

Memorandum of Agreement Between the U. S. Environmental Protection Agency and Agan Chemical Manufacturing, Dow AgroSciences, Drexel Chemical, Oxon Italia S.P.A., and Syngenta Crop Protection Concerning the Registration of Pesticide Products Containing Atrazine

This Memorandum of Agreement (“Agreement”) sets forth the terms of an agreement between the United States Environmental Protection Agency (“EPA” or “Agency”) and Agan Chemical Manufacturing, Dow AgroSciences, Drexel Chemical, Oxon Italia S.P.A., and Syngenta Crop Protection Inc. regarding registrations held by them under the Federal Insecticide, Fungicide and Rodenticide Act (“FIFRA”) of pesticide products containing Atrazine as an active ingredient (hereinafter “Atrazine Registrants”). See Appendix I for the list of Atrazine Registrants and Agents of Atrazine Registrants.

EPA has determined that registrations pertaining to certain uses of Atrazine must be amended in order to ensure that they do not present human and ecological risks that are inconsistent with the standard for registration in FIFRA and the requirements for tolerances under the Federal Food, Drug and Cosmetic Act (“FFDCA”). EPA believes that this Agreement will substantially reduce the risks posed by use of Atrazine by reducing the most significant exposures associated with Atrazine. The Atrazine Registrants believe that current Atrazine uses do not cause unreasonable adverse effects on human health or the environment. The Atrazine Registrants do not consider it appropriate to use raw water concentration measurements as triggers to require mitigation measures to protect human health. In order to reach a settlement of the issues raised by EPA, the Atrazine Registrants have agreed in this Agreement that such raw water triggers be used. Provided that the terms of this Agreement are fully implemented as stated herein and according to the schedules set forth herein, EPA has no current intention to initiate cancellation or suspension proceedings under section 6 of FIFRA with respect to the issues addressed in this Agreement.

In reaching this Agreement, Atrazine Registrants and EPA acknowledge that the Agreement addresses various risks and concerns from residential and agricultural uses but does

not resolve potential risk concerns related to prostate cancer to workers, risks to amphibians, or cumulative exposure to pesticides. Both the Atrazine Registrants and EPA further acknowledge that other regulatory actions may or may not be necessary concerning products containing Atrazine because of these or other risks identified in the future.

In reaching this Agreement, neither EPA nor the Atrazine Registrants shall be deemed to have admitted or accepted the positions advanced by the other.

By this Agreement, each Atrazine Registrant requests that all of its registrations for Atrazine products be amended to include the following term and condition:

“Each Atrazine Registrant shall comply with all the terms and conditions set forth in the Memorandum of Agreement Between the U. S. Environmental Protection Agency and Atrazine Registrants Concerning the Registration of Pesticide Products Containing Atrazine.”

By entering into this Agreement, EPA accepts the request, and amends all of the affected registrations.

This Agreement shall take effect for each signatory Atrazine Registrant on the date it has been signed by the Director, Special Review and Reregistration Division, Office of Pesticide Programs, on behalf of EPA, and an authorized representative of that Atrazine Registrant. It is EPA's intent to undertake appropriate regulatory measures to ensure that any Atrazine registrations not subject to this Agreement will be brought promptly into compliance with the terms and conditions in this Agreement.

The specific terms of this Agreement are as follows:

1. **Voluntary cancellation of technical products:** For atrazine products listed in Appendix II.A., no later than 15 business days after the effective date of this Agreement, each Atrazine Registrant will submit to the Director of EPA's Special Review and Reregistration Division

(7508C), Office of Pesticide Programs, pursuant to Section 6(f) of FIFRA, a request for voluntary cancellation of its Atrazine registration(s) identified in Appendix II.A.. Atrazine Registrants agree that the request for voluntary cancellation will include a request to waive the 180 day comment period provided in Section 6(f)(1)(C) of FIFRA. The request will provide that it is irrevocable and unconditional, except that any such request for voluntary cancellation may be expressly conditioned so that the cancellation will not take effect until EPA grants an application for replacement of the registration pursuant to this Agreement. It is also EPA's current intention to grant voluntary cancellation requests submitted for products listed in Appendix II.A. as expeditiously as possible following the close of the 30-day public comment period that follows EPA's publication of the Federal Register Notice announcing receipt of each Atrazine Registrant's request(s) for voluntary cancellation. If a request for voluntary cancellation is expressly conditioned upon EPA's grant of an application for replacement registration submitted pursuant to this Agreement, EPA will not grant the request for voluntary cancellation prior to approving the application for replacement registration, unless the relevant Atrazine Registrant fails to submit a complete application within the time frame set out in paragraphs 6 and 7 of this Agreement. If a timely application has been submitted, and EPA determines that it does not satisfy the requirements of this Agreement, EPA will notify the Atrazine Registrant of the deficiencies, and give the Atrazine Registrant 15 business days from the date of receipt of EPA's notification to submit to the Agency documents that correct the deficiencies. If an Atrazine Registrants fails to correct the deficiencies within 15 business days from the date of receipt of EPA's notification, EPA may grant the request for voluntary cancellation.

2. **Amendment of end-use product registrations:** For atrazine products listed in Appendix II.B. (hereinafter "end use atrazine products"), no later than 45 calendar days after the effective date of this Agreement, each Atrazine Registrant will submit to the Director of EPA's Special Review and Reregistration Division (7508C), Office of Pesticide Programs, a complete application in accordance with 40 CFR Title 40 to amend its Atrazine registration(s) identified in Appendix II.B. Applications submitted pursuant to this paragraph may not include changes

other than those submitted to comply with this Agreement and authorized by this Agreement, unless those changes have been specifically authorized by EPA in writing prior to submittal of the application. The Agency will, as expeditiously as possible, review any applications for amended registrations submitted pursuant to this Agreement, and will grant any such application that complies with the terms of FIFRA, the regulations at Title 40 of the CFR, and this Agreement. As necessary, EPA may require changes to the submitted label in addition to those described in this Agreement. If the Agency, at its sole discretion, determines that an application is deficient or otherwise inconsistent with the requirements of this Agreement, EPA will notify the relevant Atrazine Registrant of the deficiencies. The Atrazine Registrant will have 15 business days from the date of notification to correct the deficiencies and to submit a corrected application. If the Atrazine Registrant fails to correct the deficiencies, such product may be deemed in noncompliance with the terms and conditions of registration set forth in this Agreement. Each application shall request that EPA include all of the following as terms and conditions of the amended registration:

A. Requirements of Agreement: All terms and conditions set forth in paragraphs 8, 9, 11, and 12 of this Agreement.

B. Conditions on distribution and sale: As of the 60th calendar day after the notification of approval of each amended registration, the Atrazine Registrant shall not distribute or sell the product without either a label bearing the statements identified in paragraph 8.A. and E. or a sticker directing users to the supplemental label pursuant to paragraph 4. Distribution or sale of this product by the Atrazine Registrant without the new approved labels after the date in the preceding sentence may result in enforcement action.

C. Notification of current purchasers: Within 30 calendar days of the notification of approval of this amended registration, the Atrazine Registrant shall notify all supplemental distributors and any end use registrants using the end use atrazine product as a source of active ingredient for their end use products of: 1) the new terms and conditions of this registration and

2) the terms and conditions placed on any end use product formulated from this end use product, as described in this Agreement. The Atrazine Registrant shall provide EPA's Special Review and Reregistration Division (7508C), Office of Pesticide Programs, with copies of these notifications within 14 business days after the notifications were sent.

3. **Atrazine products not listed in Appendix II:** A request for cancellation pursuant to paragraph 1 or an application to amend registrations pursuant to paragraph 2, must specifically include the name and registration number of any other Atrazine product registrations containing Atrazine as an active ingredient that is held by the Atrazine Registrant and that is not listed in Appendix II.A. or II.B. Any such product registrations identified in a request or application that are not already listed in Appendix II.A. or II.B. will be automatically added to the relevant portion of Appendix II and subject to this Agreement.

4. **Supplemental Labeling:** Each Atrazine Registrant agrees to provide supplemental labeling with its Atrazine products listed in Appendix II.B. (other than products containing 4% or less atrazine active ingredient) and its Atrazine products listed in Appendix II.A.. Supplemental labeling is not required for any product listed in either Appendix II.A. or II.B. if the product bears an amended registration label or replacement registration label that is approved by EPA pursuant to paragraph 2 and 6 through 7, respectively, and consistent with the terms and conditions of this Agreement, and the product bearing the amended label or replacement registration label is distributed in the same manner as described for supplemental labeling in paragraph 4.B.(1) and 4.B.(2).

A. **Label statements:** Such labeling shall include the following, as appropriate for each Atrazine product:

- (1) Labeling provisions required pursuant to paragraph 8.A. and 8.E..
- (2) All statements conforming to all provisions of Appendix V.

B. Distribution of supplemental labeling: Such supplemental labeling shall be made available pursuant to the following process:

(1) Each Atrazine Registrant shall ensure that the supplemental labeling for its technical products is distributed to the purchasers of its technical products, and take appropriate steps to see that the supplemental labeling for its end use products is distributed to the retailer or other final point of sale for such end use products (“retailers”); and that distribution shall occur within 60 calendar days of notification of approval of the supplemental labeling by EPA and any necessary State regulatory authority.

(2) Each Atrazine Registrant distributing technical products to registrants having their own end use labels shall provide guidance on the language for that purchaser’s supplemental label.

(3) Upon approval of the supplemental label by all necessary governmental entities, Atrazine Registrants shall ensure that any Atrazine product (other than a product containing 4% or less atrazine active ingredient) in their possession and produced from products listed in Appendix II.A. as well as products listed in Appendix II.A., shall bear a sticker that directs users to the supplemental label and that states that the supplemental label must be followed even if the supplemental label is inconsistent with the label attached to the product. In addition, upon approval of the supplemental label by all necessary governmental entities, Atrazine Registrants shall send to each of their customers copies of the supplemental label and stickers for atrazine products no longer in the atrazine registrants possession but produced prior to approval of supplemental label with a request that those customers make supplemental labels and stickers available to any purchasers of their product except end users.

C. Time for submission of supplemental labeling: No later than 15 business days after the effective date of this Agreement, Atrazine Registrants shall submit proposed

supplemental labeling or a statement that the registrant intends to use a generic supplemental label approved by EPA.

D. Failure to comply with supplemental labeling provisions for technical products: For atrazine products listed in Appendix II.A., in the event that (i) EPA or any necessary State regulatory authority rejects the supplemental labeling, and an acceptable revision is not submitted within 10 days of receipt of such rejection notice; (ii) the labeling is approved but is not being distributed in accordance with paragraph 4.B; or (iii) there is evidence that stickers required by paragraph 4.B.(3) are not appropriately attached to the products or are otherwise misleading, such Atrazine product implicated by such noncompliance may be deemed in noncompliance with the terms and conditions of registration set forth in this Agreement.

E. Failure to comply with supplemental labeling provisions for end-use products: For Atrazine products listed in Appendix II.B. (other than products containing 4% or less atrazine active ingredient) and that have not received an approval of an application filed pursuant to paragraph 2, in the event that (i) EPA or any necessary State regulatory authority rejects the supplemental labeling, and an acceptable revision is not submitted within 10 days of receipt of such rejection notice; (ii) the labeling is approved but is not being distributed in accordance with paragraph 4.B; or (iii) there is evidence that stickers required by paragraph 4.B.(3) are not appropriately attached to the products or are otherwise misleading, such Atrazine product implicated by such noncompliance may be deemed in noncompliance with the terms and conditions of registration set forth in this Agreement.

5. **Existing stocks:** Except as provided in paragraph 4, it is EPA's current intention to state in the cancellation order that the Atrazine Registrant requesting voluntary cancellation may not distribute or sell existing stocks as defined in EPA's existing stocks policy at 56 FR 29,362 (June 26, 1991), after the product is cancelled, unless the distribution or sale is for the purpose of i) shipping such stocks back to the manufacturer; ii) relabeling or repackaging in accordance with this Agreement; iii) for purposes of export consistent with the requirements of section 17 of

FIFRA; or iv) for proper disposal. EPA reserves the right, however, to revise the date of cancellation, to prevent unreasonable adverse effects on human health and the environment. Upon request from an Atrazine Registrant, EPA shall contact appropriate State registration authorities and encourage them to expedite their consideration of any applications filed by such registrant within that State to obtain state approval(s) of changes to registrations or labels necessitated by this Agreement.

6. **Replacement registrations for technical products:** Not later than 15 business days after the effective date of this Agreement, Atrazine Registrants shall submit complete applications for replacement registrations for the Atrazine registrations listed in Appendix II.A. (and any others identified pursuant to paragraph 1) that comply with the terms of this Agreement. These applications shall be filed pursuant to section 3(c)(7)(A) of FIFRA and the regulations at Title 40 of the Code of Federal Regulations (CFR), and submitted to the Director of EPA's Special Review and Reregistration Division (7508C), Office of Pesticide Programs.

7. **Application process for replacement registrations:** Atrazine Registrants' applications for replacement registrations must be consistent with the applicable provisions of FIFRA, the regulations at Title 40 of the CFR, and this Agreement. An application will not be considered complete by the Agency unless the application complies with all the provisions of this Agreement. An application for replacement registration must be for a product that is identical in composition and labeling to a currently registered product that is held by the Atrazine Registrant, except for any differences required or authorized by the terms of this Agreement or for the deletion of any uses that are not the subject of this Agreement. Applications submitted pursuant to this paragraph may not include changes other than those submitted to comply with this Agreement and authorized by this Agreement, unless those changes have been specifically authorized by EPA in writing prior to submittal of the application. The Agency will, as expeditiously as possible, review any applications for replacement registrations submitted pursuant to this Agreement, and will grant any such application that complies with the terms of FIFRA, the regulations at Title 40 of the CFR, and this Agreement. As necessary, EPA may

require changes to the submitted label in addition to those described in this Agreement. If the Agency, at its sole discretion, determines that an application is deficient or otherwise inconsistent with the requirements of this Agreement, EPA will notify the relevant Atrazine Registrant of the deficiencies. The Atrazine Registrant will have 15 business days from the date of notification to correct the deficiencies and to submit a corrected application. If the Atrazine Registrant fails to correct the deficiencies, EPA may grant the request for voluntary cancellation.

8. **Specific terms and conditions of registrations:** Each replacement or amended registration must contain the following terms and conditions set forth below and in all Appendices to this Agreement :

A) **Label requirements:** The label must include in the “DIRECTIONS FOR USE” section the following statements:

1) “This product may not be reformulated or repackaged into another product unless the registration of the reformulated or repackaged product was either granted or amended after May 1, 2004 so as to be consistent with the terms and conditions set forth in the Atrazine January 31, 2003 Interim Reregistration Eligibility Document (IRED).” The terms and conditions of the IRED will be consistent with the Agreement.

2) “No product **(other than products containing 4% or less atrazine active ingredient)** may be formulated or repackaged from this product unless the formulated repackaged product bears a label including all of the following statements:

The following language must be prominently displayed in the DIRECTIONS FOR USE on the label: “ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through www.atrazine-watershed.info or

1-866-365-3014 [or insert own AWIC contact information]. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact [insert name of registrant] for a refund.””

3) "No products containing 4% or less active ingredient may be formulated or repackaged from this product unless the registration of the resulting product includes the following terms and conditions: the Registrant of this product shall immediately: i) cease all distribution and sale to any retailer or any entity distributing or selling such product to any retailer located within all counties containing any portion of any Watershed Area listed in the AWIC; ii) ensure the removal of such Atrazine product from the shelves of any retailer located within all counties containing any portion of any Watershed Area listed in the AWIC; and iii) repurchase any such Atrazine product from any of the purchasers described above. In addition, such Registrant shall consult with the State(s) in which such counties are located to determine whether additional territory shall be included in the area to which these requirements will apply. If the State(s) determine that a larger area is warranted, the Registrant shall within 10 days of such determination notify the Director of EPA's Special Review and Reregistration Division (SRRD) (7508C), Office of Pesticide Programs, of the specific boundaries within which the stop sale, removal, and repurchase shall take place."

4) If the product contains directions for use other than for reformulation and contains greater than 4% atrazine active ingredient, the label must include all of the following statements:

The following language must be prominently displayed on the label: "ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through www.atrazine-watershed.info or 1-866-365-3014 [or insert own AWIC contact information]. If use of this product is prohibited in your watershed,

you may return this product to your point of purchase or contact [insert name of registrant] for a refund.””

B) Drinking water program: Atrazine Registrants shall conduct the drinking water monitoring program as described in Appendix III, and shall submit reports in accordance with the schedules set forth in paragraph 7 of Appendix III. EPA has issued a FIFRA Section 3(c)(2)(B) Data Call-In Order (DCI) to require the monitoring described in Appendix III.

1) Any failure to conduct the review and analysis of SDWA compliance monitoring data required by paragraph 5 of Appendix III, or to conduct the more intensive monitoring required by paragraph 2 of Appendix III, or to submit reports consistent with paragraph 5 of Appendix III may result, consistent with paragraph 12, in cancellation of all Atrazine registrations without a right to a hearing.

2) Any use of Atrazine within a Watershed Area, as described in paragraph 10, Appendix III, contributing to a Community Water System (hereinafter “CWS”) that is listed in Appendix IV and at which total chlorotriazine (hereinafter “TCT”) levels have been found in the Weekly and Biweekly Monitoring required by paragraph 2 of Appendix III to be at or above 37.5 ppb as a 90-day rolling average at the CWS raw water intake after December 31, 2003 will be prohibited. For each CWS listed in Appendix IV, Atrazine Registrants must submit to EPA, no later than August 1, 2003, written Mitigation Plans including mitigation measures to be implemented within the Watershed Area containing each CWS listed and such Plans shall include consideration of Best Management Practices such as buffer strips, grass waterways, changes in tillage practices, changes in application timing, and use rate reductions, and how the Atrazine registrants intend to communicate with growers the measures included in each plan. Atrazine Registrants will submit progress reports semi-annually describing the measures taken during that quarter in each CWS, until EPA notifies Atrazine Registrants in writing that such reports may cease.

3) Any use of Atrazine within a Watershed Area contributing to a CWS that is not listed in Appendix IV and at which TCT levels have been found in two separate years within a five year period in the monitoring required by paragraph 2 of Appendix III to be at or above 37.5 ppb as a 90-day rolling average at the CWS raw water intake after December 31, 2003 will be prohibited. Defining the Watershed Area subject to such prohibition is at the sole discretion of EPA. For any CWS for which Atrazine Registrants have notified EPA of a first exceedence pursuant to paragraph 7, Appendix III, Atrazine Registrants must submit to EPA and begin implementing within 90 days of that exceedence, a written Mitigation Plan including mitigation measures to be implemented within that Watershed Area containing that CWS and such Plans shall include consideration of Best Management Practices such as buffer strips, grass waterways, changes in tillage practices, changes in application timing, and use rate reductions, and how the Atrazine Registrants intend to communicate with growers the measures included in each plan. Atrazine Registrants will submit progress reports semi-annually describing the measures taken during that quarter in each CWS, until EPA notifies Atrazine Registrants in writing that semi-annual reports may cease.

4) No later than 90 days after the date of this agreement, Atrazine Registrants shall establish an Atrazine Watershed Information Center (hereinafter "AWIC").

a) The AWIC will provide detailed information on what Watershed Areas have become subject to a prohibition on Atrazine use pursuant to paragraph 8.B.(2) above. Only information approved by EPA may be included in the AWIC.

b) The AWIC shall be accessible to the public daily, including weekends and holidays, through a toll-free telephone number available 24 hours a day and seven days a week, a World Wide Web site, and a regular mailing address. Contact information for the AWIC will be included on all Atrazine product labels pursuant to paragraph 8.A.

c) The AWIC shall be updated: (i) within 5 business days of receiving EPA's determination of the boundary (under paragraph 10 of Appendix III) of any Watershed Area for which use is prohibited after atrazine registrants notify EPA of an exceedence pursuant to

paragraph 7 of Appendix III; and (ii) within 5 business days of receipt of notification from EPA of a change to the description of any Watershed Area affected by use prohibition.

(d) Information provided by the AWIC regarding use prohibitions shall be prominently displayed or provided in a manner that is simple and convenient for users to access and understand and shall not be obscured by other information.

5) In the event that any CWS's 90 day rolling average TCT concentration meets or exceeds the 37.5 ppb trigger in subparagraph 8.B.(2) or 8.B.(3) due solely to acts of sabotage, non-farm point source incidents such as rail or truck spills, and acts of God, excluding runoff from rainfall, EPA will not count that exceedence toward either prohibition of use of Atrazine in that CWS's Watershed Area or submission of a Mitigation Plan pursuant to paragraphs 8.B.(2) and 8.B.(3), or for any measures to be implemented pursuant to paragraph 12.

6) (a) Beginning January 1, 2004, if a CWS is reported to EPA to be in violation of the Atrazine MCL, the Atrazine Registrants will initiate the watershed mitigation program under paragraphs 8.B.(2) and 8.B.(3) and develop a schedule for its implementation in consultation with the State Drinking Water Administrator of the State where such CWS is located.

(b) If the State Drinking Water Administrator, after receiving input from the State Agriculture Department and State Lead Agency for Pesticides, disapproves the mitigation schedule on the ground that it is not reasonably likely to reduce Atrazine concentrations in the CWS water supply, or the mitigation schedule is not met, the use of products containing Atrazine would be prohibited and the Watershed Area would be included in the AWIC.

C) **Rural well program:** Atrazine Registrants shall develop and conduct a program for monitoring of rural wells, according to the following terms and conditions, unless notified to the contrary by EPA in writing. EPA has issued a FIFRA Section 3(c)(2)(B) Data Call-In Order (DCI) to require this monitoring.

- 1) Atrazine Registrants shall define an outline of an approach for monitoring TCT levels in rural wells by March 31, 2004.
- 2) Such an outline shall, at a minimum, identify the number of wells to be sampled (such as representative of Atrazine use areas, soil types, farming practices), the frequency of monitoring (taking into consideration the need to review the data based on a 90 day rolling average), duration and timing of monitoring (taking into consideration such factors as use seasons, need for multiple year data sets) and timing of submission of data.
- 3) EPA shall review such an outline within a reasonable period of receipt of the proposed protocol from Atrazine Registrants in order to ensure that the study can be started prior to March 1, 2005. Monitoring may not commence until EPA approves the protocol.
- 4) Monitoring consistent with an approved protocol, if any, shall commence after receiving notice of the Agency's approval of the protocol in order to ensure that the study can be started prior to March 1, 2005, unless EPA agrees in writing that monitoring can commence at a later date.
- 5) Atrazine registrants shall submit the results of such monitoring in accordance with any required protocol approved by EPA.

Failure to reach agreement on a program for monitoring rural wells shall not constitute a violation of this Agreement. If the parties fail to reach agreement, EPA reserves the right to take appropriate regulatory action if EPA determines that additional label restrictions for the protection of rural drinking water wells are necessary.

D) Environmental exposure program: Atrazine Registrants shall conduct the ecological monitoring program as described in the October 2003 Atrazine IRED. This program will focus on watershed impacts of Atrazine use, particularly surface water run-off. It is EPA's current intention to issue a FIFRA Section 3(c)(2)(B) Data Call-In Order (DCI) to require the monitoring described in the October IRED. However, the obligation to conduct such monitoring is not contingent upon issuance of such DCI.

E) **Other label requirements:** The label must include statements conforming to all provisions of Appendix V.

F) **Notification to past purchasers:** Except as provided in paragraph 4, within 15 business days of the notification of approval of a replacement or amended registration, each Atrazine Registrant shall notify each pesticide registrant and each supplemental distributor who within the past 5 years purchased any Atrazine products from the Atrazine Registrant of: 1) the new terms and conditions of its registrations and 2) the terms and conditions placed on any end use product formulated from its product, as described in this Agreement. Atrazine Registrants shall provide EPA's Special Review and Reregistration Division (7508C), Office of Pesticide Programs, with copies of these notifications within 14 business days of the approval of the amended registration.

G) **Repurchase of Unstickered Atrazine Inventory:** Except as provided in paragraph 4, each Atrazine Registrant will repurchase from any person, upon request, any unopened, original packages of that registrant's Atrazine product(s) subject to the voluntary cancellation request submitted pursuant to paragraph 1 ("Atrazine Inventory"). Upon request, Atrazine Registrants must take delivery of the Atrazine Inventory as soon as commercially practicable. Atrazine Registrants have the obligation in perpetuity to repurchase any Atrazine Inventory.

H) **End-use product stop sale, removal and repurchase :** Each Atrazine Registrant that distributes or sells any Atrazine product with 4% or less of Atrazine active ingredient shall immediately: i) cease all distribution and sale to any retailer or any entity distributing or selling such product to any retailer located within all counties containing any portion of any Watershed Area listed in the AWIC; ii) ensure the removal of such Atrazine product from the shelves of any retailer located within all counties containing any portion of any Watershed Area listed in the AWIC; and iii) repurchase any such Atrazine product from any of the purchasers described above. In addition, Atrazine Registrants shall consult with the State(s)

in which such counties are located to determine whether additional territory shall be included in the area to which these requirements will apply. If the State(s) determine that a larger area is warranted, the Atrazine Registrants shall within 10 days of such determination notify the Director of EPA's Special Review and Reregistration Division (SRRD) (7508C), Office of Pesticide Programs, of the specific boundaries within which the stop sale, removal, and repurchase shall take place.

9. **Relabeling:** Except as provided in paragraph 4, in addition to the terms and conditions specified for each replacement or amended registration, each replacement or amended registration must also contain the following terms and conditions: relabeling of products canceled or amended pursuant to this Agreement with EPA-approved labels that an Atrazine Registrant elects to conduct may be accomplished under the supervision of such Atrazine Registrant by persons other than such Atrazine Registrant's employees, and may be conducted at facilities that are not registered establishments, provided that the Atrazine Registrant complies with the reporting requirements of this paragraph. Each Atrazine Registrants shall submit to EPA by December 31 in any year in which such relabeling occurred a report that identifies all individuals or entities to whom the Atrazine Registrant provided replacement labels, the locations at which relabeling occurred, the registration numbers of the relabeled products and the number of units relabeled at each location. The reports shall be filed with the Chief, Agricultural Branch, Office of Compliance (2225A), Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency.

10. **Written authorization for label changes:** No label language identified in this Agreement or any referenced document may be changed by any Atrazine Registrants without first obtaining prior, written authorization from EPA.

11. **Agreement not to challenge or provide assistance:** Atrazine Registrants agree that they will not challenge or provide financial or technical assistance to anyone challenging in any judicial or administrative forum any of the provisions of this Agreement, any cancellation orders

or Section 6(f) notices or the pendency of such orders or notices putting the terms of this Agreement into effect. Notwithstanding the foregoing sentence, nothing in this paragraph 11 shall limit any Atrazine Registrant's right to: 1) provide information concerning Atrazine to any other entity unless it can reasonably be anticipated that such information is intended to be used by that entity in litigation (or in other ways) against the Agency for the purposes of challenging any of the provisions of or implementation of this Agreement; 2) defend against an EPA cancellation proceeding brought pursuant to this Agreement; 3) challenge (in any forum) the Agency's failure to apply to Atrazine after the date of this Agreement any changes in, or adoption of, EPA policies of general applicability that would result in a material change in the limitations or obligations imposed on Atrazine Registrants under this Agreement; 4) support or participate in any action (in any forum) that challenges any EPA policy or practice of general applicability that may affect the limitations or obligations of Atrazine Registrants under this Agreement, including the support of or participation in the activities of any trade association or coalition that is involved in any such challenge; 5) defend any personal injury/toxic tort suit and raise any defense in such suit; 6) submit applications for registration of any use terminated pursuant to this Agreement, or applications to amend any term or condition of registration imposed by this Agreement; 7) seek implementation of the Agreement, or 8) enforce rights under FIFRA or EPA's implementing regulations other than rights waived in this agreement. Nothing in this Agreement shall be construed as subjecting any such application to the requirements of 40 C.F.R. Part 164, subpart D. Nothing in this Agreement affects any rights or obligations of the Atrazine Registrants under the Safe Drinking Water Act or the Clean Water Act.

12. **Cancellation without a hearing, broadening of delineation of Watershed Area, and order to investigate:** Each Atrazine Registrant agrees that failure to comply with any of the terms and conditions of registration set forth in this Agreement may, at the sole discretion of EPA, result in the issuance of an order cancelling the affected registration(s) without hearing. Before issuing any such order, EPA will notify the affected Atrazine Registrant(s) in writing of its intention to cancel the registration(s) and will specify in such notification the basis for its conclusion that the Atrazine Registrant has failed to comply with the relevant term(s) and

condition(s) of registration identified in this Agreement. If within ten (10) business days of receipt of such notification the Atrazine Registrant submits to the Agency a request in writing to meet with the Director of the Office of Pesticide Programs ("Office Director") before a cancellation order is issued, the Agency will not issue a cancellation order before providing the Atrazine Registrant an opportunity to meet with the Office Director to discuss whether cancellation is appropriate. The decision of the Office Director thereafter shall be final.

In addition, each Atrazine Registrant agrees that if any CWS subject to Weekly and Biweekly Monitoring as described in paragraph 2 of Appendix III in a Watershed Area where Atrazine use is prohibited finds a 90 day rolling average TCT concentration of 37.5 ppb in raw water at the CWS intake, EPA may broaden the delineation of the Watershed Area where use is prohibited and/or order the Atrazine Registrants to investigate and report upon the reasons for the subsequent exceedence. Before doing so, EPA will notify the Atrazine Registrants in writing of its intention and will specify in such notification the basis for its conclusion. If within ten (10) business days of receipt of such notification an Atrazine Registrant submits to the Agency a request in writing to meet with the Director of the Office of Pesticide Programs ("Office Director"), the Agency will not broaden the delineation of the Watershed Area or order any investigation before providing the Atrazine Registrant an opportunity to meet with the Office Director to discuss whether such action is appropriate. The decision of the Office Director thereafter shall be final.

13. **Other applications for Atrazine registrations:** EPA does not intend at this time to grant any application for registration of any product containing Atrazine unless the registration includes all applicable terms and conditions of this Agreement. If EPA does grant any registrations for new Atrazine products with terms and conditions different than those set forth in this Agreement, Atrazine Registrants may request conforming registrations or amendments with similar conditions. EPA shall promptly grant such registrations or amendments pursuant to FIFRA section 3(c)(7)(A) except as provided below. EPA will not approve conforming registrations or amendments if it determines that it erroneously granted a registration with terms

and conditions that differ materially from those permitted under this Agreement. In such a case, EPA will promptly take appropriate regulatory action against such registration or amendment and will not approve conforming registrations or amendments based on the erroneously granted registration or amendment.

14. **Document submission process:** Any document required to be submitted to the Agency on a specified date pursuant to this Agreement shall be deemed to be timely only if it is actually received by the Agency on or before the particular date specified in this Agreement using mail, email or facsimile. If the date specified in this Agreement is a Federal holiday or weekend, the date shall be interpreted to be the next business day. Unless otherwise specified in a subsequent communication by the Agency, all documents required to be submitted to the Agency pursuant to this Agreement must be submitted to the Director of EPA's Special Review and Reregistration Division (SRRD) (7508C), Office of Pesticide Programs.


15. **Designated representatives of Atrazine Registrants:** Any document required by this Agreement to be communicated by the Agency to Atrazine Registrants shall be sent to the appropriate representative specified in Appendix I. In the event an Atrazine Registrant wishes to change its designated representative for receipt of Agency communications or update information for its representative, the Atrazine Registrant shall inform by letter EPA's Information Resources and Services Division (7502C) and the Director of SRRD, Office of Pesticide Programs of such change. Such change will result in an automatic revision of Appendix I to incorporate the change.

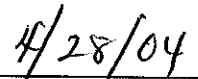
16. **The Agreement:** This Agreement and all its Appendices constitute the complete Agreement reached by EPA and Atrazine Registrants.

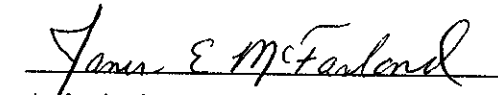
17. **Execution of the Agreement:** This Agreement may be executed in a number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document.

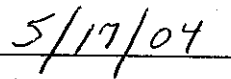
18. **Replacement of Prior Agreements:** When executed, this Agreement shall supercede and replace the prior MOA dated January 31, 2003 between Syngenta and EPA, and shall constitute the complete Agreement between EPA and the Atrazine Registrants.

WE AGREE TO THIS:


U.S. Environmental Protection Agency


Date


Authorized Agent, Atrazine Registrant


Date

APPENDIX I

AGAN CHEM MFG, LTD

Agent Name:

MAKHTESHIM-AGAN OF N AMERICA INC

551 FIFTH AVE, SUITE 1100

NEW YORK, New York 10176

UNITED STATES

DOW AGROSCIENCES LLC

9330 ZIONSVILLE RD 308/2E225

INDIANAPOLIS, Indiana 462681054

UNITED STATES

DREXEL CHEMICAL CO

1700 CHANNEL AVENUE, PO Box 13327

MEMPHIS, Tennessee 381130327

UNITED STATES

OXON ITALIA S. P. A.

Agent Name:

SIPCAM AGRO USA, INC

300 COLONIAL PARKWAY, SUITE 230

ROSWELL, Georgia 30076

UNITED STATES

SYNGENTA CROP PROTECTION, INC.

PO Box 18300

GREENSBORO, North Carolina 274198300

UNITED STATES

APPENDIX II

II. A. Atrazine Technical Products

100-529	11603-32	19713-7	34704-784	35915-6	62719-456
		19713-375			

II. B. Atrazine End-Use Products Registered by Technical Registrants

100-497		19713-6	34704-69	35915-3	62719-312
100-585		19713-11	34704-490	35915-4	62719-313
100-817		19713-76	34704-622		62719-368
100-827		19713-80	34704-689		62719-371
100-886		19713-171	34704-690		62719-479
100-962		19713-291	34704-728		
100-972		19713-498	34704-822		
100-1152		19713-499			
100-1161		19713-513			

APPENDIX III

Review of Past SDWA Monitoring Data and Intensive Monitoring Program:

- 1) The Atrazine Registrants will review and analyze all available Safe Drinking Water Act (SDWA) compliance monitoring data from the following States: IL, IA, NE, KS, IN, MO, OH, TX, MN, WI, FL, KY, MI, PA, SD, LA, CO, NY, TN, NC, VA, MS, OK, MD, SC, GA, AR, AL, DE, NM, CA, and HI, from 1997-2002 as it becomes available for every surface water Community Water System (hereinafter "CWS") in the United States that tests for Atrazine.

- 2) For the CWS listed in Appendix IV and for any CWS for which the annual average of the SDWA data results in a value of 2.6 ppb or greater for parent Atrazine plus its chlorotriazine degradates (hereinafter "TCT") for a given year during the years 1997 - 2002 the Atrazine Registrants will take (i) weekly measurements in both raw (at the CWS intake) and finished water during the peak Atrazine use season (as specified in Table I below or identified by EPA in consultation with the Atrazine Registrants) and (ii) biweekly measurements in both raw (at the CWS intake) and finished water during the remainder of the year in that given CWS (hereinafter "Weekly and Biweekly Monitoring"). The Registrants shall submit to the Agency no later than 30 calendar days after the effective date of this agreement the list of CWS that meet the trigger defined in this paragraph. Such monitoring shall begin in 2003. TCT levels for determining the annual average of the SDWA data shall be calculated using the regression functions identified in Appendix VI.

Table I: Peak Use Season

Region	Weekly Sampling	Biweekly Sampling
Corn- Midwest	April - July	January- March and August- December
Corn - Texas	March - June	January- February and July- December
Corn - Louisiana	March-August	January- February and September- December
Sorghum - Midwest	May - July	January-April and August- December
Sugarcane- Louisiana	March- November	January- February and December

3) In the event that 37.5 ppb TCT or greater in raw water at the CWS intake is not found at any particular CWS during any five consecutive years of either:

a) weekly and biweekly Monitoring (after December 31, 2003) in accordance with this Agreement; or

b) weekly and biweekly sampling beginning in any of the years from 1997 through 2003 taken during timeframes that are reasonably comparable to those set forth in paragraph 2 above, that CWS will no longer be subject to the Weekly and Biweekly Monitoring, unless EPA objects to the proposed cessation. However, as described in paragraph 6 below, such CWS will be subject to potential future Weekly and Biweekly Monitoring by Atrazine Registrants in the event that any future annual average of SDWA data for a given year for that CWS results in a value of 2.6 ppb or greater TCT.

4) At any time after 2006 the Atrazine Registrants may provide to EPA a statistical analysis of the results from Weekly and Biweekly Monitoring for the purpose of demonstrating that less frequent monitoring can reliably predict 90 day rolling average TCT concentrations. EPA will review such analysis within a reasonable period of submission and respond appropriately.

Future Review of SDWA Monitoring Data, and Resulting Intensive Monitoring Requirements:

5) Every year the Atrazine Registrants will review and analyze all available SDWA compliance monitoring data for all surface water CWSs in the United States that test for Atrazine each year. The Atrazine Registrants will identify and notify EPA in writing, by April 1 of the following year, any CWS in which the average of the SDWA data for that year is at or greater than 2.6 ppb for TCT. Such written notification shall be provided with the results of the prior calendar year's analysis of SDWA compliance monitoring.

6) The Atrazine Registrants shall commence Weekly and Biweekly Monitoring pursuant to the terms identified in paragraph 2 at each CWS identified by Atrazine Registrants pursuant to paragraph 5. The monitoring shall commence no later than the day the report is filed pursuant to paragraph 5.

Submission of Reports on Monitoring:

7) By January 30 of each year the Atrazine Registrants shall submit the following written reports covering information for the preceding year to the Director of the Special Review and Reregistration Division: all data generated pursuant to paragraphs 2, 6 and 8, and a summary and analysis of the results of that data. In addition, Atrazine Registrants shall notify EPA in writing of any 90 day rolling average TCT concentration of 37.5 ppb or greater at CWS intake within 30 days from the last water sample included in that result.

8) If TCT levels are discovered in any CWS in finished water equal to or greater than 2.6 ppb as an annual average or in raw water at the drinking water intake equal to or greater than 12.5 ppb as a 90 day rolling average through reliable monitoring data, that CWS shall be incorporated into the Weekly and Biweekly Monitoring programs as described in paragraph 2 above and subject to cessation pursuant to paragraph 3 above.

9) By February 1, 2004, the Atrazine Registrants will submit a report to the Director of the Special Review and Reregistration Division (SRRD) containing an analysis of the feasibility of collecting and analyzing water quality samples from all CWS served by surface water that are not in the Weekly and Biweekly monitoring program described in paragraph 2 above, that could exceed 37.5 ppb as a 90 day rolling average at the CWS raw water intake. The analysis shall

consider the seasonal variability of Atrazine raw water concentrations to determine a trigger for a more frequent monitoring program to assure an Atrazine level at the CWS raw water intake will not exceed 37.5 ppb as a 90 day rolling average. The feasibility study must consider the following factors, in addition to other factors proposed by the Atrazine Registrants:

- For CWS that do not use treatment other than that necessary to remove naturally occurring pollutant concentrations, concentrations would be sampled at a point immediately following such conventional treatment.
- For CWS that do use treatment other than that necessary to remove naturally occurring pollutant concentrations, concentrations would be sampled at a point before such additional treatment is applied. If such additional treatment (e.g. activated carbon powder) is applied as a first step in the overall treatment process, the sampling would be in the immediate vicinity upstream of the drinking water intake.
- Two samples would be collected during the peak application season in that area and analyzed using a valid laboratory method and standard analytical practices. Such method may be, or include, immuno-assay technology.

10) Generally, Watershed Area is the area that directly contributes water to the CWS drinking water intake. EPA will determine the boundary of a Watershed Area after consulting with the Atrazine Registrants.

APPENDIX IV

LA1047002	Iberville Water Works District #3	Louisiana
MO1010204	Dearborn	Missouri
IL1170400	Gillespie	Illinois
KY0280267	Marion Water Department	Kentucky
KY0710247	Lewisburg Water Works	Kentucky
IA5903011	Chariton Municipal Water Works	Iowa
MO2010112	Bucklin	Missouri
IN5299001	Batesville Water Utility	Indiana

APPENDIX V

Required Labeling Per IRED for Products Containing Atrazine

Agricultural Products

1) Mixing/Loading Scenarios:

A) Liquids:

- require closed systems for mixing/loading to support aerial applications at greater than 3 lb ai/A
- all mixers/loaders (including using engineering controls) must wear long-sleeve shirt, long pants, shoes, socks, chemical-resistant gloves and chemical resistant apron

B) Wettable Powders:

- require water-soluble packaging for all WP formulations
- all mixers/loaders must wear long-sleeve shirt, long pants, shoes, socks, chemical-resistant gloves and chemical resistant apron

C) Dry Flowables:

- water-soluble packaging optional
- if in water-soluble packaging, all mixers/loaders must wear long-sleeve shirt, long pants, shoes, socks, chemical-resistant gloves and chemical resistant apron
- if not in water-soluble packaging, mixers/loaders must wear coveralls over long-sleeve shirt and long pants, chemical-resistant gloves, chemical-resistant footwear, and chemical-resistant apron plus a NIOSH-approved dust/mist filtering respirator with any N, R, P, or HE filter

- if not in water-soluble packaging, aerial application is prohibited
- D) Granular Products:
- Loaders must wear long-sleeve shirt, long pants, shoes, and socks
- 2) **Applicator and Flagger Scenarios:**
- A) Pilots must use enclosed cockpits (40 CFR 170.240(d)(6)) for aerial applications.
- B) Human flaggers supporting aerial applications must use enclosed cabs (40 CFR 170.240(d)(5)).
- C) Applicators applying sprays with motorized ground equipment (i.e., groundboom or rights-of-way sprayers) must wear long-sleeve shirt, long pants, shoes, socks, and chemical-resistant gloves.
- D) Applicators applying granular products or impregnated fertilizer must wear long-sleeve shirt, long pants, shoes, and socks.
- 3) Restrict the impregnation of bulk fertilizer to commercial facilities (prohibit on-farm impregnation).
- 4) Restrict the impregnation of dry bulk fertilizer to 500 tons per day for no more than 30 days per calendar year per facility.
- 5) Reduce the maximum application rate for handlers applying liquids with rights-of-way sprayers to 1.0 lb ai/A.
- 6) Reduce the maximum application rate for liquids for chemical follow to 2.25 lb ai/A.
- 7) Require a 60-day PHI for field corn forage uses.
- 8) Require a 45-day PHI for sweet corn forage uses.
- 9) Require a 60-day PHI for preemergent uses and a 45-day PHI for postemergent sorghum forage uses.

Non-Agricultural Products including Lawns and Turf (not Sod Farms)

- 1) Require that all wettable powder products be packaged in water soluble bags.
- 2) Granular formulations: loaders, applicators, and other handlers must wear long-sleeve shirt, long pants, shoes, and socks.
- 3) Liquid, wettable powder, dry flowable (water-dispersible granule) formulations:
 - A) applicators using spray equipment mounted on their backs must wear coveralls worn over long sleeved shirt and long pants, chemical-resistant gloves and chemical-resistant footwear plus socks.
 - B) all other mixers, loaders, applicators, and other handlers must wear long-sleeved shirt and long pants, shoes and socks, and chemical resistant gloves.
- 4) Reduce the maximum single application rate for liquid formulations on residential lawns and turf to 1 lb ai/A from 2 lb ai/A (liquid products containing >4% ai are restricted use).
- 5) Require that granular lawn products be watered in.

Homeowner Products

- 1) Restrict the application of granular lawn products when using hand-held devices (e.g. belly grinder) to spot applications only.
- 2) Prohibit applications of granular lawn products by hand.
- 3) Reduce the maximum single application rate for liquid formulations on residential lawns and turf to 1 lb ai/A from 2 lb ai/A (liquid products containing >4% ai are restricted use).
- 4) Require that granular lawn products be watered in.

Label Harmonization

- 1) Atrazine products containing >4% active ingredient must be classified as restricted use.
- 2) Maximum broadcast application rates for corn and sorghum must be as follows:
 - A) Where both a preemergence and a postemergence are used, the total atrazine applied in the preemergence PLUS postemergence treatment cannot exceed 2.5 lb ai/A/calendar year.
 - B) 2.0 lb ai/A as a single preemergence application on soils that are not highly erodible or on highly erodible soils if at least 30% of the soil is covered with plant residues; or
 - C) 1.6 lb ai/A as a single preemergence application on highly erodible soils if <30% of the surface is covered with plant residues; or
 - D) 2.0 lb ai/A if only applied postemergence.
 - E) For all tank mixtures and sequential treatment of products containing atrazine, the total lbs. a.i. of atrazine applied cannot exceed the application limits described above.
- 3) Maximum application rates per crop must be as follows (single application and annual maximum):
 - A) Conifers 4 lb ai/A; 4 lb ai/A per year maximum.
 - B) Sugarcane 4 lb ai/A (single application); 10 lb ai/A per year maximum.
 - C) Rights-of-Way/Roadsides Treatment 1 lb ai/A; 1 application per year.
 - D) Guava 4 lb ai/A (single application); 8 lb ai/A per year maximum.
 - E) Macadamia Nuts 4 lb ai/A (single application); 8 lb ai/A per year maximum.
 - F) Conservation Reserve Program (CRP) 2 lb ai/A .

- G) Chemical Fallow 2.25 lbs ai/A.
- 4) Delete all uses for total vegetation control on non-cropland areas. This does not include rights-of-way/roadsides or CRP.
 - 5) Prohibit use in chemigation systems.
 - 6) Product must not be mixed or loaded, or used within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or form the pad which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide to the mixing/loading.
 - 7) Prohibit mixing and loading within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs.
 - 8) Prohibit application within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers. If land is highly

erodible, the buffer must be planted to the crop or seeded with grass or other suitable crop.

- 9) Prohibit application within 200 feet of natural or impounded lakes and reservoirs.
- 10) Require that one of the following restrictions be used in applying Atrazine to tiled-outletted fields containing standpipes
 - A) Do not apply within 66 feet of standpipes in tile-outletted fields
 - B) Apply this product to the entire tile-outletted field and immediately incorporate it to a depth of 2-3 inches in the entire field
 - C) Apply this product to the entire tile-outletted field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

APPENDIX VI.

Regression Equations

The following are the regression equations to be used to calculate total chlorotriazine concentrations for the purposes of this agreement.

First Quarter: $y = 1.535X + 0.223$

Second Quarter: $y = 1.394X + 0.107$

Third Quarter: $y = 1.704X + 0.123$

Fourth Quarter: $y = 1.630X + 0.122$

Legend:

y = total chlorotriazine concentration

x = atrazine concentration