Mr. Heiko Leideker Executive Director, Forest Stewardship Council FSC International Center Bonn Goerresstr. 15 / II a 53113 Bonn, Germany

28 September 2006

From: The Undersigned FSC Forest Management Certificate Holders in the United States.

Subject: FSC Pesticides Policy (FSC-POL-30-001), Guidance on implementation (FSC-GUI-30-001), and Processing Applications for Derogations (FSC-PRO-01-004).

Dear Heiko,

The undersigned FSC forest management certificate holders comprising almost 20 million acres (8 million hectares) in the United States fully support and actively strive to meet the goal stated in the introduction to FSC PESTICIDES POLICY (FSC-POL-30-001): *"FSC policy in relation to the use of pesticides in FSC-certified forests and plantations aims to minimise the negative environmental and social impacts of pesticide use whilst promoting economically viable management."* We also agree in principle with the three key elements for implementation described in section 1.1 of the policy (FSC-POL-30-001).

- 1. The identification and avoidance of 'highly hazardous' pesticides;
- 2. Promotion of 'non-chemical' methods of pest management as an element of an integrated pest management strategy;
- 3. Appropriate use of the pesticides that are used.

However, we are certain that the implementation of requirements as outlined in Section 2 of POL-30-001, and specified in the Guidance on implementation (FSC-GUI-30-001), and Processing Applications for Derogations (FSC-PRO-01-004) will lead to more, not fewer negative environmental and social impacts whilst discouraging, not encouraging, economically viable management. Therefore, we wish to thank you for the opportunity to provide additional input that is to be reviewed by an assembled panel of experts, relative to the FCS pesticides policies and derogation process. We anticipate that these experts will convince the FSC Board of Directors that a revision of FSC's policies is necessary to meet the goal stated in the introduction to FSC-POL-30-001 and improve the overall certification program. We believe the policies and derogation process are flawed for several reasons.

1. The policies fail to consider long standing, well funded, and scientifically credible regulatory frameworks in the United States and other countries and will lead to less environmental protection and higher forest management costs. When properly used under the more robust regulatory system in the United States, several of the FSC "banned" chemicals are the most environmentally safe and cost effective alternatives available to meet FSC's goals in many situations. Eliminating from consideration the regulated use of these chemicals will increase the use of less environmentally appropriate and cost effective chemicals and mechanical methods.

- 2. The policies fail to evaluate the environmental risk posed by various pesticides in the *context of forestry applications* where applications are far less frequent (usually only once or twice in the 30 to 120+ year life span of a forest versus annually in food crops). As such, several of the chemicals on FSC's "Highly Hazardous" list have in fact been shown to be safe and effective when used in forestry applications.
- 3. The policies fail to use a *risk assessment methodology* that considers the myriad of factors influencing the potential for environmental impacts. Again this failure results in the inappropriate inclusion of several chemicals on FSC's "Highly Hazardous" list.
- 4. The policies were not developed in a "*peer reviewed*" process that took into account input of unbiased experts in appropriate scientific fields including environmental toxicology and forest science.
- 5. The policies fail to consider the social and legal recourse available to concerned citizens and the public processes used in the United States and other countries that ensure environmental risks from pesticides are eliminated or minimized.
- 6. The FSC should adopt an approach based on a risk assessment paradigm and endorse integrated pest management.
- 7. The current policies and processes will result in unintended consequences and are a source of conflict between FSC Principles and Criteria that mandate compliance with existing laws, sustainable production, economic viability, and minimizing environmental impacts.
- 8. The policies improperly correlate hazard and risk with persistence. Persistence, by itself and especially within the relatively short time span of the thresholds used in the policies, is not necessarily a hazard or risk. Many safe and effective products rely on relatively short term persistence (less than one year) to aid in their mode of action. It is other factors such as mobility, toxicity and bio-accumulation that influence hazard and risk.

We have reviewed the submissions provided to you by FSC certificate holders in Australia, Canada, New Zealand and others in the United States and we fully concur with their assertions and conclusions. We intend to continue working with FSC to further our mutual goal "to minimise the negative environmental and social impacts of pesticide use whilst promoting economically viable management."

Existing Regulatory Mechanisms

We urge the FSC to utilize the extensive, well developed and well funded, science-based regulatory framework governing pesticide application in the United States to meet FSC goals. This framework provides a far superior approach to eliminating or minimizing any potential adverse environmental effects associated with pesticide application than does the simplistic threshold methodology currently contained in the FSC policies. In the United States these laws have been developed over a period of many decades and are often applied at Local (County), State, and Federal levels. These systems are complex, robust and considerable overlap exits amongst various agencies. Numerous safeguards are in place that effectively eliminate or significantly minimize the potential for environmental effects do not result from lawful application of pesticides. If laws are violated, penalties are enforced.

Additionally, several regulatory agencies monitor pesticide use and residues to ensure that risks to humans and the environment associated with pesticides are detected and corrective action initiated when necessary. Public safety is maintained in all cases as is environmental integrity. See for examples, Appendix (A) California Department of Pesticide Regulation <u>http://www.cdpr.ca.gov/docs/pressrls/dprguide1.htm</u>, Appendix (B), Central Valley Regional Water Quality Control Board Monitoring Program, and Appendix (C), EPA Registration Process summary.

In the absence of a robust regulatory framework, we understand FSC's need to maintain prohibitions against applying pesticides in a haphazard or irresponsible manner. In areas where a robust regulatory framework is lacking, the FCS policy should strive to employ a risk based, rather than hazard based approach. A risk assessment paradigm has the added validity needed to preserve credibility in the overall FCS Certification program because all factors affecting risk are considered (i.e., expected environmental concentration, exposure, frequency of application, toxicity, climatic conditions etc.). Developing criteria against which regulatory frameworks can be judged is one way to approach this issue.

Risk Assessment in the context of Forestry Applications

Many factors influence the potential risks associated with pesticide applications to achieve forestry objectives. These factors include rates of application, method of application, exposure, frequency of application, designed applications that safeguard against risk (i.e., watercourse and wet area buffers), timing of application, soil type, pH and organic content, climatic variables and many others. Identifying "hazardous chemicals" based on threshold limits for only one chemical or physical property fails to address important interactions of multiple factors that influence environmental fate and risk of adverse effects. For example, although imazapyr is more "persistent" than alternative chemicals that would be used instead of imazapyr, it is not persistent in terms of risk and is practically non-toxic (much less toxic than the alternatives). Also imazapyr is used at much lower rates (amounts of chemical) and much less frequently than alternatives which require multiple treatments on re-sprouting weed species.

Additionally, the fate of pesticides in field environments is dictated by numerous other sitespecific variables. Using the threshold approach currently applied by FSC does not accurately predict the potential for pesticides to persist or bio-accumulate in field settings. Please see Appendix (D), Tatum for further discussion regarding the low risk to wildlife associated with several commonly used forest pesticides, and Appendices (E), DuPont, and (F), BASF, for information concerning pesticide fates in field settings.

Peer Review and Scientific Credibility

We believe it is imperative that FSC and FSC Certificate holders operate in a scientifically defensible manner. As such, policies developed by FSC must maintain the highest degree of credibility in order to gain acceptance to both consumers and producers of FSC Certified forest products. It is has become very evident from our conversations with well respected scientists and resource professionals that FSC's pesticide policies, particularly the guidance and implementation policies, were not peer reviewed by a range of experts in the fields of forest and weed science, toxicology, pesticide policy and regulation, soil microbiology and entomology. To maintain scientific credibility of the certification program, these policies need to be re-developed in consultation with experts in these fields who are widely respected by both producers and consumers.

Public comment and recourse regarding pesticide registration, applications and other concerns in the United States.

There are several other factors that should be considered when evaluating risks of adverse effects from pesticides in the U.S. Both the State and Federal Governments allow for participation by the citizenry. The National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) (for example) require that any potential adverse environmental impacts resulting from a federally or state (California in this instance) permitted action be fully disclosed to the public and any significant adverse effects on the environment must be mitigated. The public is provided an opportunity to comment on the proposed action, including EPA's registration of all pesticides, and express any concerns. All public comments must then be addressed. Again as an example, if a public concern still remains regarding a proposed action, legal recourse (litigation) is available to the public. There have been many instances where a public concern has resulted in additional investigation and scientific determination by experts that a particular pesticide will not result in harm to biological resources (see Appendix (G), EPA memorandum regarding salmonids). In the U.S., these disputes are often resolved through the judicial system to ensure impartiality.

Integrated Pest Management

We submit the "Weed Control Methods Handbook, The Nature Conservancy" as an excellent example of how pesticides may be used in an integrated pest management (IPM) scenario. Specifically, using an IPM approach provides for the most effective, economical, and environmentally sensitive method of achieving a desired outcome. Consideration of alternatives (where they exist) is given high priority but evaluated based upon all factors influencing decisions and outcomes regarding pest control (See Appendix (H), The Nature Conservancy Handbook, http://tncweeds.ucdavis.edu/handbook.html).

Unintended Consequences

The current FSC pesticides policy will have several unintended negative consequences to both FSC and FSC Certificate holders. The credibility of the FSC Forest Certification process is seriously undermined by the use of a simplistic threshold-based pesticide policy. A more scientifically robust and peer reviewed policy is essential to maintain FSC's position as a credible mechanism that can be relied on by both consumers and producers of certified forest products.

The FSC needs to maintain a reasonable pool of FSC Certified producers if market influences are to be achieved and maintained. If consumers cannot rely on FSC to apply unbiased and science-based policies, they may be reluctant to place their trust with FSC. If producers are not reasonably certain that science-based decisions drive the intentions of FSC, then they may pursue other avenues to provide materials that consumers value. The resultant reduction in the land-base under FSC Certification will further erode the confidence of both consumers and producers.

Also, forest managers whose objectives are primarily non-commodity, natural ecosystem focused will be discouraged from becoming FSC certified. For example, a portion of the lands managed by The Nature Conservancy (TNC) in the U.S. are now FSC Certified. Although some of TNC's lands are already certified, TNC and other conservation organizations might be discouraged from maintaining and/or pursuing certification on

other lands that they manage now or in the future where environmentally safe chemicals which are on FSC's arbitrarily banned list are used to effectively control invasive pests and meet conservation goals.

Secondly, the FSC should endorse a policy that encourages advancements in forest science, specifically in this case, development of environmentally friendly methods of controlling vegetation as necessary to achieve forest management and conservation objectives. Pesticide manufacturers need to be assured of market viability before they commit to spending large sums of capital on research and development. Also, under FSC's existing policies, manufacturers will be discouraged from developing chemicals that can better meet the FSC goal of reducing pesticide use if there is not a stable, scientific basis upon which those chemicals will be judged as appropriate for use. Any policy adopted by FSC should consider the impacts on fostering and even encouraging better methods for achieving their objectives. Additionally, by prohibiting certain pesticides, FSC is requiring Forest Managers to use alternative methods even though the environmental costs of such methods may be greater than that of the banned product. Mechanical methods of vegetation control are not without environmental costs. These may include the loss of topsoil and reduced productivity, increased potential for erosion and sedimentation of watercourses, increased use of fossil fuel for operating equipment, and loss of precision in the ability to control unwanted species and retain desired commercial species and species that provide habitat beneficial to wildlife and promote biodiversity.

Conflicting Mandates

The ability to simultaneously meet FSC's goals for sustainable productivity and economic viability is compromised by FSC's existing pesticide policies. There are many instances where loss of productivity of newly planted forests will be significant in the absence of adequate control of competing vegetation or insect pests. While there may be other methods of reducing competition or insect damage, none may be as cost effective yet as environmentally benign as many available pesticides that have been subject to extensive testing during the regulatory registration processes and that are applied by licensed personnel according to legal guidelines. As one example, the California Forest Practice Rules also mandate that areas must be adequately stocked with timber within specified time frames following regeneration harvests. Again, there may be multiple ways to ensure this requirement is achieved but all carry costs. Maintaining economically viable forestry operations (especially on small ownerships with narrow profit margins) will be difficult if not impossible under FSC's existing pesticide policies.

Specific products used in the United States

2,4D: 2,4D is listed as "highly hazardous" by FSC due to an unsupportable premise that all "chlorinated hydrocarbons", as defined by FSC, have similar hazardous characteristics. We agree that the types of "chlorinated hydrocarbons" that persist and bio-accumulate such as Chlordane and DDT should not be used by FSC certificate holders. But other than the presence of a chlorine atom (which is present in all animals and plants) 2,4D has entirely different characteristics than these hazardous chemicals when it comes to bio-accumulation, toxicity and other impacts on human health and the environment. A wide body of scientific expertise and research has been ignored in FSC's guidance and implementation policies use of the term "chlorinated hydrocarbon" in regards to listing 2,4D as "highly hazardous". As one of the most researched herbicides in the world, 2,4D has been shown to be a safe and selective tool when properly prescribed and used for managing competing vegetation and for restoring native forest and grassland habitats.

The policies and guidelines ignore much of this immense body of research. Additionally, it should be noted that most of these studies which show 2,4D to be safe were conducted in the context of annual agricultural crops which require far more frequent applications than forestry applications. See Appendix (I) Journal of American College of Toxicology.

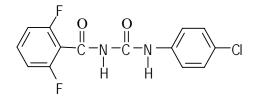
Hexazinone: Scientific reviews have shown hexazinone to be a safe and effective tool when properly prescribed and used to control unwanted invasive weeds and manage competing vegetation to promote healthy conifer growth. It is on FSC's "highly hazardous" list because it exceeds the threshold for "persistence" as determined by the flawed guidance and implementation policy. However, when considering a broader more field applicable range of research, hexazinone's persistence is actually below FSC's threshold values. But more fundamentally, FSC's relatively short values for persistence as previously discussed should not be the only decision factor in determining the appropriate use of hexazinone or any other chemical that is legally registered for use under the strict framework of US EPA and FSC's general policies and audit procedures. Hexazinone is a good example of a chemical that because it is somewhat persistent (but still for a relatively short period of time) can reduce the need for repeated applications relative to alternative treatments, thereby reducing overall chemical use. Also hexazinone is a good example of the need to evaluate chemicals based upon forestry applications because usually only one treatment is needed over a 30 to 120+ year period when establishing young conifers versus typical annual applications on agricultural crops such as alfalfa. Hexazinone has not only been demonstrated to be safe to humans and animals when properly prescribed and used, recent research has shown it to be safe to forest soil biota and processes as well. (Appendix (J) Hexazinone Effects on Soil Biota and Processes).

Imazapyr: Prohibiting chemicals based upon single attributes will unnecessarily increase costs and result in greater amounts of chemical use relative to relying on existing regulatory processes. Consider the less frequent need for use of imazapyr products compared to alternatives to control many tough re-sprouting brush species that compete aggressively with conifers. Specifically, when considering whether to pursue registration of imazapyr in California, the manufacturer (BASF) consulted with several large FSC Forest Management Certificate holders in California to judge whether the market for their products would justify the cost of registration. Had imazapyr been on a banned list, the FSC certificate holders would not have been able to indicate that they would use it in lieu of costlier and more toxic chemicals. Without this commitment BASF likely would not have spent the money and time to register imazapyr-based Chopper[®] and Arsenal AC[®] in California. Importantly, the use of these imazapyr-based products has drastically reduced the amount of the alternative chemical applied that would require much higher rates and more frequent applications with inferior results. Alternative non-chemical, mechanical treatments on re-sprouting weed species, has not only been shown to be more costly and less effective but also more hazardous to workers and result in a greater use of fossil fuels and emission of hazardous compounds.

Permethrin: LastCall products are a relatively new technology to forestry insect control. Recently, FSC Forest Management Certificate Holders in California have been working in conjunction with the manufacturer (Forests Alive) on methods to control western pine shoot borers (*Eucosma sonomana*) and western pine tip moths (*Rhyacionia bushnelli*). The technology involves using a miniscule (less than one ounce per acre) amount of "banned" permethrin combined with a species-specific pheromone attractant to specifically target a given insect pest. The alternative traditional broadcast applications of broad spectrum insecticides require active ingredients at much higher rates that impact many more non-target species. Although other companies might not need to use this technology now, it would be a very helpful tool to have available in the future if a particular invasive insect threatens a particular forest tree species and region. It is illogical to discourage a company from further developing this technology simply because the active ingredient they use is on a "banned" list without further evaluation of actual risk. Research and development of this type technology could be a means to drastically reduce insecticide use (in terms of amount of active ingredient), more precisely focus chemical applications toward pest species, and also meet the FSC goals of sustainable forest management.

Diflubenzuron: Diflubenzuron is included on the "highly hazardous" list due to acute toxicity and because it has been considered a chlorinated hydrocarbon. The WHO states, "Diflubenzuron is not persistent and is readily degraded in soil and water. However, it is highly toxic for aquatic invertebrates. Water surfaces should not be oversprayed when diflubenzuron is applied for mosquito control." ⁱ It is also worth noting that the product label, approved and enforced by the US EPAand various state and county regulatory agencies says quite explicitly, "This pesticide is extremely toxic to crab, shrimp and other aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark, except under the forest canopy when aerially applied to control forest pests. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters." In other words, it is recognized that this product is toxic when used improperly and proper use is clearly defined on the label. When used for the control of forest pests waters are protected from treatment and drift.

Regarding diflubenzuron's classification as a chlorinated hydrocarbon, diflubenzuron should **<u>not</u>** be classified as a (poly-)chlorinated hydrocarbon (also often referred to as organochlorine pesticides); for the following reasons: The molecular structure of diflubenzuron is <u>**not**</u> primarily consisting of chlorine, hydrogen and carbon. It contains just 1 chlorine atom and furthermore consists of fluorine, nitrogen and oxygen, besides hydrogen and carbon (see structural formula below).ⁱⁱ It does not exhibit the typical chlorinated hydrocarbon characteristics of bio-accumulation and persistence.



Regarding bio-accumulation, the partition coefficient n-octanol/water (expressed as log P) of diflubenzuron is indeed > 3 (3.89 to be precise ⁱⁱⁱ). This measure is however not a final indicator of a compound's bio-accumulation potential in the environment. It is merely a trigger for further research, if the log P is > 3. Therefore a US-EPA/EU guideline & GLP-compliant study ^{iii, iv} was conducted to investigate the actual bio-accumulation of diflubenzuron in non-target organisms. In a 42-day study^{iv, v, vi} conducted to evaluate the bio-concentration of radio-labelled diflubenzuron by bluegill sunfish (*Lepomis macrochirus*), fish were exposed for a 28-day period (uptake phase) to diflubenzuron added to the water, and subsequently transferred to clean water for a 14-day period to study depuration (clearance). Radio-analysis of fillet, whole fish, and visceral portions

were performed throughout the exposure and subsequent depuration period. Radioanalysis throughout the depuration period indicated **99%** clearance from fillet, whole fish, as well as viscera. The time needed for 50% depuration was only **0.60 days**, the bioconcentration factor (BCF) was only 320 and the time to reach 90% of steady state was just 2.0 days.

Completely banning the use of Dimilin[®] (a.i., diflubenzuron) will have negative social, environmental and economic impacts. For example, on the Michigan state forest system Dimilin is used to control red headed pine sawfly. Not controlling red headed pine sawfly allows populations to build to the point where they can cause damage on neighboring lands. It also results in seedling mortality ultimately resulting in poorly stocked plantations, sub-optimizing returns on investment to forest managers and landowners. These outcomes run counter to the stated purpose of "minimising the negative environmental and social impacts of pesticide use whilst promoting economically viable management."

Tebufenozide One example of the importance of tebufenozide is in the control of the Nantucket Pine Tip Moth (*R. frustrana*) that can damage the buds of young loblolly pine trees and in substantial infestations can cause significant impacts to tree growth and potentially stem quality. Mimic $2LV^{\circledast}$ (tebufenozide) is a proven means to control tip moth attack on individual trees when applied at appropriate times in relation to emergence of larvae, and is employed at small scale in loblolly pine (research plots, seed orchards, etc.). The mode of action of the pesticide is through ingestion of treated crop surfaces, and the chemical is highly active against most lepidopterous larvae while having practically no activity at typical use rates against other orders of insects. This selectivity of tebufenozide is a key element in integrated pest management programs.

Conclusion

We urge the FSC Board of Directors to carefully consider how their actions will affect the future ability to meet the mutual objectives of FSC and FSC Forest Management Certificate holders. In order to minimize potential risks associated with pesticide applications in forest settings a policy that encourages, rather than discourages innovation in forest science should be adopted. The policy should also encourage other willing landowners and forest managers to become certified and hopefully provide existing certificate holders benefits from their continued participation. This approach will better achieve the mutual objectives of all concerned parties and will more effectively reduce the use of pesticides, reduce any potential risks associated with pesticide applications, and refine methods of controlling forest pests where necessary.

We appreciate the additional time that has been granted to us to provide constructive comments regarding FSCs pesticide policies and welcome the opportunity to meet with the FSC Board on 7 November 2006 to further discuss positive solutions to this important issue.

Thank you for consideration of this matter.

Respectfully Submitted,

Participating L	J.S. Forest Management	Certificate Holders:
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Company / Agency	Certificate #	State(s)	Hectares	Acres
Anderson-Tully Co.	SW-FM/COC-124	MS, AR, LA,TN	131,579	325,000
Blencowe Associates	SW-FM/COC-09	California	10,833	26,769
Big Creek Lumber Co.	SCS-FM/COC-00009N	California	3,076	7,600
Collins Almanor Forest	SCS-FM-00006	California	38,040	94,000
Collins Lakeview Forest	SCS-FM/COC-00012	Oregon & CA	31,565	77,896
Collins Pennsylvania Forest	SCS-FM/COC -00007	Pennsylvania	50,992	126,000
The Forestland Group, LLC	SW-FM/COC-092	several	890,296	2,200,000
Hancock Forest Management-McCloud Tree Farm	SW-FM/COC-097	California	15,783	39,000
Maryland DNR – Chesapeake Forest Lands	SCS-FM/COC-00069P	Maryland	23,652	58,447
Mendocino Redwood Co.	SCS-FM/COC-00026N and SW-FM/COC-128	California	91,862	227,000
Minnesota Dept. of Natural Resources	SCS-FM/COC-088N	Minnesota	1,958,571	4,839,735
Potlatch Corporation	SW-FM/COC-1479	Arkansas	200,362	475,000
Potlatch Corporation	SCS-FM/COC-00067N	Idaho	271,000	664,000
Potlatch Corporation	SW-FM/COC-1598	Minnesota	129,307	300,000
Potlatch Corporation	SW-FM/COC-034P	Oregon	6,880	17,000
Red River Forests	SCS-FM/COC-00023N	California	51,785	127,961
Roseburg Resources	SW-FM/COC-134	California	117,357	290,000
Roy O. Martin Lumber Co.	SW-FM/COC-186	Louisiana	242,808	600,000
Seven Islands	SCS-FM/COC-00005N	Maine	326,401	806,555
Shasta Forests	SCS-FM/COC-00024N	California	57,610	142,353
State of Maine Bureau of Parks & Lands	SCS-FM/COC-00042N	Maine	230,671	570,000
State of Michigan, Dept. of Natural Resources	SCS-FM/COC-090N	Michigan	1,517,618	3,750,000
State of Pennsylvania Bureau of Forestry	SCS-FM/COC-00011N	Pennsylvania	849,484	2,099,149
State of Wisconsin DNR	SCS-FM/COC-00070N	Wisconsin	711,915	1,759,178
The Nature Conservancy	SW-FM/COC-238	VT, ME, VA, IN, MN	89,872	221,564
		Grand Total	8,049,319	19,844,207

cc: Mr. Roger Dower, FSC-US

- Mr. Tony Marcil, FSC Canada
- Mr. Michael Spencer, FSC Australia
- Mr. Richard Donovan, Smartwood
- Mr. Robert Hrubes, SCS

ⁱ IPCS INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY, Health and Safety Guide No. 99. **DIFLUBENZURON HEALTH AND SAFETY GUIDE.** UNITED NATIONS ENVIRONMENT PROGRAMME, INTERNATIONAL LABOUR ORGANISATION, WORLD HEALTH ORGANIZATION, GENEVA 1995

ⁱⁱ CHEMTURA LETTER TO FSC DATED SEPT. 8, 2006

ⁱⁱⁱ THUS, J.L.G. (1988). DETERMINATION BY HPLC OF THE LOG P VALUE OF DIFLUBENZURON AND ITS PRIMARY METABOLITES. REPORT DUPHAR B.V., THE NETHERLANDS NO.56635/36/1988. DI – 7016

^{iv} BURGESS,D. (1989). UPTAKE, DEPURATION AND BIOCONCENTRATION OF 14C-DIFLUBENZURON BY BLUEGILL SUNFISH (LEPOMIS MACROCHIRUS). REPORT BIO-CHEMISTRY LABORATORIES, INC., U.S.A. NO.56635/16/1989. DI – 7477

^v BOELHOUWERS,E.J., JOUSTRA,K.D., STEGMAN,K. (1992). IDENTIFICATION OF 14C-RESIDUES IN AQUARIUM WATER, FILLET, WHOLE FISH AND VISCERA SAMPLES OF BLUEGILL SUNFISH FROM AN ACCUMULATION STUDY WITH 14C-DIFLUBENZURON. REPORT SOLVAY DUPHAR B.V., THE NETHERLANDS NO.56630/08/1991. DI – 7477

^{vi} CITED IN CHEMTURA LETTER TO FSC DATED SEPT. 8, 2006