity, mutagenicity, teratogenicity, and fetotoxicity.
Sodium fluoroacetate	Acute oral toxicity. Hazard to non-target organisms. Use and accident history.
Sodium hydroxide	Acute toxicity, hazardous to inhale, hazard to eyes, skin.
Sodium methyldithiocarbamate	Dermal toxicity and teratogenicity. Acute toxicity. Metam Sodium and its intended use in controlling sewage growth.
Sodium pyroarsenate	Oral toxicity oncogenicity, mutagenicity and reproductive and fetal effects.
Starlicide	Hazard to non-target organisms.
Strychnine	Acute oral toxicity. Hazard to non-target avian species. Use and accident history.
Sulfotepp	Inhalation hazard to humans.
Sulfuric acid	Extremely corrosive, acute toxicity to humans.
Sulfuryl fluoride	Acute inhalation hazard, possible acute toxicity hazard in humans.
Sulprofos	Wildlife hazard.
Tefluthrin	Environmental concerns.
Tepp	Inhalation hazard to humans. Dermal hazard to humans. Residue effects on mammalian and avian species.
Terbufos	Residue effects on avian species, acute oral and dermal toxicity.
Tergitol	Eye and skin irritant, plus use of this product requires special knowledge, skills, and equipment.
TFM	Requires specialized training, equipment and clothing.
Toxaphene	Persistent Organic Pollutant; hazard to non-target organisms, potential human oncogen, acute toxicity to aquatic organisms, chronic wildlife effects.
Tralomethrin	Toxicity to aquatic organisms.
Tributyltin fluoride	Toxicity to aquatic organisms including shellfish.
Tributyltin methacrylate	Toxicity to aquatic organisms including shellfish.
Trifluralin	N/A
Triisopropranolamine	Hazard to nontarget organisms, specifically nontarget plants both ornamental and noncrop.
Treiphenyltin hydroxide	Possible mutagenic effects.
Z-mevinphos	N/A
Zinc Phosphide	Acute inhalation toxicity. Hazard to non-target organisms. acute

toxicity.

APPENDIX B

Persistent Organic Pollutants (POPS)

The twelve chemical products specified below are classified as POPS pursuant to the United Nations Stockholm Convention on Persistent Organic Pollutants. Note that HCB's are specified in two categories. The information listed with these POPS is taken from the United Nations Environment Programme (UNEP) Guide to the Stockholm Convention and other subsidiary information to the Convention.

Pesticides (also listed in Appendix A)

<u>Chemical Name</u>	<u>Information</u>
Aldrin	A pesticide applied to soils to kill termites, grasshoppers, rootworm, and other insect pests.
Chlordane	Probable human oncogenicity, chronic liver effects, toxicity to avian and aquatic organisms, used extensively to control termites and as a broad spectrum insecticide.
DDT	Applied against mosquitoes to control malaria.
Dieldrin	Used principally to control termites and textile pests, also used to control insect-borne diseases and insects living in agricultural soils.
Endrin	Produces acute dermal toxicity, hazard to nontarget organisms, sprayed on the leaves of crops, also used to control mice, vole and other rodents.
Heptachlor	Primarily employed to kill soil insects and termites, also used to control cotton insects, grasshoppers, other crop pests and malaria-causing mosquitoes.
Hexachlorobenzene (HCB)	Kills fungi that affect food crops, also released as a byproduct of the manufacture of certain chemicals and as a result of the processes that give rise to dioxins and furans (also listed as an Individual Chemical below).
Mirex	An insecticide applied mainly to combat fire ants, other ant species and termites, also used as a fire retardant in plastics, rubber and electrical goods.
Toxaphene	An insecticide that is a hazard to non-target organisms, potential human carcinogen, acute toxicity to aquatic organisms, chronic wildlife effects. Also called camphchlor.

also called camphechlor.

Industrial Chemicals

- Hexachlorobenzene (HCB) Kills fungi that affect food crops, also released as a byproduct of the manufacture of certain chemicals and as a result of the processes that give rise to dioxins and furans (also listed as a Pesticide above)
- Polychlorinated biphenyls (PCB) These compounds are employed in industry as heat exchange fluids, in electric transformers and capacitors, and as additives in carbonless copy paper, sealants and plastics.

Unintentional Chemical By-products

- Dioxins These chemicals are produced unintentionally due to incomplete combustion, as well as during the manufacture of certain pesticide and other chemicals. In addition, certain kinds of metal recycling and paper bleaching can release dioxins. Dioxins have also been found in automobile exhaust, tobacco smoke and wood and coal smoke.
- Furans These compounds are produced unintentionally from combustion and from industrial processes such as the production of pesticides, polyvinyl chloride, and other chlorinated substances. They are also found in commercial mixtures of PCBs.