



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4561

February 25, 2011

Andrea Utecht
Vice President, General Counsel and Secretary
FMC Corporation
1735 Market Street
Philadelphia, PA 19103

Re: FMC Corporation
Incoming letter dated December 29, 2010

Dear Ms. Utecht:

This is in response to your letters dated December 29, 2010 and February 4, 2011 concerning the shareholder proposal submitted to FMC by David Brook. We also have received letters from the proponent dated January 24, 2011 and February 8, 2011. Our response is attached to the enclosed photocopy of your correspondence. By doing this, we avoid having to recite or summarize the facts set forth in the correspondence. Copies of all of the correspondence also will be provided to the proponent.

In connection with this matter, your attention is directed to the enclosure, which sets forth a brief discussion of the Division's informal procedures regarding shareholder proposals.

Sincerely,

Gregory S. Belliston
Special Counsel

Enclosures

cc: David Brook

FISMA & OMB Memorandum M-07-16

February 25, 2011

Response of the Office of Chief Counsel
Division of Corporation Finance

Re: FMC Corporation
Incoming letter dated December 29, 2010

The proposal requests the board to establish a product stewardship program that includes the elements set forth in the proposal.

There appears to be some basis for your view that FMC may exclude the proposal under rule 14a-8(i)(7), as relating to FMC's ordinary business operations. In this regard, we note that the proposal relates to the products offered for sale by the company and that it does not focus on a significant social policy issue. Accordingly, we will not recommend enforcement action to the Commission if FMC omits the proposal from its proxy materials in reliance on rule 14a-8(i)(7). In reaching this position, we have not found it necessary to address the alternative bases for omission upon which FMC relies.

Sincerely,

Carmen Moncada-Terry
Special Counsel

**DIVISION OF CORPORATION FINANCE
INFORMAL PROCEDURES REGARDING SHAREHOLDER PROPOSALS**

The Division of Corporation Finance believes that its responsibility with respect to matters arising under Rule 14a-8 [17 CFR 240.14a-8], as with other matters under the proxy rules, is to aid those who must comply with the rule by offering informal advice and suggestions and to determine, initially, whether or not it may be appropriate in a particular matter to recommend enforcement action to the Commission. In connection with a shareholder proposal under Rule 14a-8, the Division's staff considers the information furnished to it by the Company in support of its intention to exclude the proposals from the Company's proxy materials, as well as any information furnished by the proponent or the proponent's representative.

Although Rule 14a-8(k) does not require any communications from shareholders to the Commission's staff, the staff will always consider information concerning alleged violations of the statutes administered by the Commission, including argument as to whether or not activities proposed to be taken would be violative of the statute or rule involved. The receipt by the staff of such information, however, should not be construed as changing the staff's informal procedures and proxy review into a formal or adversary procedure.

It is important to note that the staff's and Commission's no-action responses to Rule 14a-8(j) submissions reflect only informal views. The determinations reached in these no-action letters do not and cannot adjudicate the merits of a company's position with respect to the proposal. Only a court such as a U.S. District Court can decide whether a company is obligated to include shareholder proposals in its proxy materials. Accordingly a discretionary determination not to recommend or take Commission enforcement action, does not preclude a proponent, or any shareholder of a company, from pursuing any rights he or she may have against the company in court, should the management omit the proposal from the company's proxy material.

David Brook

FISMA & OMB Memorandum M-07-16

Sent Via Email and U.S. Mail

February 8, 2011

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Chief Counsel
100 F. Street, N.E.
Washington, D.C. 20549

Re: Shareholder Proposal by David Brook
Response to FMC's Second Letter, dated February 4, 2011

Dear Sir/Madam:

I am writing in response to the second submittal by FMC, dated February 4, 2011, as it relates to the shareholder proposal submitted by David Brook ("Brook Proposal.") FMC has submitted a new twenty page letter with hundreds of pages of new documents all focused on trying to show that it has substantially implemented the components of the Brook Proposal. I am sure that after the submittal of all of this information you can make one very important conclusion, that the issues relating to Furadan and other FMC pesticides are complicated. I think what shouldn't be complicated is the conclusion which the SEC should now be in a position to make.

Stripped to its basics: FMC claims that it has substantially implemented the Brook Proposal. Here's the problem with that statement. First, FMC once again has provided a lengthy letter with all sorts of assertions and claims about doing this and that, but once again it has not provided much of anything to show its actual documentation of a stewardship program which is in any way remotely connected to the components of what the Brook Proposal is seeking to establish. Yes, there is no doubt that FMC is operating in the world's commerce, and that it is involved with the normal issues associated with its business operations. This, however has no direct correlation to the nature and substance presented within the Brook Proposal.

Here is why FMC has not substantially implemented the Brook Proposal:

- The Brook Proposal calls for the production of an annual report for all identified product misuse. FMC has never prepared an annual report to document all product misuse, it has identified Furadan is being misused, but, with no annual reporting.
- The Brook Proposal calls for product withdrawals when there is documented misuse. FMC has never allowed for the establishment of any programs to

document misuse, so its actions are at best ad hoc, which is not demonstrative of proper and/or substantial implementation.

- The Brook Proposal would document misuse and propose changes to prevent further misuse. FMC has never prepared recommendations on changes to its products or practices to control misuse.
- The Brook Proposal calls for an independent scientific advisory panel to prepare these reports. FMC has never retained an independent third party to gather and prepare any reports such as these.
- The Brook Proposal goes beyond simple stewardship concepts and attempts to put in place broader solutions to misuse issues, like funding programs to prevent loss of wildlife and licensing applicators. FMC has no such programs and has expressed no interest in exploring these issues, thus no implementation, let alone substantial.
- The Brook Proposal calls upon FMC to establish a human equality declaration as part of its Corporate Responsibility Principles. FMC has never adopted any such policy.

In short, FMC cannot claim that it has substantially implemented the Brook Proposal, because it has not. FMC's recent submission with its hundreds of pages of exhibits actually provides nothing to bolster FMC's claims that it has substantially implemented a comprehensive stewardship program, as requested in the Brook Proposal. There is not one document in the form of a policy or procedure or guidance or memorandum attached to buttress FMC's claims. The information in these papers does address some issues of product misuse, but it does not even come close to demonstrating that FMC has implemented, let alone substantially implemented the Brook Proposal. FMC has failed to demonstrate how it translates its claims of having policies and procedures in place, when once again it is making claims that it is asking the SEC to accept, without providing any physical evidence to support those claims.

An Alternate Analysis:

Second, let's examine this issue slightly differently. If FMC has, as it says, substantially implemented the Brook Proposal, then why doesn't it simply agree to formally adopt it right now? The Corporate Secretary/General Counsel/Vice President seems to be agreeing with every component of the Brook Proposal as being valid and appropriate and the company seems to be saying that it embraces all of the principles embodied in the Brook Proposal. So, why not save all of the time of the SEC and the shareholders and ask FMC to simply put their proverbial money where their mouth is and agree to adopt the Brook Proposal right now?

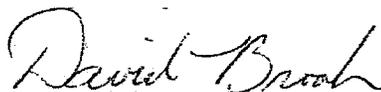
The answer to this question is that if FMC had substantially implemented the Brook Proposal, then its Officers and attorneys wouldn't be fighting so hard to keep it from reaching the shareholders, and why is that? That is because the Brook Proposal is not something that FMC has substantially implemented and because it suits FMC to avoid this issue and to avoid

any accountability as to Furadan or any other pesticides that it manufactures. FMC can talk about stewardship and human rights, but it does not want to be held accountable for the fact that it has never seen fit to devote the resources necessary to adequately protect humans and wildlife from the deadly consequences of exposure to its products. The components of the Brook Proposal, if discussed and adopted by the shareholders will begin to change that corporate intransigence.

The SEC can play a critical role in changing the dynamics at FMC by allowing the Brook Proposal to see the light of day and reach the shareholders for what will be a lively debate. The Rules of the SEC encourage this dialogue. I believe that a thorough review of the Brook Proposal, the arguments of FMC and the arguments presented in support of the Brook Proposal, shows there is ample legal support for the SEC to allow this proposal to be included in the 2011 FMC Annual Proxy Statement.

Thank you for your interest, patience and willingness to keep an open mind towards new ideas and ways that all corporations can better serve the needs of their shareholders and the world that we all live in.

Respectfully Submitted,

A handwritten signature in cursive script that reads "David Brook".

David Brook

Cc: Ms. Andrea Utecht, General Counsel FMC (sent via email)

FMC Corporation

FMC Corporation
1735 Market Street
Philadelphia, PA 19103
215.299.6000 Phone
www.fmc.com

RECEIVED
FEBRUARY 7 PM 5:00
SECURITIES AND EXCHANGE COMMISSION

Via Federal Express and PDF Email

February 4, 2011

Office of the Chief Counsel
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F. Street, N.E.
Washington D.C. 20549

Re: FMC Corporation
Shareholder Proposal of David Brook
Securities Exchange Act of 1934 – Rule 14a-8

Ladies and Gentlemen:

This letter is in response to the letter (the “Response Letter”) to the staff of the Division of Corporate Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) dated January 24, 2011 from Mr. David Brook (the “Proponent”). The Response Letter is in response to the letter (the “No-Action Request”) from FMC Corporation (the “Company”) to the Staff dated December 29, 2010, pursuant to which the Company requested that the Staff confirm that it will not recommend any enforcement action if, in reliance on Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), the Company excludes the shareholder proposal (the “Proposal”) submitted by the Proponent from its proxy statement and form of proxy (the “2011 Proxy Materials”) for its 2011 Annual Meeting of the Shareholders (the “2011 Annual Meeting”).

While the Company feels that its arguments to exclude the Proposal on the basis of Rule 14a-8(i)(3) and Rule 14a-8(i)(7) are compelling and sufficient enough to justify exclusion, the Company would like to supplement its argument that the Proposal may be excluded under Rule 14a-8(i)(10) with additional written evidence of the policies, practices and procedures that will clearly demonstrate the Company has implemented the essential objectives of the Proposal.

INTRODUCTORY STATEMENT

In evaluating the No-Action Request, in light of the Proposal and the Proponent’s supporting documents, it is critical to keep in mind that the issue at hand is not whether the Company’s products or generic or counterfeit products simulating the Company’s products are being misused to poison wildlife. Rather, the issue at hand is whether the Company has in place a product stewardship program for its Agricultural



Product Group (“APG”) that has “substantially implemented” the Proposal within the meaning of Rule 14a-8(i)(10), or whether the Proposal and the accompanying Supporting Statement are materially false and misleading within the meaning of Rule 14a-8(i)(3), or whether the Proposal deals with matters relating to the Company’s ordinary business operations within the meaning of Rule 14a-8(i)(7).

The Company recognizes that some poisonings are taking place in Africa by some desperate farmers as revenge for attacks by lions on their livestock, and in other cases by illegal poachers. The Company is by no means unsympathetic to this loss of life. These illegal killings of wildlife are very regrettable, and the Company is eager to see them come to a swift end. Nevertheless, the Company has demonstrated in its No-Action Request, and demonstrates further in this letter, that these unfortunate killings are being done almost entirely with pesticide products that are not manufactured or distributed by FMC Corporation or any of its subsidiaries, affiliates or business partners.¹ Third party use of another manufacturer’s products for illegal purposes certainly cannot be held up as evidence that the Company’s Stewardship Program is lacking in any respect. Furthermore, although some rogue purchasers of the Company’s products may in fact be misusing the Company’s products for illegal purposes, it must be acknowledged that almost any agricultural or other chemical product is capable of being illegally misused for an improper purpose if desired. In that light, the Company has processes and policies in place to minimize the chances of such misuse and to ensure that the highest standards of public health and safety are achieved in all aspects of the Company’s operations, and such processes and policies comprise the Company’s stewardship program (the “Stewardship Program”).

APPLICABLE LEGAL PRINCIPLES

The Proponent, in his Response Letter, argues that “it is insightful and telling to observe that that [sic] FMC has stated that it believes that it has substantially implemented the ‘objectives’ sought by the proposal, it does not state that it has implemented the proposal,” *see* Response Letter, pg. 10. The Proponent argues that the language of 14a-8(i)(10) reads “substantially implemented the proposal,” not its objectives.” *See* Response Letter at n. 27. By insinuating that the Company must implement the Proposal *exactly* as it has been presented by the Proponent in order for the Company to properly exclude the Proposal under Rule 14a-8(i)(10), the Proponent misstates the Staff’s published interpretation of Rule 14a-8(i)(10).

The Commission stated in 1976 that the predecessor to Rule 14a-8(i)(10) was “designed to avoid the possibility of shareholders having to consider matters which have already been favorably acted upon by the management....” Exchange Act Release No.

¹ Crop Life International, a global industry organization committed to supporting sustainable agriculture, has estimated that on the order of 40% of all pesticides used in Kenya is counterfeit.

12598 (July 7, 1976). When a company can demonstrate that it already has taken actions to address each element of a shareholder proposal, the Staff has concurred that the proposal has been “substantially implemented” and may be excluded as moot. *See e.g. Exxon Mobil Corp.* (avail. Jan. 24, 2001); *The Gap, Inc.* (avail. Mar. 8, 1996); *Nordstrom, Inc.* (avail. Feb. 8, 1995). Moreover, a proposal need not be “fully effected” by the company in order to be excluded as substantially implemented. *See* Exchange Act Release No. 40018 at n.30 (May 21, 1998); *see also* Exchange Act Release No. 20091 at II.E.6. (Aug. 16, 1983). Instead, the Staff has noted that “a determination that the [c]ompany has substantially implemented the proposal depends upon whether [the company’s] particular policies, practices and procedures compare favorably with the guidelines of the proposal.” *Texaco, Inc.* (avail. Mar. 28, 1991). In other words, substantial implementation under Rule 14a-8(i)(10) requires that a company’s actions satisfactorily address the underlying concerns of the proposal and that the *essential objectives* of the proposal have been addressed. *See e.g. Anheuser-Busch Cos., Inc.* (avail. Jan. 17, 2007); *ConAgra Foods, Inc.* (avail. Jul. 3, 2006); *Johnson & Johnson* (avail. Feb. 17, 2006); *The Talbots, Inc.* (avail. Apr. 5, 2002); *Masco Corp.* (avail. Mar. 29, 1999).

As noted above, the Commission’s statements and Staff precedent confirm that the standard for exclusion under Rule 14a-8(i)(10) is that a shareholder proposal be substantially implemented, not fully effected in all its particulars. In other words, Rule 14a-8(i)(10) permits exclusion of a shareholder proposal when a company has implemented the essential objectives of the proposal, even when the manner by which a company implements the proposal does not correspond precisely to each of the actions sought by the shareholder proponent. *See* Exchange Act Release No. 20091 (Aug. 16, 1983); *see also Honeywell Int’l Inc.* (avail. Jan. 31, 2007); *Sun Microsystems, Inc.* (avail. Sept. 12, 2006); *General Motors Corp.* (avail. Apr. 5, 2006); *Tiffany & Co.* (avail. Mar. 14, 2006); *The Boeing Co.* (avail. Mar. 9, 2005); *The Home Depot, Inc.* (avail. Mar. 7, 2005) (each allowing exclusion under Rule 14a-8(i)(10) of a shareholder proposal requesting that any future poison pill be put to a shareholder vote “as soon as possible” or “within 4-months” where the company had a poison pill policy in place that required a shareholder vote on any future poison pill within one year). *See also Schering-Plough Corp.* (avail. Feb. 2, 2006); *Northrop Grumman Corp.* (avail. Mar. 22, 2005); *Southwest Airlines Co.* (avail. Feb. 10, 2005) (each permitting exclusion of a shareholder proposal seeking declassification of the company’s board of directors “in the most expeditious manner possible” when the company planned to phase in declassification of the board of directors such that the directors were elected to one-year terms as their current terms expired).

In his “Brief Answer,” the Proponent summarizes his argument that the Company has not substantially implemented the Proposal because the Company “has not adopted policies or procedures that it has disclosed or taken sufficient actions to address the concerns raised in the proposal,” and that “FMC has no policy on human equality, so factually there can be no implementation whatsoever.” *See* Response Letter, pg. 9. Contrary to these assertions, the Company has, in fact, adopted written policies and procedures that clearly demonstrate the Company’s continued and unwavering dedication

to its Stewardship Program, and that the Stewardship Program is designed to address both identified and alleged incidents involving *any* of the products of the Company's Agricultural Products Group ("APG"), including, but not limited to, Furadan. Moreover, the Company can demonstrate that its practices and procedures with respect to the sale of its APG products supplement its adherence to written policies, and that, accordingly, the essential objectives of the Proponent's "human equality" declaration have also been substantially implemented.

ANALYSIS

I. The Company's Policies, Practices and Procedures Compare Favorably with the Guidelines of the Proposal and Demonstrate that the Company has Substantially Implemented the Essential Objectives of the Proposal

The Proponent asserts that "the lack of any documentation, other than the word 'stewardship' overwhelmingly demonstrates that in practice FMC has not, as a corporation, committed to any real product stewardship program." *See* Response Letter, pg. 2. Despite these claims, the Company has ample documentation to support that its Stewardship Program has been "institutionalized" with written goals and objectives; product life cycle analysis questionnaires; comprehensive internal and independent product audits; internal and external product surveys; Adverse Effect ("AE") system reporting; a Global Product Stewardship Manager for APG who facilitates dialogue among APG employees, its customers, foreign governmental organizations and non-governmental organizations; and a Sustainability Council that issues written recommendations to the Company's senior executive management. Moreover, the Company's stewardship efforts and AE reports are communicated to, and reviewed by, the Company's Chief Executive Officer and senior executive management on an annual basis, thus establishing their direct involvement, and potential for implementing modifications to, the Company's Stewardship Program.

A. The Company's Product Stewardship Program is Institutionalized by Written Goals and Objectives and Features Direct Involvement by the Company's Senior Executive Management

Despite the Proponent's unfounded assertion that "it has become apparent that FMC has not institutionalized through the adoption of policies or procedures any product stewardship program," *see* Response Letter, pg. 2, the Company's Stewardship Program is in fact "institutionalized" through a document outlining its goals and objectives and this document, for practical purposes, functions as a mission statement (the "Mission Statement"). The Mission Statement is attached hereto as Exhibit A, and its existence, in combination with the rest of the documents referred to below, demonstrate that the Company's Stewardship Program is endorsed by senior executive management.

The Company devotes substantial resources and management attention to its Stewardship Program, which is summarized on the Company's web site at: <http://www.fmc.com/corporateresponsibility/HealthSafetyEnvironment/ProductStewardship.aspx>. In a related manner, public health and safety are major concerns of the Company. See: <http://www.myfmc.com/corporate/safety/Pages/default.aspx>.² The stewardship principles listed on these Company web pages are institutionalized through the daily practices of the Company's employees and are inherent in every phase of the Company's operations, from product development, to manufacturing, operations, delivery to our customers, and product use. Contrary to the Proponent's assertion that the Company's Stewardship Program is limited in focus to internal employee safety, *see* Response Letter, pg. 15, the Company's stewardship efforts are in fact equally directed to the Company's distributors, customers, retailers, growers, and the communities in which the Company operates. As just one example of many, see Exhibit C to our No-Action Request, entitled "Environmental Stewardship Guidelines." This pamphlet is addressed to users of our APG products, advising on how to avoid misuse of the products, advising as to the use of the products in accordance with label directions, warning against the use of products for illegal predatory baiting, and advising distributors and retailers how to spot a purchaser who may be attempting to purchase a product for illegal baiting purposes. The importance of stewardship principles is emphasized by the Company's senior executive officers, who direct and oversee the Stewardship Program.

The Proponent repeatedly expresses his concern that "[w]ithout the direct involvement of the Board and the Senior Executive Officers, it is hard to imagine that FMC can claim that any program exists." In addition to their endorsement of the Mission Statement, the Company's senior executive management is directly involved in the Company's Stewardship Program. Every year, APG, which is heavily involved in implementing the Company's Stewardship Program in that business segment, as discussed in more detail below, presents a comprehensive annual stewardship report to the Company's Chief Executive Officer and senior executive management (the "Annual Report"). Each other business segment of the Company does the same. The Annual Report, which is presented in written form and explained in detail in a meeting of senior APG personnel with the Company's Chief Executive Officer and the senior management team, presents the material aspects of the Company's stewardship efforts implemented through the Company's Stewardship Program throughout the previous year. Moreover, the Annual Report dedicates substantial attention to the Company's AE data collection and reporting process, enumerating the AE reports concerning each APG product received in the prior year. The Annual Report facilitates a direct communication between the Company's senior executive management and senior APG management, which implements the Company's Stewardship Program for its APG products globally. Through this process, the Company's executive leadership is able to assess the status and progress of APG's

² This compares favorably with the Environmental Health & Safety initiative of Dow Chemical Company, the company that the Proponent holds out as the gold standard for meeting the "substantially implemented" requirements of Rule 14a-8(i)(10) in the stewardship arena.

stewardship efforts and, as necessary or appropriate, to implement changes to the Company's Stewardship Program. As much of the Annual Report contains sensitive confidential and proprietary information, the Company cannot make public the entire Report, but an excerpt from the most recent Annual Report is attached hereto as Exhibit B, and the Company undertakes to make additional portions of the Annual Report available to the Staff upon request, subject to confidential treatment.

Upon the guidance and direction of the Company's executive leadership, APG implements changes to the Stewardship Program directly through communication to its employees. Attached hereto as Exhibit C is a communication from the head of APG, who is also a senior executive officer of the Company, to all 1500 APG employees. This communication reinforces the Company's commitment to AE reporting and, significantly, includes a reference to the importance of AE reporting relating to information obtained outside of the United States, which goes above and beyond the requirements of the U.S. Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"). While the Proponent asserts that the Company's reporting of AEs to the United States Environmental Protection Agency ("USEPA") is "not voluntary..., so that can't be called FMC's [stewardship] program," *see* Response Letter, pg. 13, this communication demonstrates that the Company is committed to more than just FIFRA's reporting requirements.⁵

The Mission Statement, the Annual Report and the types of communications detailed above demonstrate that the Company has institutionalized its Stewardship Program with direct involvement and meaningful participation from its senior leadership. Accordingly, it simply cannot be said, as the Proponent asserts, that the Company has not "presented a single written policy or procedure as to how its... 'stewardship' program is implemented." *See* Response Letter, pp. 1-2. Instead, the Company's efforts in this regard clearly demonstrate that the Company has substantially implemented the Proposal.

B. As Part of its Product Stewardship Program, the Company Utilizes Product Life Cycle Analysis Questionnaires, Comprehensive Internal and Independent Product Audits and Internal and External Product Surveys to Monitor and Assess Risks and Safety Issues Associated with its Products

The Proponent asserts that the Company "has no ... policies, procedures, public participation components, identified systems or processes set up to monitor and assess risks and teams of employees to monitor product use." *See* Response Letter, pg. 12. In support of this unfounded proposition, the Proponent cites *The Dow Chemical Co.* (avail. Mar. 5, 2008) (the "Dow No-Action Letter") to argue that the type of documentation submitted by The Dow Chemical Company ("Dow") would allow "an objective observer to identify components of its programs which [would confirm] that [the stewardship] program

⁵ *See also* Section I.C below, which describes the Company's FIFRA & AE Reporting Compliance Manual.

February 4, 2011

was real and it had integrated these programs into its daily operations.” See Response Letter, pg. 10. Specifically, the Proponent cites the following passage:

Under this program, Dow has implemented systems and processes for evaluating, monitoring and addressing both the risks associated with, and the societal concerns raised by, its products, including those that are genetically engineered. These systems and processes include a “Business Risk Review,” through which Dow conducts risk evaluations for new and existing products and their applications. These various reviews address the entire life cycle of a product, starting at the discovery phase. See Response Letter, pg. 11 (*citing The Dow Chemical Co.*, 200 SEC No-Act. Lexis 301, 42-43).

The Proponent also notes that Dow’s systemic review consisted of a product evaluation by teams of its own employees using a checklist with 40 questions “to ensure that its products were properly used.” See Response Letter, pg. 11.

Like Dow, the Company has implemented a written procedure by which *all* of its products, including Furadan and other products marketed domestically and internationally, are meticulously reviewed to address risk and safety concerns, prior to their introduction into the marketplace. Moreover, while the product evaluation review of Dow cited by the Proponent purportedly consists of 40 questions, the Company’s Product Life Cycle Analysis questionnaire (“LCA”) consists of over 100 questions. The Company’s LCA is attached hereto as Exhibit D. Each completed LCA is analyzed by key managers of all relevant functional areas within APG, and the product’s future commercialization is evaluated from a variety of perspectives, including public health and safety. If appropriate, changes in proposed production methods or raw materials may be indicated, or the product may be abandoned altogether. The LCA process is not conducted only upon the inception of a product. Rather, each time a product is changed in any material respect, the LCA is updated to address the impact of those changes, and the analytical evaluation is repeated in order to ensure that the product, as modified, meets the same high standards for public health and safety as when the product was first introduced into the marketplace. The Company’s use of the LCA for each and every one of its products is an example of a fully-implemented system and process for evaluating, monitoring and addressing both the risks associated with, and the societal concerns raised by, its products.

The Company supplements the LCA with a Responsible Care Management System (“RCMS”) Internal Audit, which is an *annual* audit involving interviews conducted with many managerial employees of the APG, the most recent one involving sixteen APG managers. The RCMS Internal Audit is effected through the RCMS Internal Audit Checklist, which is a twenty-page document consisting of approximately 100 questions. The RCMS Internal Audit Checklist is attached hereto as Exhibit E. Whenever an APG manager responds to a question with either “non-conformance,” which is defined as a deviation or non-conformity with the RCMS requirements, or “opportunity for improvement,” which is defined as an isolated deviation from planned arrangements, the

response is compiled at the end of the RCMS checklist in the "Summary of Findings" section and the Company immediately develops remedial actions to address these findings. As demonstrated by the written policy statement that accompanies the RCMS Internal Audit, "[f]or all cases where non-conformances with the RCMS have been identified, corrective actions will be developed," and "[w]herever possible, corrective action plans will be developed within 30 days from the date the final audit was issued." Similar to the product evaluation questionnaire utilized by Dow, the RCMS Internal Audit is only implemented for products registered in the United States, including Furadan, but the remedial effects developed by the Company in response to any non-conformance are implemented into the Company's *global* operations. Finally, these RCMS Internal Audits are supplemented by an *external* audit conducted by an independent agency every three years by Det Norske Veritas Certification, Inc.

In addition to its implementation of the LCA and the RCMS Internal Audit, the Company conducts a RCMS Employee Survey in order to solicit *additional* internal evaluations of the Company's products. Upon review of employee responses, APG's Global Product Stewardship Manager tabulates the results and communicates these results to the Company's senior executive management. An action plan is also developed to address issues identified from the survey.

While the Company's use of the LCA, the RCMS Internal Audit and the annual RCMS Employee Survey demonstrates a steadfast commitment to risk and safety product review based upon *internal* evaluation, the Company has demonstrated repeated and continued commitment to soliciting *external* evaluation in order to strengthen its review process by implementing a RCMS Customer Survey, which the Company sends to all of its customers. Upon receipt of customer responses, the Company's APG Global Product Stewardship Manager tabulates the results, communicates these results to the Company's senior executive management, and develops an action plan to address any issues identified in the survey. The RCMS Customer survey is also important because, like the Proponent asserts, any credible stewardship program must focus on "the real world, not ... [the Company's] production facilities," *see* Response Letter, pg. 16, and these surveys are designed to elicit direct, external feedback and evaluation of the Company's products from its customers.

The LCA, the RCMS Internal Audit, the RCMS Employee Survey, the RCMS Customer Survey and the corresponding role played by the Company's APG Global Product Stewardship Manager in communicating these audit and survey results to the Company leadership are examples of the Company's implementation of systems, processes, practices and procedures for evaluating, monitoring and addressing both the risks associated with, and the societal concerns raised by, its products. These measures taken by the Company demonstrate that the Company has institutionalized efforts to understand and control the risks and safety issues associated with its products, and that the data collected by these processes is directly communicated to the Company's senior executive management. Accordingly, the Proponent's assertion that "it has become

apparent that FMC has not institutionalized through the adoption of policies or procedures any product stewardship program” is simply untrue. *See* Response Letter, pg. 2.

C. The Company’s Global Adverse Effects Reporting System Both Exceeds the Company’s Legal Reporting Obligations under FIFRA and Facilitates the Company’s Established Trend Analysis and Corresponding Remedial Efforts

In addition to the LCA, the RCMS Audits and the RCMS Surveys, the Company’s robust AE reporting system is another example of an institutionalized system and documented process by which the Company monitors and assesses global risks associated with its products. This AE reporting system is an important part of the Company’s Product Stewardship Program and substantially implements the essential objective of the Proposal that seeks to address all documented product misuses worldwide. While the Proponent asserts that the Company’s AE Reporting is “not voluntary” because it is required by federal law, and thus cannot be “called FMC’s [stewardship] program,” *see* Response Letter, pg. 13, the Proponent has not provided any support for his proposition that a company’s efforts to comply with applicable law should disqualify those efforts and established procedures from comprising part of an effective stewardship program. To the contrary, the Company respectfully submits that implementation of organizational procedures and practices to ensure legal compliance is an *essential* part of any properly constructed product stewardship program. Furthermore, the Company’s AE Reporting system (1) is an important *component* of its Stewardship Program and (2) is *global* and therefore exceeds the scope required under FIFRA’s AE reporting requirements.

The Company has institutionalized the AE reporting system in its own proprietary FIFRA & AE Reporting Compliance Manual (the “Compliance Manual”), which is 76 pages long and lays out all processes and instructions required to be followed by the Company’s employees to handle AE process reporting. The Compliance Manual details the processes and procedures to be carried out with respect to any AE reports emanating from anywhere domestically and internationally and demonstrates that the Company’s AE reporting system is indeed global (and therefore exceeds the scope of FIFRA’s AE reporting requirements, which are limited to the United States). The Company’s commitment to collecting data relating to global AEs is also exemplified by communications like that attached hereto as Exhibit C, and previously discussed, because it exemplifies a direct instruction from the Company’s senior leadership that AEs arising in international markets are as important as those arising in the United States.

The Company’s commitment to global AE reporting is further exemplified by the fact that all of its product labels are printed in the native language of each country in which the corresponding product is sold. In addition, the Company supplies Material Safety Data Sheets (“MSDS fact sheets”) with all of its products to provide product users with a twenty-four hour hotline staffed by independent analysts who are trained to elicit all necessary and relevant information required to ascertain the nature of any AE and to facilitate a complete and comprehensive report. In addition, the Company’s distributors

report any AE of which they become aware. These are just some of the many efforts the Company has taken to implement and sustain a global AE reporting system that collects data from all documented product misuses worldwide.

In addition to exceeding the mandate of FIFRA's AE reporting requirements by collecting *global* data concerning product misuse, the Company's AE reporting system also collects *unsubstantiated* AEs involving *all* APG products, including Furadan, even when the Company cannot verify that its products were actually involved. The Proponent has neglected to point out that many alleged "Furadan" poisonings have definitively been demonstrated, through physical and chemical analyses, *not* to involve Furadan at all, nor for that matter any product containing carbofuran (the chemical name of the active ingredient in Furadan). The Proponent also fails to point out that Furadan's efficacy and affordability as a pesticide had made it an invaluable aid to African growers in increasing crop yields, making Furadan a highly coveted product. After the Company instituted the buy-back program and voluntarily ceased the authorized sale of Furadan in Kenya effective May 2008, in Uganda and Tanzania effective May 2009, and in South Africa effective the end of 2010, counterfeiters in these countries began selling counterfeit blue granular pesticide to capitalize on this unfulfilled market demand, claiming that it was Furadan when, in fact, it was not. The Company's No-Action Request included, as Exhibits A and B thereto, investigative reports showing that alleged "Furadan" poisonings had no connection, whatsoever, to carbofuran. In addition to counterfeit Furadan being available in Africa, there are five generic carbofuran-based pesticides registered for sale in Uganda, so even if a chemical analysis of a poisoned animal shows evidence of carbofuran, this is not evidence of Furadan.

Despite the fact that many alleged "Furadan" poisonings do not actually involve carbofuran or indeed the Company's Furadan-brand carbofuran, the Company's AE reporting system collects data related to these unsubstantiated African AEs. Furthermore, in addition to merely *collecting data* on these unsubstantiated African AEs, the Company's Stewardship Program *takes action* and devotes considerable resources to investigating these alleged "Furadan" poisonings and implementing remedial action plans accordingly, and these efforts are more fully explained in Section "D," below.

Upon collecting the data related to domestic, global and even unsubstantiated AEs pursuant to the established processes and procedures mentioned above, the Company generates *quarterly* reports and submits these reports to the USEPA, as required under FIFRA. This demonstrates the falsity of the Proponent's claim that "FMC has failed to include incident data that it has collected from around the world on product misuse or other incidents, since this may not be helpful to their arguments that everything is under control." See Response Letter, pg. 6. In addition to facilitating the Company's reporting obligations under FIFRA, the Company's AE reporting system

comprises an important part of the Company's Stewardship Network because, based on the reports generated from *all* data collected through the Company's AE reporting system, the Company evaluates possible trends and makes corresponding changes to product instructions and formulations. This trend analysis is an integral part of the Company's Stewardship Program because it presents a fluid and systematic opportunity for the Company to implement global changes to its product lines based upon "real-time" data. In addition, the Company's trend analysis and opportunity for subsequent remedial action serve to substantially implement what the Proponent insists is "the most important part of the Brook Proposal," which (in the Proponent's words) is the Company's ability "to identify trends and other issues and to devote resources to 'proposing changes' to prevent further misuse." *See* Response Letter, pg. 16. Both the Annual Reports, discussed above, and this trend analysis demonstrate that the Company has substantially implemented the "most important part" of the Proposal, and accordingly, its essential objective.

D. The Company's Has Developed Constructive Partnerships with Foreign and Non-Governmental Organizations to Strengthen its Stewardship Program

The Proponent insists that "the lack of any documentation, other than the word 'stewardship' overwhelmingly demonstrates that in practice FMC has not, as a corporation, committed to any real product stewardship program," *see* Response Letter, pg. 2, but the Company has a surfeit of written documentation that demonstrates the efforts and actions taken by its Stewardship Network and Sustainability Council. These records (1) show that the Company indeed has a "real" product stewardship program, (2) provide additional support for the Company's claim that it has substantially implemented the essential objectives of the Proposal because these documents indicate that the Company's Stewardship Program works with foreign governments in training and educational programs, and (3) indicate that the Company actively partners with foreign and non-governmental organizations to strive to identify and correct product misuse, which is another essential objective of the Proposal.

One important component of the Stewardship Network, and the Company's Stewardship Program, is working with, and providing training to, foreign governmental and non-governmental organizations. The Company has met with organizations like the Kenya Wildlife Service, the Maasailand Preservation Trust and WildLife Direct, which are governmental and non-governmental organizations ("NGOs") in Africa, to develop a constructive partnership and to facilitate a dialogue that enables governmental and NGO officials to implement more effective programs to prevent misuse of chemicals by growers, and enable the Company to better identify and address safety issues, trends of product misuse and other risks associated with its products. In addition, these meetings provide the Company with an opportunity to educate and provide training to its global stakeholders. In April 2009, the Company met with the three aforementioned organizations, and these meetings were recorded through meeting minutes, which are attached hereto as Exhibit F (the "Minutes"). The Minutes demonstrate that the Company dedicates resources to understanding potential issues associated with its products, to discussing corresponding

remedial strategies with global stakeholders and to developing specific action items to execute these strategies. The Company's APG Global Product Stewardship Manager supplements these efforts by communicating and working with organizations like the Kenya Wildlife Service to monitor those processes and procedures implemented by the Company designed to remedy product misuse. An example of such a communication is attached hereto as Exhibit G.

Although the efforts described above are relatively recent, the Company has been working with foreign governmental organizations and NGOs to investigate alleged product misuse and implement preventative measures from as early as 1996. A letter to the Company from G.N. Paterson dated April 10, 1996 (the "1996 Letter"), minutes documenting a meeting held on July 24, 1996 with the Kenya Wildlife Service and the Kenyan National Irrigation Board (the "1996 Minutes"), and an acknowledgment of registration (the "Acknowledgment") sent to the Company by the Pest Control Products Board (the "PCPB") are attached hereto as Exhibit H (collectively, the "1996 Documents"). In the 1996 Letter, the Company is being informed of the alleged misuse of Furadan to poach wild fowl. The 1996 Minutes demonstrate that, within three months, the Company met with foreign governmental organizations to investigate this alleged product misuse and to agree on an action plan to correct and prevent further product misuse. Thereafter, in response to concerns over the alleged poaching activities using Furadan, the Company voluntarily withdrew registration for the use of Furadan granules on rice in Kenya. The 1996 Documents are important because they demonstrate that the Company's stewardship efforts have been a critical part of its business long before Furadan was the subject of *60 Minutes*. Moreover, the 1996 Documents exemplify that the Company has been working with foreign government organizations and NGOs to investigate alleged product misuse and developing action plans to correct and prevent further misuse for at least 15 years.

E. Since the Cessation of Sales of Furadan into East Africa in 2008, All Subsequent Alleged Cases of Poisoning of Wildlife with Furadan Appear to Have Involved Counterfeit Furadan or Other Unrelated Chemical Agents.

In addition to these efforts and despite the Proponent's assertion that the Company has "never taken steps to create a pro-active [sic] product stewardship program which is capable of accurately identifying product misuse," *see* Response Letter, pg. 2, the Company continues to make considerable efforts in working with African governmental organizations and NGOs to investigate and identify alleged misuse. Nearly all claims of wildlife poisoning allegedly involving Furadan are devoid of detailed photographs of the scene, physical samples of the granules of the suspected poisoning agent, or any sample of the carcass of the poisoned animal, and the lack of these types of evidence hinders reliable identification of the poisoning agent. In cases where photographic or physical evidence have been collected, however, the Company has tapped into its constructive partnerships with NGOs, which are a fundamental component of the Company's Stewardship Program, to implement and offer funding for rigorous and reliable testing methods to ascertain whether Furadan is actually the responsible poisoning agent.

To reiterate, in most cases where photographic or physical evidence has been collected, rigorous and reliable testing methods have demonstrated that the agent in question is actually not Furadan. In a recent case of misidentification of a pesticide alleged to be "Furadan," a representative of a non-governmental organization in Kenya purchased a container of a blue granular pesticide in an agroveter shop in Kampala, suspecting that FMC had resumed the distribution of Furadan in Uganda. The NGO representative delivered the container of pesticide to representatives of Defenders of Wildlife, an environmental activist organization. A sample of the pesticide was made available to the Company, and the Company was able to demonstrate definitively through physical and chemical testing (undertaken in the presence of the representatives of Defenders of Wildlife) that the substance was not, in fact, Furadan. This Ugandan sample was subjected to a dissolution test, which indicated that the dissolution rates of the dye in the sample varied considerably from that in Furadan. In addition, the Ugandan sample was analyzed chemically using mass spectroscopy, which demonstrated definitively that the sample was devoid of carbofuran. In e-mail correspondence relating to the incident, representatives from Defenders of Wildlife vouched for the veracity of the Company's testing, but this correspondence is also important because it demonstrates the Company's action plan related to this incident. The e-mail from the Company's APG Global Product Stewardship Manager indicates that, in response to this incident, the Company is, among other actions, (1) meeting with Defenders of Wildlife to discuss the incident and (2) developing a tiered approach for assessing samples. As a consequence, the Company is dedicating resources to investigating and implementing corrective actions *for incidents that do not even involve its own products*. This e-mail correspondence, together with photographs of the dissolution testing, are attached hereto as Exhibit I.

In addition to this Ugandan incident, detailed photographs of another recent poisoning allegedly involving "Furadan" in Tanzania were provided to the Company by a conservationist with the Amboselli Lion Project, which is a collaboration involving the Kenya Wildlife Service and other organizations. A copy of these photographs, together with e-mail correspondence with the conservationist, are attached hereto as Exhibit J. In this e-mail exchange, the conservationist notes that the photograph indicates the poisoning agent is "obviously Furadan," but in actuality, the poisoning agent was *not* Furadan. While Furadan is regular in size and shape and is spherical, upon closer inspection, the photograph reveals that the blue granules in the alleged incident are of inconsistent size and are angular in shape similar to the known counterfeit identified in the Ugandan example described above. Additionally, this e-mail correspondence shows that the substance in question was purchased in a container labeled "Furadan," demonstrating that counterfeiters are falsely labeling the packaging used to sell their counterfeit product. While this unfortunate poisoning is recent, and despite the fact that it has been established that the Company's products are not even involved, the Company already has instituted an action plan to work with Defenders of Wildlife to provide training on sample collection and agent identification. These incidents in Uganda and Tanzania are certainly unfortunate, but they are also important because they provide additional support to demonstrate that (1) in most

cases where physical and detailed photographic evidence is collected, reliable physical and chemical testing indicates that Furadan is not the actual poisoning agent and (2) the Company's Stewardship Program is both *responsive* and *dedicating significant resources* to investigating and remedying alleged product misuse, and is actively working with foreign governmental organizations and NGOs in pursuit of these goals, which is another example of how the Company's Stewardship Program is substantially implementing the essential objectives of the Proposal.

The erroneous conclusion that FMC-brand Furadan was the actual poisoning agent responsible for animal poisonings is not a recent phenomenon. Attached to the Response Letter as Exhibit 7 is a letter from Dr. Laurence Frank asserting that Furadan is being used to kill lions in Kenya. However, Dr. Frank knows quite well that lion poisoning investigations in which he has been involved and in which he initially asserted the use of Furadan actually wound up showing, through chemical analyses, not to involve Furadan at all. Accordingly, his continued assertion that Furadan is being used to kill lions in Kenya is suspect, at best. Attached hereto as Exhibit K is a letter and e-mail correspondence between Dr. Frank and the PCPB together with laboratory results certified by the Kenyan Government Chemist's Department (the "Strychnine Documents"). In the letter from Dr. Frank to the PCPB, dated August 13, 2003, Dr. Frank generally states that "the blue crystals obtained by Mr. Masere as being the pesticide used to poison predators were identified as Furadan." See Exhibit K, pg. 3, note 4. Subsequently, in the letter from the PCPB to Dr. Frank, dated January 27, 2005, the PCPB states that "[t]he results indicate that strychnine is the poison that was used to poison lions," and "[i]t is therefore true to say that contrary to the common belief that carbofuran was being used to kill the lions, strychnine, which is normally used by Veterinary department to bait dogs[,] is the poison that the locals use in killing the lions." See Exhibit K, pp. 5-6. Upon the receipt of this certified laboratory analysis, Dr. Frank wrote, in an e-mail correspondence dated February 17, 2005, that the "finding of strychnine in poisoned lions was a critical breakthrough."⁸ See Exhibit K, pg. 8. The Strychnine Documents are important, not just because they discredit Dr. Frank's assertions concerning the use of Furadan to poison lions in Kenya in support of the Proposal, but also because they demonstrate that even Dr. Frank, who according to the Proponent "has been involved with predator biology and conservation issues in Kenya for over 40 years and ... has authored 79 scientific papers and 10 articles," see Response Letter, pg. 14, cannot correctly identify whether carbofuran is the chemical agent responsible in animal poisonings.

The Frank Affidavit also states that Dr. Frank met with Company representatives in 2003 and that he informed the Company of Furadan's role in predator and waterfowl poisonings, but "FMC took no action until CBS *60 Minutes* publicized the issue in 2009." See Frank Affidavit, pg. 2. The meeting minutes from this 2003 meeting (the "2003 Minutes") and a subsequent letter, dated April 22, 2004 (the "Mead Letter"),

⁸ Note that Furadan does not contain any strychnine.

from the Company to Mr. David Mead, an Honorary Warden with the Kenya Wildlife Service, are attached hereto as Exhibit L. The 2003 Minutes are important because they show that the Company met with foreign governmental organizations and NGOs and committed to revising its product labeling in order to address the alleged role of the Company's products in waterfowl poisonings. As exemplified by the Mead Letter and the amended Furadan label for use in Kenya, included in Exhibit L, the Company fulfilled its voluntary commitment to amend the Furadan label. Accordingly, in addition to *voluntarily ceasing the authorized sale of Furadan in Kenya effective May 2008*, the Company did, in fact, take responsive action to alleged product misuse after the 2003 Meeting but prior to 2009. In addition to the Frank Affidavit, a partial listing of other errors and omissions in the Response Letter is attached hereto as Appendix 1.

Finally, the Proponent includes the statement of Mr. Martin Odino as Exhibit 8 attached to the Response Letter, to the effect that Furadan is being used to poison wildlife in Kenya. This statement is grounded entirely upon *observations* and *inference* rather than any physical evidence or empirical laboratory testing (even rudimentary testing) that would identify, or alternatively rule out, carbofuran as the responsible agent in these unfortunate and illegal poisonings. Moreover, Mr. Odino's blog indicates that he is casually using the trade name "Furadan" generically to refer to any counterfeit blue granular poisoning agent. In his blog entry dated June 2, 2010 and captioned "'Ugandan' Furadan or FMC's Furadan," Mr. Odino unwittingly provides all of the evidence necessary to conclude that the poisoning agent he has identified as being responsible for the killing of wildlife is not a product manufactured by the Company at all, but is rather a counterfeit product. In this blog entry, Mr. Odino writes:

"[t]he usual Furadan 5G has granules that are homogeneous, almost perfect spherical shapes. This 'new' Furadan has seemingly slightly larger granules that are heterogeneous in shape-spherical, oblong, polygonal."⁹

The Company's authentic product meets the description in Mr. Odino's first sentence quoted above – authentic Furadan granules are indeed "homogeneous, almost perfect spherical shapes." Accordingly, the poisoning agent he is discussing cannot be the Company's product. As is evident from the quoted blog entry, Mr. Odino has decided to use the word "Furadan" to describe the counterfeit irregular blue granules he has found at the scenes of wildlife poisoning, notwithstanding the fact that these granules are clearly not FMC's Furadan. Accordingly, one can only presume that the "Furadan" Mr. Odino is discussing in Exhibit 8 attached to the Response Letter is this same counterfeit product. Thus, his assertions concerning the Company's product being involved in the ongoing poisoning of wildlife in Kenya must be discounted.¹⁰

⁹ See <http://stopwildlifepoisoning.wildlifedirect.org/author/martin-odino/>, at entry dated June 2, 2010.

¹⁰ Incidentally, the most recent entry of Mr. Odino's blog commends the success of the Company's Furadan buy-back program and states that "we no longer see the explicit display of Furadan on the shelves in our

F. The Company's Sustainability Council Generates Written Recommendations to Senior Executive Management on a Semi-Annual Basis to Address Product Misuse Worldwide

While the Proponent implies that the Company's Sustainability Council, an independent scientific advisory panel, does not prepare annual reports on product misuse, *see* Response Letter, pg. 17, the Company respectfully submits that the Sustainability Council does indeed generate specific recommendations that are provided, in written form, to the Company's senior executive management (each, a "Sustainability Report") on a periodic basis. The Sustainability Reports contain clear and succinct recommendations to strengthen the Company's product stewardship initiatives. The organization of the Sustainability Council and the dissemination of the Sustainability Reports are additional examples of Company practices that substantially implement the essential objectives of the Proposal because they involve a written report generated from recommendations issued by an independent scientific advisory panel to address and propose changes to prevent further global product misuse.

II. The Company Has Substantially Implemented the Essential Objectives of the "Human Equality" Component of the Proposal

The Proponent asserts that the second purpose of his proposal "seeks to have FMC establish a human equality declaration and policy." *See* Response Letter, pg. 8. The Company's No-Action Request clearly and succinctly lists the written policies that, in the aggregate, substantially incorporate the essential objectives of this component of the Proposal, including the Company's commitment to the Code of Conduct of the Food and Agricultural Organization of the United Nations, the American Chemistry Council's Responsible Care Guidelines and the Company's Code of Ethics and Business Conduct. *See* No-Action Request, pp. 9-11. In addition, global public health and safety are major concerns of the Company. *See*: <http://www.myfmc.com/corporate/safety/Pages/default.aspx>. While these arguments are incorporated herein by reference, the Company respectfully submits that it has consistently demonstrated a commitment to human equality by more than just adherence to written policy. As discussed in Section "B" above, the lessons learned from the Company's routine periodic RCMS Internal Audits and RCMS external independent audits are applied through implementation of action plans that apply *globally*. In addition, as discussed in Section "C" above, the Company's AE reporting and data collection is operated on a *global* basis, and across all APG products, wherever sold or distributed..

(continued...)

Kenyan agrovets [which is] an indicator of a job – the buy back – well done. We are strongly hopeful this move promotes human livelihood & wildlife conservation." *See id.* at entry dated November 20, 2010.

The Company's *practices and procedures*, in addition to its policies, have highlighted its commitment to treat, in the Proponent's words, "third world people no differently than Americans as it relates to U.S. pesticide exposure limits," and this applies with respect to the Company's sale of all APG products.

INCLUSION OF ADDITIONAL CORRESPONDENCE

Finally, the Company would like to inform the Staff that its prior failure to enclose with its No-Action Request copies of certain correspondence between the Proponent and the Company was both unintentional and inadvertent. We had not been made aware of the requirement to do so as set forth in the SLB No. 14 series. We clearly had no intention to suppress these materials, as our No-Action Request makes reference to the Proponent's annotated Proposal in multiple places.¹² Fortunately, the Proponent has supplied the Staff with most of these materials with his Response Letter, so that the Staff may take those materials into account into consideration in its evaluation of the No-Action Request and no harm will have occurred as a result of this omission. We have enclosed herewith, as Exhibit M, a copy of additional e-mail correspondence from the Company to the Proponent, dated December 22, 2010, which the Proponent failed to supply with his Response Letter. The e-mail in question demonstrates many of the Company's stewardship efforts. We have no reason to believe that the Proponent's omission of this letter was anything other than unintentional and inadvertent as well.

The Company confirms that since December 22, 2010, it has neither sent nor received any correspondence or other documents to or from the Proponent, other than copies of the No-Action Request and the Response Letter.

CONCLUSION

While the Company respectfully submits that its arguments to exclude the Proposal on the basis of Rule 14a-8(i)(3) and Rule 14a-8(i)(7), as detailed in the No-Action Request (and incorporated by reference herein), are compelling and sufficient enough to justify exclusion, the Company has supplemented its argument to exclude the Proposal under Rule 14a-8(i)(10) to provide additional examples and supporting documentation demonstrating that the Company's existing practices, policies and procedures have

¹² See Exhibits M and N to the No-Action Request, along with the corresponding text on pages 16 and 18 of the No-Action Request, as well as footnote 15 of the No-Action Request and the corresponding text on page 17.

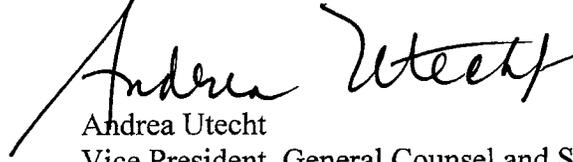
substantially implemented the essential objectives of the Proposal. The Commission's statements and Staff precedent confirm that the standard for exclusion under Rule 14a-8(i)(10) is that a shareholder proposal be substantially implemented, not fully effected in all of its particulars. In other words, Rule 14a-8(i)(10) permits exclusion of a shareholder proposal when a company has implemented the *essential objectives* of a shareholder proposal, even when the manner by which a company implements the proposal does not correspond precisely to the actions sought by the shareholder proponent.

The Company's practices, policies and procedures, in combination with the supporting documentation provided by the Company, demonstrates that the Company's Stewardship Program has been "institutionalized" with written goals and objectives; product life cycle analysis questionnaires; comprehensive internal and independent product audits; internal and external product surveys; AE system reports; an APG Global Product Stewardship Manager who facilitates dialogue among APG employees, its customers, foreign governmental organizations and non-governmental organizations; and a Sustainability Council that issues written recommendations to the Company's senior executive management. Moreover, the Company's stewardship efforts and adverse effect reports are communicated to, and reviewed by, the Company's Chief Executive Officer and senior executive management on an annual basis, thus establishing their direct involvement, and ability to expand, strengthen and effect modifications to, the Company's Stewardship Program. Accordingly, the Company does not anticipate that it would implement a product stewardship program that is materially different from the stewardship program already guiding the Company's own extensive actions, even if the Proposal were to be adopted. Consequently, and for the reasons described both herein and in the No-Action Request, the Company believes that it has substantially implemented the essential objectives of the Proposal and that the Proposal may be properly excluded pursuant to Rule 14a-8(i)(10). The Company respectfully requests that the Staff not recommend any enforcement action if the Company omits the Proposal from the 2011 Proxy Materials.

To facilitate transmission of the Staff's response to our request, my facsimile number is (215) 299-6728. If the Company can provide you with any additional information or answer any questions you may have regarding this subject, please do not hesitate to call me at (215) 299-6990. Thank you for your consideration of this request.

U.S. Securities and Exchange Commission
Page 19
February 4, 2011

Respectfully,

A handwritten signature in black ink, appearing to read "Andrea Utecht". The signature is written in a cursive style with a large initial "A" and a long horizontal stroke at the end.

Andrea Utecht
Vice President, General Counsel and Secretary
FMC Corporation

Enclosures

Cc: Mr. David Brook (w/encl.)

APPENDIX 1

1. The annotated Proposal provided by the Proponent, included as Exhibit 1 to the Response Letter, is replete with false, misleading and unsubstantiated statements. The Company has broken down the annotated Proposal into 14 main points that are being made by the Proponent. Of these, six are factually incorrect, four are misleading, one is unsubstantiated, two are unknown to the Company, and one is factually correct. Furthermore, many of the resources cited in the footnotes of the annotated Proposal are inapposite or irrelevant. Several examples of these inapposite or irrelevant cited resources are mentioned in the No-Action Request. *See* No-Action Request, Exhibits M - N; No-Action Request, pp. 16, 18; No-Action Request at n. 15, pg. 17.

2. The Proponent now claims that his Proposal is intended to apply to all of APG's insecticides, herbicides and fungicides. *See, e.g.*, Response Letter, pg. 3. However, the Proposal itself is clearly focused on Furadan, since the resources cited in the footnotes of the annotated Proposal are entirely or predominantly related to alleged incidents involving Furadan. For this reason, the No-Action Request gives more attention to allegations concerning Furadan than APG's other product lines. Nevertheless, as described in more detail in the within letter to the Commission, the Company's stewardship program is by no means limited to matters relating to Furadan, nor solely to the United States, but rather encompasses all of APG's product lines and is global in scope.

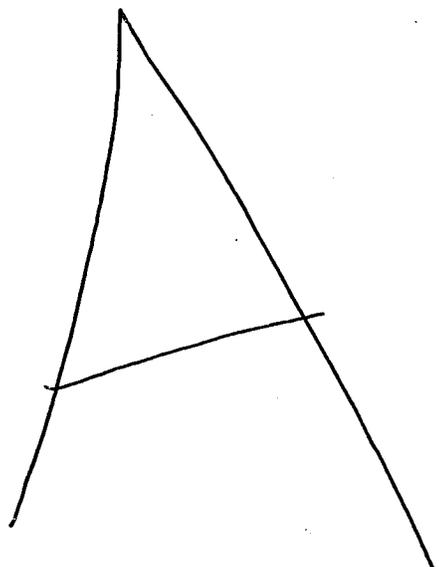
3. On pg. 15 of the Response Letter, the Respondent claims that the Company's "Vision 2015" does not contain any identifiable item related to stewardship and contains no focus towards product stewardship. Contrary to this assertion, Vision 2015 – the Company's vision for the future – contains a five-point plan that will govern the Company's activities during the next five years, and one of these points is "being safe, ethical and responsible stewards." Refer to the Vision 2015 video at <http://www.fmcbiopolymer.com/careers/Recruiting/Vision2015.aspx>, at 4 minutes and 30 seconds.

FMC CORPORATION
REQUEST FOR NO-ACTION LETTER
SUPPLEMENTAL RESPONSE LETTER

FEBRUARY 4, 2011

INDEX

- A. Mission Statement
- B. Annual Report (the introductory slides from the Annual Report as well as the twenty or so pages specifically on Stewardship)
- C. Communication from the Head of APG to All APG Employees
- D. Product Life Cycle Analysis: Screening Questions for New Products
- E. RCMS Internal Audit Checklist
- F. Minutes of Meetings with Government and Non-Government Organizations
- G. Communications from the Company to Kenya Wildlife Service
- H. 1996 Documents
- I. Correspondence and Photographs of Uganda Incident
- J. Correspondence and Photographs of Tanzania Incident
- K. Strychnine Documents
- L. 2003 Minutes/Mead Letter/Amended Furadan Label for Kenya
- M. Correspondence from Company to Proponent, dated December 22, 2010



MISSION STATEMENT

B

***ANNUAL REPORT (THE
INTRODUCTORY SLIDES FROM THE
ANNUAL REPORT AS WELL AS THE
TWENTY OR SO PAGES
SPECIFICALLY ON STEWARDSHIP)***

C

***COMMUNICATION FROM THE HEAD
OF APG TO ALL APG EMPLOYEES***

Linda Froelich

From: Milton Steele
Sent: Thursday, February 18, 2010 3:08 PM
To: ML-APG Staff
Subject: FIFRA 6(a)(2) - Adverse Effects Reporting

Importance: High
Sensitivity: Personal

Dear APG Colleagues:

As you know, one of the core principles in the FMC Code of Ethics and Business Conduct is compliance with all applicable rules and regulations.

For APG, the U.S. Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), is one of the most important laws we are required to comply with and governs the manufacture, sale, distribution, import and export of pesticides. Section 6(a)(2) of the law requires registrants to submit information to EPA regarding post-registration incidents and studies involving adverse effects to humans, animals, non-target plants, and the environment. While the Adverse Effects Reporting Rule applies particularly to U.S. information obtained by FMC Corporation through its employees and agents, information obtained outside the U.S. may also be reportable.

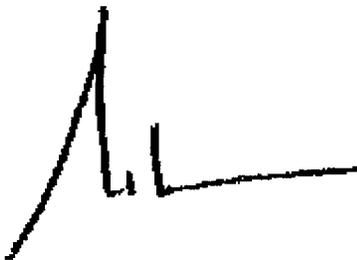
APG has a long-standing practice of complying with the Adverse Effects Reporting Rule through the use of our compliance manual, employee training, and APG's reporting processes. Our overall compliance with the Adverse Effects Reporting Rule is overseen by the FMC TSCA-FIFRA Risk Evaluation Committee (T-FREC) whose members consist of representatives from each of FMC's divisions.

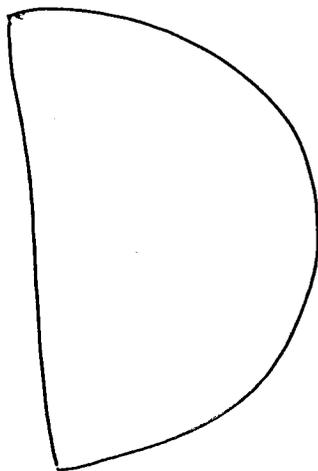
A short summary of FMC's Adverse Effects Reporting Compliance Manual can be found using the link here

<http://www.myfmc.com/departments/APG4U/Insight%20Documents/Regulatory/6a2%20Presentation%204Feb2010.pptx>. This summary addresses some common questions that have arisen over the past several years on our reporting obligations and procedures. I ask you to review the summary slides to re-familiarize yourself with the rule to ensure we are in compliance. If you should have any questions, please direct them to [REDACTED] who manages our adverse effects reporting to the U.S. EPA.

I thank you for your continued efforts to maintain APG's commitment to compliance.

With warm regard,





***PRODUCT LIFE CYCLE ANALYSIS:
SCREENING QUESTIONS FOR NEW
PRODUCTS***

PRODUCT LIFE CYCLE ANALYSIS (LCA)				
SCREENING QUESTIONS FOR NEW PRODUCTS				
The primary criteria for the product LCA is whether there is a known, perceived or potential impact to health, safety, security and the environment. This should be the consideration when answering the screening questions. An acronyms list is provided at the end of the document.				
Product Name:				
Date of Analysis:				
Compiled by:				
Life Cycle Element	Life Cycle Analysis Questions	Response	Date	Comments
R&D	Have the appropriate R&D activities been completed to support the product? <i>If the answer is no, please explain.</i>			
R&D	Is the safety of this product better than older competitive products for the same use?			
R&D	Is the performance of this product better than older competitive products for the same use?			
R&D	Have any potential hazards with this product been communicated to employees?			
R&D	Has the product been fully evaluated for the following: efficacy, behavior, fate, hazard, and risk?			
R&D	Does the product require Experimental Use Permits (EUPs) for field testing? If so, have they been obtained?			
R&D	Have the requirements for shipping (transportation and regulatory) been addressed and met?			
R&D	Does the handling of this material with R&D require the use of PPE or engineering controls? If yes, list Management Control Processes and/or Practices in place to ensure application and use of PPE			
R&D	Are the constituents of the product/process on any carcinogen list? (IARC, EPA, ACGIH, California Prop 65, New Jersey)?			
R&D	Are there any ongoing or planned R&D/Product Development activities with this product that would trigger HSSE reviews, testing schemes and/or toxicology studies to assess "potential risk?" Do you believe there are sufficient Management Control Processes and/or Practices in place to trigger and guide the HSSE reviews, testing schemes and/or toxicology studies to assess "potential risk?"			
R&D	Does further R&D work on this material require the use of highly hazardous compounds or solvents? Is there any use or formation of any persistent, toxic and bio-accumulating substances (PTBs)?			

R&D	Does current and/or planned Research and Development on the Product contemplate or require the use of Good Laboratory Practices (GLP) or other federally mandated testing compliance requirement?			
R&D	Does the manufacture of a planned new material fall under Process Safety Management (PSM) and if so has a HazOp Analysis been completed for the R&D activities involving this material?			
R&D	With respect to this product, do you anticipate incorporating the use of new or unique equipment unfamiliar by the research scientists? If Yes, please explain Do you believe the current Process Safety Review (PSR) procedure is a sufficient control measure to address any required information, sharing and associated training obligation pursuant to running a safe operation? If No, what changes to current or new Management Control Processes and/or Practices should (will) be considered to bring about a thorough safety and operational review of new unique equipment unfamiliar by the research scientists?			
R&D	Will the new process/process modification use a new (not currently used at FMC) chemical?			
R&D	Will additional R&D/process modifications be required for this product?			
R&D	Do you foresee any new critical issues arising such as regulatory, public perception, competitive response that could delay or stop the development? If yes - explain in some detail the regulatory or public perception issue and what if anything is being done from an advocacy perspective to put the issue on the right business track. Likewise, do you anticipate the elimination of any regulatory or other noteworthy obstacles that could serve to hasten the development of this product? If yes list those items that could be eliminated.			
R&D	Are there new requirements in the environmental, health and safety area for this material/product? If yes explain.			
R&D	Does any proposed change as described in a written change order, experimental notes or manufacturing requirements document impact the R&D process or activities for the Product?			
R&D	Are you aware of any new or unfamiliar equipment that will be introduced or used in the production, packaging or handling of this product? If Yes: (a). What Management Processes and/or Practices are in place or need to be added to ensure the safe use, management and maintenance of new equipment which is unfamiliar to the operation? {List Them} • _____ • _____ • _____			
Raw Materials	If the raw material supplier or vendor is not a member of ACC, has a supplier been qualified by Corporate Strategic Sourcing? a). If the answer is No, "Is there a plan in place to 'after-the-fact' certify/qualify those raw material suppliers that are non-ACC member companies?"			

Raw Materials	Is there a contract in place with the raw material/vendor which identifies their responsibility under the Responsible Care Program?			
Raw Materials	Is pertinent HSSE information such as Material Safety Data Sheets, updated physical & chemical hazards, etc. provided concurrent with first delivery? If the answer is No - If EH&S information such as MSDS' are not supplied in a timely fashion or updated routinely, what Management Control Processes and/or Practices are in place to get the supplier to respond? {Explain}			
Raw Materials	Is any pertinent [and important] hazard or toxicological data missing on any existing raw material used in the manufacturing processes of this product? If yes or I Don't Know: (a). What Systems, Processes and/or Practices are in place to identify important "missing data" and to interface with the Vendor/Vendor(s) to get the needed information? {Please List and Explain} • _____ • _____ • _____			
Raw Materials	Will a new raw material not currently used by FMC be introduced into our operations with this product? If the answer is Yes: (a). What systems, processes and/or practices are currently in place to facilitate a smooth transition of a new raw material into the operations? This may include one of more systems, processes and/or practices. Please list and explain. • _____ • _____ • _____ (b). Do you consider the previously listed systems, processes and/or practices to be sufficient? If No: (c). Please list additional systems, processes and/or practices that should be considered to fill the existing gap? • _____ • _____ • _____			
Raw Materials	Does the supplier of this product, raw materials, process aids and/or equipment require a site inspection or equipment process review prior to first delivery? If No (a). What systems, processes and/or existing practices are in place to extract and apply key supplier findings from into our current programs and operations? {Please List} • _____ • _____ • _____			

Raw Materials	<p>Are there special requirements in the transportation or receipt of the product, raw materials, process aids or equipment such as refrigeration, heating, specialized PPE, prior DOT notification, etc.? If Yes: (a). Explain some of these "special requirements", how they were discovered and systems in place to keep the current and operational?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ 			
Raw Materials	<p>Are you aware of or do you have direct/indirect knowledge that the supplier and/or its representing agent(s) has experienced any significant transportation, deliver or storage incidents associated with the raw material, process aids and/or equipment associated with the manufacturing of this product? If Yes, (a). Provide an explanation and how such findings are shared with others and communicated throughout the organization to help FMC be better Product Stewards of this product/material. (List and Explain)</p> <ul style="list-style-type: none"> • _____ • _____ • _____ 			
Raw Materials	<p>Are you aware of any new or anticipated emerging critical issues (e.g., regulatory, legislative, public perspective, etc.) arising could prohibit or significantly limit the transportation, storage, use and/or receipt of this product, raw material, process aid and/or equipment associated ?</p>			
Raw Materials	<p>Have there been any past or current supplier quality performance issues that may have an impact the product risk within FMC? If yes, explain how the current system are working to correct supplier performance issues? Are they sufficient?</p> <ul style="list-style-type: none"> • _____ • _____ 			
Manufacturing	<p>Is the handling, storage and/or processing of the raw materials used to product the product covered by PSM requirements?</p>			
Manufacturing	<p>Have there been past incidences with the handling, storage and/or processing of the raw materials used to produce this product (e.g., serious effects, explosions, fires, environmental releases, etc.) If Yes: a). What, if any, Management Control Processes and/or Practices have been put into place to avoid an incident recurrence? List Management Control Processes/Practices:</p> <ul style="list-style-type: none"> • _____ • _____ • _____ 			

<p>Manufacturing</p>	<p>Are there special requirements for the use of unique, special and/or unusual PPE when handling the raw materials or finished products associated with this product? If Yes: a). "What Management Control Processes and/or Practices are in place at the manufacturing sites to ensure compliance with special PPE measures?" {List Them}</p> <ul style="list-style-type: none"> • _____ • _____ 			
<p>Manufacturing</p>	<p>Are you aware of any new or unfamiliar equipment that will be introduced or used in the production, packaging or handling of this product? If Yes: (a). What Management Processes and/or Practices are in place to ensure the safe use, management and maintenance of new equipment which is unfamiliar to the operation? {List Them}</p> <ul style="list-style-type: none"> • _____ • _____ • _____ 			
<p>Manufacturing</p>	<p>Are there any "site-limited" intermediates used in the development of this product? If Yes: "What Policies, Procedures and/or Practices are currently in place to address 'site-limited' intermediates, quantities allowed and storage requirements?" {Explain}</p> <ul style="list-style-type: none"> • _____ • _____ • _____ 			
<p>Manufacturing</p>	<p>Are there any recent or proposed process or formulation changes associated with the manufacturing of this product which may cause health, safety or environmental concerns regarding the storage, handling, and transportation or consumer use of this product? If Yes: (a). What current systems including Management Control Practices, Policies or Operational SOP's are in place to capture process and/or formulation changes that would cause a change in health, safety, environmental concern regarding the storage, handling, transportation and consumer use of this product? {List}</p> <ul style="list-style-type: none"> • _____ • _____ • _____ 			
<p>Manufacturing</p>	<p>Are you aware of or do you have direct/indirect knowledge that the supplier and/or its representing agent(s) has experienced any significant transportation, delivery or storage incidents associated with the raw materials, process aids and/or equipment associated with the manufacturing of this product?</p>			

Manufacturing	<p>Have any changes in the Quality Assurance Programs and/or associated finished product quality created situations wherein health, safety or environmental impact may be associated by this product? If Yes: (a). Please explain and elaborate a bit on Management Control Practices, Policies or Operational SOP's in place to detect such affects on finished Product Quality?</p> <ul style="list-style-type: none"> • _____ • _____ 			
Manufacturing	<p>Have contractors or outsider tollers/manufacturers requested health, safety and environmental guidance information as a result of incidents at their site with the raw materials, process aids, etc. associated with the production/manufacturing of this product?</p>			
Manufacturing	<p>Does any proposed change or amendment as described in a written change order, experimental notes or manufacturing specifications/requirements document impact the current manufacture of this product?</p>			
Transportation	<p>Have there been significant transportation related incidents associated with the transportation of this product that FMC is aware of? If Yes: (a). What Management Control Processes, Systems and/or Practices have been or will be implemented to mitigate reoccurrence?</p> <ul style="list-style-type: none"> • _____ • _____ 			
Transportation	<p>Is this product transported in unregulated containers?</p>			
Transportation	<p>Are there any written policies, procedures or guidelines on how shippers are qualified to ship this product?</p>			
Transportation	<p>What Management Control Processes, Systems and/or Practices are in place to ensure the integrity of the product, it's packaging and contents from the point of departure to receipt. (e.g. loading SOP's, etc)?</p> <ul style="list-style-type: none"> • _____ • _____ 			
Transportation	<p>Are there any current or pending transportation or citing restrictions related to the shipment of this product? If Yes, explain.</p>			
Transportation	<p>Are you aware of or do you have direct/indirect knowledge of any current or pending changes to transport classification or labels associated with the finished product? If Yes, provide the source of Management Control Processes, Systems and/or Practices that are present to detect and alert the business to current or pending changes?</p> <ul style="list-style-type: none"> • _____ • _____ 			

Transportation	Does the finished product exhibit any specific hazards that would suggest special "pre-emptive" communication to the public or emergency planning agencies?			
Transportation	<p>Are you aware of or do you have direct/indirect knowledge of any new critical issues (i.e., regulatory, public perception, etc.) arising that could affect the transportation of the finished product? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes: . Provide an example of the "new critical issue", and what Management Control Processes, Systems and/or Practices are in place to capture "new critical issues" and how to migrate them into the FMC's business?</p> <ul style="list-style-type: none"> • _____ • _____ 			
Transportation	Does any proposed change or amendment as described in a written change order, experimental notes or manufacturing specifications/requirements document impact the transportation of this product?			
Storage/Handling/ Packaging	<p>Does this product require any unique packaging requirements to address HSSE hazards and/or characteristics? List:</p> <ul style="list-style-type: none"> *Child-Resistant Packaging (40 CFR 157.20) *Senior Friendly Packaging *Others _____ * _____ * _____ <p>a). Beyond federal and international requirements previously identified, do you believe there are sufficient Management Control Processes and Practices in place to address any unique packaging requirements to address any known HSSE Hazards?</p>			
Storage/Handling/ Packaging	Are there federal, state or local storage containment requirements during the storage of the finished product that should be communicated to distributors and or customers?			
Storage/Handling/ Packaging	<p>Are there any special safe handling procedures for the Product including but not limited to:</p> <ul style="list-style-type: none"> · loading and/or unloading · use · disposal · reuse · recycle · transportation · storage · packaging · other (specify) (i.e. do not drop, shake etc.) <p>a) What process is in place to conform to these requirements? Explain _____</p>			

Storage/Handling/ Packaging	<p>Does this Product require special storage conditions such as refrigeration, heated environment, sprinkled, nitrogen blanket, fast-response H2O submersion, etc.? b). Are there Management Control Process(es) and/or Practices deemed sufficient to identify the special storage requirements? List below</p>			
Storage/Handling/ Packaging	<p>Does the product require special security requirements? If Yes: Do you think we have sufficient Management Systems in place regarding Special Security Requirements?</p>			
Storage/Handling/ Packaging	<p>Does any proposed change as described in a written change order, experimental notes or manufacturing requirements document impact Storage/Handling/Packaging for the Product?</p>			
Storage/Handling/ Packaging				
Product Use	<p>Is this Product sold into a market where there have been significant past incidents (e.g. fires, unanticipated chemical reactions, health implications, etc) involving similar product families or materials? b). Are there existing management control programs and/or processes that are in place to address, correct, mitigate, etc. such incidents.</p> <p>c). Are there any additional management control programs or practices that the business should consider to reduce and/or eliminate the propensity for such incidences to occur (i.e., What should we be doing differently?)</p>			

Product Use	<p>Is this product sold into industry sectors that promote potential direct consumer exposure (i.e., food, pharmaceuticals, personal care, crop protection, etc.)? If Yes:</p> <p>a) What current management control programs and practices are in place to ensure that the product is appropriate for direct consumer exposure? Listing of controls/practices.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>b). Do you have any thoughts on any additional/supplemental management control programs and/or practices that should be implemented?</p> <p>_____</p> <p>_____</p> <p>_____</p>			
Product Use	<p>Rank the overall level of customers/consumer sophistication when handling, storing, or disposing of this Product?? <input type="checkbox"/> High <input type="checkbox"/> Moderate <input type="checkbox"/> Low</p> <p>b). If a 1 low ranking is selected, what controls, suggestions, etc. may be considered to improve the customer/consumer sophistication and/or improve the handling, storing and/or disposing of this product.</p>			
Product Use	Do customers typically use this Product in open systems?			
Product Use	<p>During customer applications is a significant portion of the Product released to the environment during customer use? Explanation: "release to the environment" signals product applications wherein the waste/effluent from the system is not substantially treated by a PWTO (Potable Water Treatment Operation).</p>			
Product Use	<p>Do a majority of the customers using this product typically not use PPE even though it may be specified on the product's label? a) Would failure to wear PPE lead to customer/consumer injuries?</p>			
Product Use	<p>Is there a potential for unacceptable trace materials in the Product? a) What management control programs and/or practices are in place to certify raw materials and thus identify the presence of trace materials and impurities?</p> <p>_____</p> <p>_____</p>			
Product Use	Are you aware of any significant complaints, allegations or observation of questionable HSE practices by customers or others using the product that could surface?			
Product Use	<p>Are there any new handling procedures or product specific procedures which need to be communicated to customers/and or consumer using the product. If Yes, list:</p> <p>_____</p> <p>_____</p> <p>_____</p>			

Product Use	Are there any new or pending federal, state or other governmentally-directed restrictions imposed on the Product?			
Product Use	Has the business identified any known past application of this product as a misuse?			
Product Use	Will this product initiate the need for assistance or information relating to product safety or product stewardship? If Yes: a) Should we change, add, amend or delete an existing Management Control Process or Practice?			
Product Use	Are you aware of any significant safety, health, environmental and/or product stewardship concerns that could be raised by distributors, brokers and/or traders?			
Product Use	Do current distributor agreements omit any of the following: • Prohibition of commingling the product? <input type="checkbox"/> Yes <input type="checkbox"/> No • Feedback from distributors/retailers on unsafe practices? <input type="checkbox"/> Yes <input type="checkbox"/> No • Requirement for distributors to communicate EHS information downstream to their customers? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Product Use	Are there known misuses of this Product that can cause harm?			
Product Use	Is the Product known to be used in any sensitive end use applications (ex.- direct or indirect food contact, toys for children, medical/pharma, personal care products, cosmetics)?			
Product Use	Are there hazard warning notices/labels on the product the consumer uses?			
Disposal	Is the Product a hazardous waste or regulated waste?			
Disposal	If the Product is a liquid, should approvals be obtained prior to disposal to a sewer system?			
Disposal	Is this Product disposed of via land application (i.e. septic system)?			
Disposal	Can/should packaging be recycled?			
Disposal	With a focus on the end-of-life-cycle, are there issues with reuse, recycling, or the volume and type of final waste?			
Disposal	Do we have knowledge of incorrect disposal practices by our customers?			
Disposal	Will the Product and it's processes contribute to stratospheric ozone depletion, tropospheric ozone formation, global climate change (greenhouse gas emissions)?			
Security	Does the use of this product pose any security risks? i.e. any chemicals that could be used for terrorists activities? Any chemicals that could be used in illegal drug manufacturing?			
Security	Does this product need to be stored in a secure location?			

Security	Does the transport of this Product require special security requirements? (a). Are the current monitoring systems sufficient to identify the special security requirements and monitor the process? (b). If No, explain what improvements should be made to improve the system(s)? • _____ • _____			
Security	In case of a fire or spill what risks are there and what security measures should be taken?			
Other	Has this product composition (including trace and trade secret components) been verified by the Analytical Group & reviewed by the Registration Manager?			
Other	For this Product, are any raw materials, intermediates, products, by-products or associated emissions being targeted by responsible environmental organizations, regulatory groups, governments etc. such that the license to construct facilities, manufacture/operate or market may not be available in the future?			

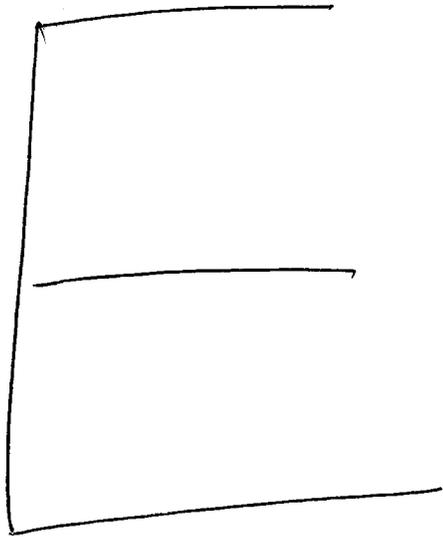
Acronyms

ACC	American Chemistry Council
ACGIH	American Conference of Governmental Industrial Hygienists
EPA	US Environmental Protection Agency
IARC	International Agency for Research on Cancer
LCA	Life Cycle Analysis
MOC	Management of Change
PPE	Personal Protective Equipment
PSM	Process Safety Management

Version No.	Reason for Change	Date
1	Original Document	11/18/2009

Doc Owner: APG Global Product Stewardship Manager

Effective Date: November 15, 2009



RCMS INTERNAL AUDIT CHECKLIST

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
1.1.a	Has FMC's senior management defined and documented its Responsible Care policy?	Y	APG Headquarters is part of "FMC Corporation Worldwide Policy on Health, Safety, Security and the Environment (HSSE)" posted on the FMC Responsible Care intranet and internet sites.	Y	*
1.1.b	Has the policy been communicated to employees, stakeholders and the public?	Y	See above. Also Philadelphia based employees receive Responsible Care e-brief training.	Y	Y
1.2	Is the policy relevant to the nature, scale and impact of FMC's operations, products and processes?	Y	Policy is relevant to APG Headquarters.	Y	*
1.3.a	Does the policy provide a framework for establishing and reviewing Responsible Care goals, objectives and targets?	Y	FMC HQ RCWG reviews and sets RC goals, objectives and targets. (BD) Started doing interdivisional annual internal RCMS audits in '10. (BD)	Y	*
1.3.b	Does the policy include commitments to continual Responsible Care improvement?	Y	See policy.	Y	*
1.4	Does the policy commit to legal and Responsible Care related requirements to which FMC is subject or subscribes?	Y	See policy.	Y	*
1.5	Does the policy promote openness with stakeholders?	Y	See policy.	Y	*
1.6	Does the policy reflect a commitment to the Responsible Care Guiding Principles?	Y	See policy.	Y	*

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
1.7	<p>Does FMC's senior management and other levels of management demonstrate visible leadership, commitment and involvement to this policy by:</p> <ul style="list-style-type: none"> - periodically reviewing the policy for relevancy? - setting and reviewing goals? - establishing objectives and targets? - auditing practices and company operations? - promoting Responsible Care issues? - providing resources? 	Y	<p>Best Practice: NAC has a hallway cabinet that contains Responsible Care Information and posts policy along with guiding principles and other communication literature on outside of cabinet.</p> <p>Annual Product Stewardship Dialog presented to CEO (6/10) contains highlights, goals, opportunities for improvement, etc. (LF)</p> <p>All Leadership Team Meetings Echo RC. Don't miss opportunity to walk the talk (MS)</p> <p>Social responsibility to community. Philanthropy working Group (MS)</p> <p>3 examples: 1) Furadan – Stop selling in all of Africa (proactive to 60 minutes report); 2) Set up independent sustainability council; 3) Look at where selling products of certain toxic classes. (MS)</p>	Y	Y
2.1.a	<p>Does FMC have a system to identify and evaluate potential health, safety, security and environmental hazards and assess and prioritize risks associated with these hazards?</p>	Y	<p>Corporate H&RA procedure administered through CEG by [REDACTED] (LF)</p> <p>EPA, EU, etc. regulated risk assessment programs. (LF)</p> <p>FIFRA mandates for pesticides to get to the market. No formal internal process. (JC)</p> <p>Annual Product Stewardship Dialog presented to CEO (6/10) contains highlights, goals, opportunities for improvement, etc. (LF)</p>	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
2.1.b	<p>Has FMC identified all appropriate potential health, safety, security and environmental hazards associated with</p> <ul style="list-style-type: none"> - new and existing products? - new and existing processes? - changes to existing products and processes? - the distribution and use of raw materials and products? - activities associated with its operations (e.g., maintenance, training, housekeeping and other non-production activities)? 	Y	<p>Product Life Cycle Analysis Spreadsheet used for new products (ex. ██████████ – process uncovered issues around battery access & removal.) (LF) Plant MOC process. (LF) Ewing (Frank Siwajek) developed form for changes to existing products. Currently in draft. Product Stewardship Worldwide Network. Started summer '09 and meets ~quarterly. March '10 focus on Furadan. Audit worldwide. Get out of markets that use illegally. EPA risk assessment revoked tolerances therefore looking at replacement product. (LF) Use SAP HAZMAT Shipping Report to determine DOT category (PG 1, PG 2, PG 3, non-regulated). (GG) Review extract from freight payment data base (shows carrier & # of shipments) to confirm proper carriers being used. (GG) 1st carrier preference is a RC carrier. (GG) Process for bringing product to market (generate data, conduct EPA risk assessment, submit package to EPA, work with EPA, need stamped approved labels, get states approvals, label review to insure what's on label is 100% accurate prior to provide plant). (JC) Need EPA approval for any changes to product and / or label) (JC) Formulation tollers in US identified and audit checklist identifies hazards. (RR)</p>	<p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p>	<p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p>

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
2.2.a	<p>How does the FMC monitor emerging health, safety, security and environmental concerns?</p> <ul style="list-style-type: none"> - Who owns this process? - How is information shared? - What evidence is available to prove the process is being implemented? - How does the organization know which concerns are relevant? 	<i>Y</i>	<p>An independent outside sustainability council has been set up to help review stewardship and sustainability practices. Had 1st meeting – established goals and objectives. (LF) Presentation made to leadership team in summer 2010. (LF)</p>	Y	Y
2.2.b	<p>Does FMC maintain current information related to potential hazards and associated risks for:</p> <ul style="list-style-type: none"> - Products - Processes - Activities associated with its operations 	<i>NC</i>	<p>See APG intranet->Business Site->Ag Products for MSDS, labels, etc (focus on North America). Looking to develop a global database. (LF) MSDS system transitioning to Wercs from 3E. (NS) MSDS reviews and updates are not current according to written procedure that they be ≤5 years old (Active MSDS on intranet were >5 years old).</p>	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
2.3	Does FMC have a system in place to review and determine the applicability of regulations, legislation and other subscribed requirements?	Y	EPA label manual (www.epa.gov) (NS) MSDS Weracs system. (NS) Attends seminars by Keller & Heckman, Informa (updates for worldwide chemical regs). (NS) ██████████ staff sits on EPA task groups.(LF) Crop Life America Trade Association (LF) Federal Register review (LF) Crop Life America Distribution Council (DOT attends 1 meeting per year) (JV) BDP (Export/Import Broker) Newsletter (JV) Law firm newsletters (GG)		
2.4.a	What are the processes in place to assess stakeholders' perspectives? - Employees - Customers - Suppliers - Community and others	Y	Supplier visits (i.e. ██████████ of Olympic Forrest Pallet Supplies 10/24/10 e-mail) (DT) Host suppliers at plants (DT) Regular phone conversations with larger suppliers (DT) RC discussed at regional sales meeting 11/09, 3/10 (BL) ██████████ and ██████████ survey (BL)	Y Y N Y	Y Y Y Y
2.4.b	Were the concerns or perspectives from stakeholders captured with these processes?	Y	Yes (i.e. Olympic Forrest Pallet Supplies f/u e-mails) (DT) Biggest things customers look for is having MSDS, spill/control response (Prosar/Chemtrec on label) (BL)	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
2.5.a	<p>Have goals, objectives and targets been established as appropriate through specific plans, procedures or employee teams for:</p> <ul style="list-style-type: none"> - Products - Processes - Activities associated with its operations 	Y	NAC division manager has HSSE API's that cascade down to organization as a metric. This closes a 2009 NC. (BT) API's cascaded down in FPS. Starts with APG Leadership Team and direct reports. (MG)	Y	Y
2.5.b	<p>Are these goals, objectives and targets based on:</p> <ul style="list-style-type: none"> - prioritized risks? - stakeholders' input? - regulatory, legal and other subscribed requirements? - commitment to continual improvements? 	Y	Last year's documented HSSE API's were a result of audit finding. Safe driving and safe work place, 2 of the higher risk items part of API's. Input received from top down and bottom up (Dec 1 e-mail on 2010 API's) (BT)	Y	Y
2.5.c	Has each relevant function in the organization established goals, objectives and targets related to RCMS responsibilities?	Y	HSSE cascaded down to other NAC employees. (BT) API's cascaded down in FPS. (MG)	Y	Y
2.5.d	Do these goals, objectives, and targets reflect FMC's commitment to continual improvement?	Y	API's developed annually to include needed areas. (BT) Quarterly Leadership Team meetings and monthly calls for extended Leadership Team. (MS)	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
2.5.e	Do the objectives and targets programs include time frames and responsibilities for accomplishment?	Y	HSSE API's are developed yearly for the employees and rated on accomplishment. (MG) Accountability and responsibility enforcement. (MG)	Y	Y
2.5.f	What is the process for identifying and assessing programs, organizational needs and resource allocation to meet goals, objectives and targets?	Y	From Leadership input and employee input and through industry association (Crop Life of America, Agricultural Retail, etc) Performance targets and regional P&L statement. (BT) APG Leadership Team Safety Discussion – 12/8/10 meeting presentation example. (KF) Fill gap with regional and local safety committees. (KF) Working with SHRS. (KF)	Y	Y
2.5.g	Are programs assessed or amended as appropriate to include new projects, activities, or developments?	Y	Activities issues from Crop Life of America and Agricultural Retail Association Executive Boards funneled to organization to be proactive. (BT)	Y	Y
3.1.a	Has FMC established and maintained a documented Responsible Care Management System as necessary to ensure its effective implementation, maintenance and control?	Y	Handled by the FMC HQ Responsible Care Working Group. See SHRS intranet Responsible Care Program FMC Management System (or HQ RCMS Sharepoint)		
3.1.b	Is the RCMS documented system: <ul style="list-style-type: none"> - legible? - dated? - available? - readily identifiable? - maintained in an orderly manner? - retained for a specific period? 	Y	See above.	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
	<ul style="list-style-type: none"> - Employees? - Customers? - Suppliers? - Contractors? - Carriers? - Distributors? - Tollers? - Community and others? 		<p>EC sourcing, visits, phone calls (DT) Warehouse visits, e-mails (i.e. 7/10 on Jacobson warehouse problem e-mail) (JV) Tollers provided written Technology transfer package (MSDS, safety precautions, etc) Communicate in product presentation give to customers (BL)</p>		
3.5.1	<p>Does FMC have a process to facilitate the flow of:</p> <ul style="list-style-type: none"> - Hazards and Safe handling information along the supply chain to support risk evaluation and risk management of its products? - Appropriate guidance, information and or training requirements along the supply chain to support knowledge of the relevant risks and hazards associated with its products, processes and activities, - For receiving such information from suppliers on goods and services used by the organization. 	Y	<p>FPS Compliant Policy & Procedure Manual. Also has FAQ to assist with manual. (LW) FPS has various incident forms. (LW) fmc.com (LW) fmcprosolutions.com (MSDS / labels) (LW) Have label change notification service – provides those who sign up with labels and MSDS when updated (LW) FPS Tech Service Handbook 1/08. How to book on what to do if... (LW) Get MSDS for sample and every shipment (DT) Get COA for quality check (DT) Warehouses get MSDS sheets (JV) Carriers provided MSDS or ERG page (JV) Customer meetings include slide on RC i.e. Athena product overview (BL)</p>	<p>Y</p> <p>Y</p> <p>Y</p>	<p>*</p> <p>*</p> <p>Y</p>

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
3.5.2	<p>Is Product Stewardship information publicly available? Through which means? This information includes, but is not limited to:</p> <ul style="list-style-type: none"> - Chemical identity (or category description) - Uses – applications, functions - Physical/ chemical properties - Health effects - Environmental effects - Exposure – exposure potential - Risk management – recommended measures 	Y	<p>Per Corporate HQ-4: RCMS Product Stewardship H&RA revised 2/2010 no APG material needs a product summary. Labels, MSDS (BL) FMCcrop.com (BL) Pay to put our information on websites most commonly used for Ag products (Greenbook, CDMS, Agrian) (BL)</p>	Y	Y
3.5.3	Is FMC involved in mutual assistance programs and sharing activities as embodied in Responsible Care?	Y	<p>Chemtrec (JV) Recycling programs for plastic jugs (BL) National Distribution Association for Pesticides (BL)</p>	Y	Y
3.6.a	How are the employees involved in the development, communication and implementation of the Responsible Care Management System?	Y	<p>APG has representation on the FMC Headquarters RCMS Working Group. Safety shares. Bi-weekly safety calls. (KF)</p>	Y	Y
3.6.b	How is the employees' Responsible Care performance evaluated and recognized? Does the employee have a performance evaluation objective (MRA) that includes Responsible Care performance?	Y	<p>API's cascade down. Factor in MRA's appropriate legal use of our products; driver safety course for appropriate personnel, etc. (MG)</p>	Y	Y
3.6.c	What mechanisms/procedures enable employees to share environmental, health and safety concerns with the management?	Y	<p>Annual APG Safety, Products Stewardship and Environmental Dialog input. (BD)</p>	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
3.7.a	Does FMC have a procedure to respond to accidents and emergency situations including considerations for preventing and mitigating impacts that may be associated with these situations?	Y	Crisis Management Team (MS) Philadelphia Safety Leadership Team Uses Philadelphia Headquarters Emergency Response Plan, Incident Investigation Procedure, Illness & Injury Procedure, Bomb Threat Checklist, etc. (posted on intranet)	Y	Y
3.7.b	Do these procedures include: <ul style="list-style-type: none"> - Appropriate consideration of communications and community recovery needs? - Appropriate participation in the development, implementation and maintenance of community emergency preparedness plans? - An appropriate process for responding to raw material, product, process, waste material and transportation incidents? 	Y	See above.	Y	Y
3.7.c	Are these procedures periodically reviewed and tested where practicable?	Y	See above.	Y	Y
4.1.a	Have procedures been documented and implemented to monitor key characteristics of operations that can have significant effect on health, safety, security and the environment?	Y	FPS Compliant Policy & Procedure Manual. Also has FAQ to assist with manual. (LW) Monthly report documents and monitors. (LW) FPS tech service manual (LW)	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
4.1.b	Are records available to track performance, relevant operational controls and conformance with goals, objectives and targets?	Y	FPS complaint tracking database contained in monthly. (LW) Monitor, document and submit adverse effects and customer complaints (i.e. 6(a)2 reports) (LF) Done in annual safety dialog (BD) Damage analysis spreadsheet (JV)	Y	Y
4.1.c	Are health, safety, security and environmental performance and trends analyzed based on relevant measures of key characteristics and records?	Y	FPS complaint tracking database contained in monthly. (LW) Monthly APG Leadership Team discussion (BD) APG monthly safety report (i.e. Oct '10) (BD) Provide damage analysis spreadsheet info to BD (JV)	Y	Y
4.2	Has the overall compliance with relevant health, safety, security and environmental legislation and regulation been evaluated?	Y	Track and keep up to date via publications (i.e. Pesticide & Toxic Chemical News) (NS) Attends seminars by Keller & Heckman, Informa (updates for worldwide chemical regs). (NS)	Y	Y
4.3.a	Has the effectiveness of the Responsible Care Management System been evaluated to determine if it has been properly implemented and maintained?	Y	Annual RCMS internal APG Headquarters audits. (LF) 2010 RCMS external FMC Philadelphia Headquarters audit (Feb '10 by DNV).	Y	Y
4.3.b	Were the results of these evaluations reviewed by management?	Y	Annual management review meetings (review of 2009 APG Headquarters internal audit done 1/6/2010). (LF/BD)	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant
4.4	<p>Has Responsible Care, or other health, safety, security and environmental program, performance review been conducted, as appropriate to the risk, for use in qualification and periodic review of:</p> <ul style="list-style-type: none"> - Carriers? - Suppliers? - Distributors? - Customers? - Contractors? - Third party providers? 	NC	<p>Customers are not qualified prior to entering into a business relationship. (from 2009). FPS has developed a customer qualification process for 2011 implementation. (LW)</p> <p>NAC will also implement customer qualification process developed by FPS in 2011. (BL)</p> <p>2011 FPS distribution program includes product stewardship, on-line training requirement to receive rebates. (LW)</p> <p>FPS Technical Service Reps provide training and review customer complaints. (See FPS tech service rep reports – i.e. ██████████ 12/6 weekly report) (LW)</p> <p>EC Sourcing system used for new Requests For Quotations (RFQ) bidding process for new suppliers. The RFQ includes questions on Responsible Care, etc. The EC Sourcing system scores the bids and is reviewed by a team. (DT)</p> <p>Annual assessment reviews of existing suppliers are performed by the plants. (DT)</p> <p>Warehouse qualification process (new distribution center set up spreadsheet (GG)</p> <p>Carrier qualification process (check Safestat, insurance, permits, etc.) Use Kavanaugh to periodically review (JV)</p> <p>C-TPAT surveys for security of imports (JV)</p> <p>Toller protocol (RR)</p>	

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
4.5	<p>Has the effectiveness of FMC's communication programs with stakeholders been periodically evaluated?</p> <ul style="list-style-type: none"> - Employees - Customers - Suppliers - Community and others 	Y	<p>FPS via tech service rep reports and training. Pest Control operators can get training credits. (LW) FPS track number of customer inquiries. (LW) Carriers – ██████████ survey (JV)</p>		
4.6.a	<p>Does FMC have a procedure/s to identify, address, investigate and communicate:</p> <ul style="list-style-type: none"> - Incidents, accidents and near misses relating to its products, processes and activities associated with its operations. - Non-conformances with its Responsible Care Management System. 	Y	<p>Uses Philadelphia Headquarters Incident Investigation Procedure, Illness & Injury Procedure, etc. posted on intranet. (BD) Spreadsheet damage analysis (JV)</p>	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
4.6.b	<p>Do these procedures address:</p> <ul style="list-style-type: none"> - Identification of root causes? - Taking steps to address and mitigate any adverse impact? - Initiation and completion of corrective and preventive actions? - Sharing key findings and associated corrective and preventive actions with relevant internal and external stakeholders? 	Y	Use FMC Philadelphia Headquarters procedures.	Y	Y
4.6.c	Are corrective and preventive actions timely, appropriate and effective?	Y	10/13/2010 recordable incident – employee broken wrist.	Y	Y
4.7	Have procedures been implemented to identify, maintain and dispose of Responsible Care Management System records?	Y	<p>RCMS document control procedure and FMC records retention policy.</p> <p>APG IT Steering Committee & Cross Business IT Steering Committee (CT)</p> <p>IT controls based on Sorbane-Oxy (CT)</p> <p>Corporate internal audit process and controls – [REDACTED] (CT)</p>	Y	Y
5.1.a	Do periodic management reviews take place to ensure the continuing suitability, adequacy and effectiveness of the Responsible Care Management System?	Y	Management review of 2009 APG internal RCMS audit done 1/6/2010. (LF/BD)	Y	Y

RCMS Tech-Spec Reference	Requirement	Confor- mance (Y,NC, OFI or N/A)	Observations & Objective Evidence	Applicability HQ/Plant	
5.1.b	Does management review result in changes, as appropriate, to the policy, goals, objectives, targets, and other elements of the Responsible Care Management System, changing circumstances and to the commitment to continual improvement?	Y	Annual safety dialog. (BD) (MS) (KF)	Y	Y

* - Must report local results to corporate.

RCMS Internal Audit Report

Date(s) of Audit:

Audit Team Leader: 

Audit Team Members:



Audit Team Leader

Management Representative

____ January 7, 2011 ____
Date

Date

Scope

This internal Responsible Care Management System (RCMS) audit scope was to determine if the RCMS at the FMC (input facility name) conforms to the RCMS standard and planned arrangements as well as if the RCMC has been properly implemented and maintained. The RCMS checklist was utilized for this audit.

Definitions

The audit findings are classified as a conformance, non-conformance or an observation.

A conformance is defined as meeting the RCMS requirements or planned arrangements based on objective evidence or observations during the audit.

A non-conformance is defined as a deviation or non-conformity with the RCMS requirements or planned arrangements that was observed during the audit.

An observation is an isolated deviation from planned arrangements observed during the audit that was not system wide.

Corrective Actions

For all cases where non-conformances with the RCMS have been identified, corrective actions will be developed.

In all cases corrective action plans will include the following:

- Clear description of the action(s) to be taken to correct the non-conformance
- Target date for completion of the corrective action(s)
- Identification of an individual responsible for completing the corrective action.

Whenever possible, corrective action plans will be developed within 30 days from the date the final audit report was issued. Within this time period, individual corrective action plans will be sent to the Responsible Care Coordinator for review and approval.

Summary of Findings

RCMS Section Reference	Findings / Observations from the Internal Audit	Is it a Non-Conformance (NC) or an Observation (O)?	Recommended Actions
2.2.b	Technical specification 2.2.b states that current product information is maintained related to their potential hazards and associated risks. In accordance with APG written procedures active MSDS should not be >5 years old. MSDS >5 years old were noted on the list of APG MSDS. From 2009.	NC	All MSDS's should be cleaned up after new WERCs MSDS system is fully implemented. This was originally scheduled to occur in 3 rd quarter of 2010 but has been delayed.
4.4	Technical specification 4.4 states qualification and periodic reviews of HSSE performance is conducted as appropriate to risk for stakeholders. Customers are not qualified prior to entering into a business relationship. The qualification process has been developed and will be implemented for FPS and NAC in early 2011. From 2009.	NC	Complete communication and implementation of customer qualification process that has been developed for FPS and NAC.
3.4.a,b,c	Technical specification 3.4 states that a process is in place to identify training needs, and to establish and maintain effective training, to ensure RCMS job related requirements are addressed. While the APG RCMS Roles and Responsibilities Document had been updated, the documentation and timeliness of training individuals included in this document should be improved. From 2009	OFI	Provide RCMS Roles and Responsibilities awareness training in a timely manner for new individuals (within first few months) and improve documentation of RCMS Roles & Responsibilities training provided to help improve awareness and training effectiveness.

2.1.c	Technical specification 2.1 states systems are established for identifying and evaluating potential HSSE hazards. While a hazard and risk assessment for the distribution of APG products based on their hazard class is used to determine how the product is handled throughout the distribution chain, the criteria used to make this determination and how distribution practices affected are not documented.	OFI	Document how each hazard class is handled on the hazard and risk assessment spreadsheet.
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2010 RCMS EMPLOYEE SURVEY

[REDACTED]

From: [REDACTED]
Sent: Friday, February 05, 2010 10:43 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RCMS - 2009 APG HQ Employee Survey Results
Attachments: APG Responsible Care Employee Survey Results - Raw Data 12-7-09.xlsx

Dear All,

The results of the 2009 RCMS APG Employee Survey for Philadelphia HQ are quite favorable – please see the high level summary below. The vast majority of employees feel that FMC provides them with necessary information on potential hazards of our products and on HSSE programs, strives to protect employees through our HSSE activities, and operates its activities in a safe and responsible manner.

Written responses to two additional survey questions (listed below) identified the following concerns:

- being able to find needed information in case of an emergency
- dealing with hazards of new ai's that we are not familiar with
- making sure that RCMS training is on-going and that everyone is committed to continuous improvement

[REDACTED] and I are addressing each of these to ensure that there are appropriate actions in place to address and alleviate these concerns.

If you are interested in the detailed results of the survey, the attached spreadsheet contains all the survey data.

If you have any questions, please let me know.

Best regards,
[REDACTED]

Summary of RCMS Employee Survey for APG HQ:

Number of Responses	95 (approx. 65% response)
Survey Question	Response
Familiarity with RCMS	92 - yes, 2 - no, 1 - no response
FMC provides info on potential hazards of our products	91 agree to strongly agree, 4 disagree
FMC keeps me informed on HSSE activities	91 agree to strongly agree, 4 disagree
FMC strives to protect employees through HSSE programs	91 agree to strongly agree, 2 disagree, 2 no response
FMC is prepared to deal with emergencies that may have community impact	89 agree to strongly agree; 5 disagree, 1 no response
FMC operates in a safe and responsible manner	93 agree to strongly agree, 2 disagree

Additional survey questions:

1. What, if anything, concerns you most about FMC and Responsible Care?
2. Has FMC provided you with sufficient information on what to do in case of a chemical or other emergency?

2010 RCMS CUSTOMER SURVEY

From: [REDACTED]
Sent: Wednesday, February 03, 2010 4:22 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RCMS Customer Survey Results for FPS and NAC
Attachments: FMC Responsible Care Survey Results - APG Customers.xlsx

Dear [REDACTED],

The results of our RCMS Customer Survey for FPS and NAC (combined) are attached. A high level summary is tabulated below. The results are mostly favorable; however, the response rate was low at only 10%.

There is opportunity for some communication, training, and education on safe transport, handling, and use of our chemicals with a few of our customers. Please let me know if you would like my help in putting something together for them from a product stewardship perspective.

Best regards,

RCMS Customer Survey Results for FPS and NAC:

Total number of survey responses	23 (out of 222 sent out - 10% response)
Survey Question	Response
Familiarity with RCMS	4
Members of ACC	3
FMC is committed to Responsible Care	21/23 agree or strongly agree; 2 N/A
FMC has been proactive in Responsible Care efforts	21/23 agree or strongly agree; 2 N/A
FMC is committed to resolving problems with handling and disposal of chemicals	22/23 agree or strongly agree; 1 N/A
Confidence in FMC's ability to provide exact chemical information in a timely manner	22/23 agree or strongly agree; 1 slightly disagree
Have an effective means of communicating with FMC on safe transport, handling and use of their chemicals	21/23 agree or strongly agree; 1 disagree; 1 N/A
FMC offers training/education on safe transport, handling, use and disposal of their chemicals	17 agree or strongly agree; 3 disagree; 3 N/A

There are two worksheets included in the spreadsheet – one with all the data and one with just the two questions and responses on:

- What additional steps could FMC take the help educate and inform you?
- What other suggestions/comments do you have?

F

***MINUTES OF MEETINGS WITH
GOVERNMENT AND
NON-GOVERNMENT ORGANIZATIONS***

***FMC MEETING WITH
CONSERVATIONISTS CONCERNED
WITH WILDLIFE POISONING USING
FURADAN – APRIL 15, 2009***

WildlifeDirect / FMC Meeting with Conservationists Concerned with Wildlife Poisoning using Furadan

WildlifeDirect offices, Nairobi, Kenya

April 15, 2009

10.30 am

Present:

- ██████████ – Wetlands Int'l, Bird life Int'l, National Museums of Kenya
- ██████████ – National Museums of Kenya, Member of bird committee
- ██████████ – Living with Lions, Laikipia
- ██████████ – WLD, Communications
- ██████████ – WLD, Partnerships
- ██████████ – National Museums of Kenya, Member of bird committee
- ██████████ – FMC, commercial manager for East Africa and India
- ██████████ – Kerr and Downey Safaris
- ██████████ – WLD, Executive Director
- ██████████ – FMC, director of global regulatory affairs and compliance
- ██████████ – FMC, global product stewardship manager for agricultural products
- ██████████ – WWF, Environmental Hazards

██████████ welcomed the visitors and after introductions the agenda was agreed upon:

- Description of Furadan withdrawal and buy back program
- Field reports of wildlife poisonings
- General discussion
- Way forward

FMC expressed the following points at the beginning of the meeting:

- Thanked everyone for attending the meeting, particularly on such short notice
- Desire for this meeting to be the first stage of an on-going dialog and exchange of views where we can learn from one another
- Asked for the discussions to remain private to allow for full and honest exchange of views
- Listed other stakeholders they would be meeting with during the week
- Goals for the meeting:
 1. Understand the existing data that ties Furadan specifically to wildlife poisonings
 2. Discuss strategies to address the situation over the long term
 3. Establish a clear and consistent process for information sharing and reporting on any future poisoning incidents

MINUTES OF THE MEETING

Furadan Withdrawal and Buy-Back Program

- FMC noted that after the initial reports of lion poisoning in the Maasai Mara, no product was sent to Kenya since last May and that the buy-back of Furadan had started recently. Withdrawal and buy back is taking place in Kenya. No more product is being distributed to Tanzania and Uganda. After some time an assessment will be done in each country individually to decide on whether it can be re-introduced while ensuring that it will be used responsibly. Although Furadan buy back is underway, WLD reported that Furadan is still available in numerous Agrovets across the country as of this morning. Paula agreed to send Linda a list of all the Agrovets visited/phoned with information on where product was still available so it can be purchased by Juanco. [REDACTED] committed to following up with Juanco.

Field Reports of Wildlife Poisonings

Lions:

- FMC expressed concern about the potential impact of Furadan on lion populations in Kenya. Conservationists warned that the availability of Furadan is tipping the balance against lions, a species that is rapidly declining because poisoning is the biggest instant threat to them. One poisoned carcass can have devastating local impact. Removing the product could buy time. FMC explained that the action to withdraw Furadan was based on the judgment that Furadan has the potential to cause major damage to lions. The decision was to pull back the supply and sort through the problem.
- FMC reviewed their independent investigation of the Maasai Mara incident involving hippos and lions after PCPB had conducted its investigation. They noted that the incident in Mara was when they were first aware that Furadan was being closely linked to lion poisoning. They provided a detailed explanation of what was found and explained how they concluded that the weight of evidence did not support a connection between Furadan and the incident of secondary poisoning. As part of their investigation, they evaluated the methods used in the Government Chemist Lab and the KEPHIS lab and highlighted that the latter used a superior method for identification and quantification. They made no judgment about the Government Chemist Lab in general, but noted that in the specific case of the Furadan incident, the method was unreliable.
- Conservationists noted that stringent methods of analysis may not be met in all incidents of poisoning using Furadan, but that other anecdotal information should be considered, such as interviews with those lacing carcasses who admit to using Furadan. It was shared that in some areas Furadan is stocked purely for stray dogs and problem animal control. Pastoralists are the main users and Furadan is usually decanted into plastic bags and is clearly recognizable. It was confirmed that all lion deaths are reported to KWS and that although the overall Laikipia population is stable now, this is due to success in the central private ranches where populations are increasing versus major declines in the surrounding community areas. Elsewhere lion populations are declining significantly, particularly in Amboseli and Mara areas.

- FMC inquired about two statistics quoted in the 60 Minutes segment. 1 – What has caused the decrease in lion population from 200,000 to 30,000? Conservationists stated that it was from increased human population taking over the lions' habitats, hunting, spearing, and poisoning. 2 – What are the 70 lion poisonings due to? Conservationists stated that they were not all necessarily due to Furadan.

Birds and fish:

- Conservationists discussed incidents of Furadan being used to kill birds and fish so they can be used for human consumption. FMC noted that human poisoning was unlikely through subcutaneous contamination, but possible to those handling the product who are at risk of ingestion. There was discussion on how surveys should be conducted to determine risk to people who are exposed to repetitive exposure through eating contaminated birds and fish.

General Discussion

- **Threat of alternatives being introduced in absence of Furadan:** During discussion it was suggested that Furadan is such a well known brand – it could be re-packaged and counterfeited. It was also confirmed that the Furadan patent has expired and that the product can be manufactured by generic producers. Thus, generic Furadan could appear in the Kenya market.
- **Furadan packaging:** In the 1990's FMC had agreed to sell Furadan only in packages >5 kg. Ultimately, this was not implemented due to industry product stewardship concerns that the bigger packages would be opened and the product re-packaged in smaller unlabelled packets. When asked why FMC does not indicate on the label that misuse could lead to prosecution, FMC indicated that it must follow national rules on labeling.
- **Risks of using Furadan in a developing country:** Concern was raised regarding ability for users to follow proper use and responsibility in terms of stewardship of the product given the scale of corruption and the illiteracy. It was noted that people use the product without gloves or following other precautions on the label. FMC reviewed the evolution of pesticide classes (organochlorines, organophosphates, carbamates, pyrethroids) and explained the role Furadan has had in feeding the world and the way the product had been safened for the user through formulation as a granule. For example, the acute dermal toxicity of Furadan 5G is greater than 10,000 mg/ kg. FMC re-affirmed that despite its safer properties growers should always be wearing gloves and protective equipment.
- **Incident reporting:** Concern was raised about lack of trust between NGO's and some government agencies on reporting incidents. WLD feels that little credibility has been given to the reports by the government. All incident reports were shared with the PCPB and KWS at the April 2008 meeting and since then reports have been made available on the WLD website. FMC requested copies of the incident reports documenting the poisonings since they have not received any to date. FMC also stated that there is a process in place for handling wildlife poisonings which involves submitting official reports to PCPB. They stressed that this procedure needs to be followed so the problem can be handled effectively. FMC confirmed that the KEPHIS lab is a world class lab that can test for Furadan using high performance liquid and gas chromatography techniques which are superior to thin layer chromatography. Ad a comment that Darcy Ogada indicated she had new evidence of

carbofuran analysis based on gas chromatography analysis by a chemistry student, but that she would have to seek approval from the 4 individual before sharing the information with us.

- **Status of Furadan globally:** FMC reviewed the registration status of Furadan in the USA and the EU. Carbofuran was first registered in the United States in 1969 and is available in granular and liquid formulations. In 1991, the USEPA and FMC agreed to phase down and limit the use of granular formulations to minimize risk to birds. Growers began to use the liquid formulation in place of granulars. There have been no confirmed reports of bird mortality from labeled uses of Furadan since 2000. The US EPA is currently evaluating Furadan's re-registration eligibility and the product's benefits. In March 2009 EPA approved FMC's voluntarily cancellation of most Furadan uses. In July 2007 the European Commission issued its decision not to include carbofuran on Annex I listing. Concerns had been identified late in the review process and consequently certain risk assessments could not be concluded. FMC had submitted the additional data two years before the decision, but these were not reviewed because they were submitted after the legal deadline. The Commission stated that the decision did not prejudice the submission of a new application for registration which FMC did in April 2008. The new application is under review.
- **Options for Kenya:** The likely impact of the Furadan withdrawal from Kenya was discussed. FMC raised concerns that farmers who use the product correctly would be penalized by the withdrawal of Furadan and that poisoning of wildlife may not decline unless underlying causes are addressed. Product stewardship ideas were explored that could ensure that the product could be used responsibly if it were ever to be reintroduced into the market: licensing users, having them sign for products, requiring evidence of growers being trained on proper use, monitoring the distribution channel, and limiting the number of distributors. Ideas for developing an unpalatable Furadan product were discussed as well. However, FMC committed that the product would never be re-introduced into the market unless they were assured that it would only be used responsibly and not to poison wildlife.

Way Forward

- **Monitoring:** In terms of monitoring and reporting poisoning incidents it was emphasized that Furadan is not the only poison available, although it was noted that it is currently the cheapest and most widely product available, even in areas without agriculture. In gathering evidence, FMC suggested looking for external signs including blue or purple granules, presence of blue or purple color, or consistent sized granules with no color (in case in color has leached out). Granules should be looked for in stomach, mouth, and on the ground around the carcass. If no evidence of Furadan is found, then look for other causes. Mocap, a granular organophosphate product, looks similar and has comparable toxicity. FMC noted that the problem with the wildlife conflict is much bigger than just Furadan due to cultural, legal, and enforcement issues as well as the improper use of the product.
- **Actions for the Poison Task Force:** FMC suggested that the Government should be the focal point for the task force since there is a process in place for handling wildlife poisonings. It was noted that, to date, the government had taken no action despite the reports and public concerns and that they may not share data equally. The following was agreed to: 1) fact finding, monitoring, and networking will continue, 2) samples will be taken for analysis, 3) all cases of poisoning will be reported to the government, 4) the government will be invited to future Task Force meetings, and 5) the Task Force will monitor the availability of Furadan in Agrovot shops and share this information with Juanco and FMC. It was noted that a number

of bird and fish samples suspected to have been poisoned using Furadan remained to be analysed.

Action Items

1. Develop a template for gathering necessary information when poisoned wildlife are found - FMC to provide first draft [REDACTED]
2. Collect information at one location and submit official reports to PCPB on a quarterly basis with a copy to FMC [REDACTED]
3. Send data on Furadan availability in Agrovet stores to Juanco and [REDACTED]
4. Send previous reports on misuse to [REDACTED] and [REDACTED]
5. Confirm that [REDACTED]'s report can be shared with [REDACTED] and send it to her [REDACTED]
6. Consider having another tripartite meeting in near future to bring together all the partners (discuss with all stakeholders)
7. Inform [REDACTED] about the meeting [REDACTED]
8. Circulate minutes for review [REDACTED]

In closing, the need for funding to continue activities of the Task Force was discussed and it was agreed that funding needs should be discussed at a future meeting.

The meeting was closed with thanks at 2 pm.

***FMC MEETING ON WILDLIFE
POISONING USING FURADAN
APRIL 16, 2009***

Maasailand Preservation Trust / *Living with Lions* / FMC Meeting on Wildlife Poisoning using Furadan

██████████'s home, ██████████, Chula Hills, Kenya

April 16, 2009

12:00 pm

Present:

██████████ – Maasailand Preservation Trust

██████████ – Maasailand Preservation Trust

██████████ – *Living with Lions*, Maasailand

██████████ – *Living with Lions*, Maasailand

██████████ – *Living with Lions*, Maasailand

██████████ – FMC, Commercial manager for East Africa and India

██████████ – FMC, Director of global regulatory affairs and compliance

██████████ – FMC, Global product stewardship manager for agricultural products

██████████ welcomed the visitors and after introductions the agenda was agreed upon:

- Description of Furadan withdrawal and buy-back program
- Field reports of wildlife poisonings
- General discussion
- Path forward

FMC expressed the following points at the beginning of the meeting:

- Thanked everyone for attending the meeting, particularly on such short notice
- Desire for this meeting to be the first stage of an on-going dialog and exchange of views where we can learn from one another
- Asked for the discussions to remain private to allow for full and honest exchange of views
- Listed other stakeholders they would be meeting with during the week
- Goals for the meeting:
 1. Understand the existing data that ties Furadan specifically to wildlife poisonings
 2. Discuss strategies to address the situation over the long term
 3. Establish a clear and consistent process for information sharing and reporting on any future poisoning incidents

MINUTES OF THE MEETING

Furadan Withdrawal and Buy-Back Program

- FMC noted that after the initial reports of lion poisoning in the Maasai Mara, no product was sent to Kenya since last May and that the buy-back of Furadan had started recently. Withdrawal and buy back is taking place in Kenya. No more product is being distributed to Tanzania and Uganda. After

some time an assessment will be done in each country individually to decide on whether it can be re-introduced while ensuring that it will be used responsibly. Although Furadan buy back is underway, both [REDACTED] and [REDACTED] reported that Furadan is still available in numerous Agrovets in Chula Hills. After discussion, it was agreed that [REDACTED] and [REDACTED] would buy-back any Furadan they find, inventory it, and store it in a secure location. They will notify FMC of the product they have and FMC will request that Juanco pick up the product, reimburse [REDACTED] and [REDACTED], and transport the product to their secure warehouse for storage. [REDACTED] also said that Furadan is still in bomas (houses) so it will be available for some time to come.

Field Reports of Wildlife Poisonings

Lions:

- FMC expressed concern about the potential impact of Furadan on lion populations in Kenya. FMC explained that the action to withdraw Furadan was based on the judgment that Furadan has the potential to cause major damage to lions. The decision was to pull back the supply and sort through the problem.
- FMC reviewed their independent investigation of the Maasai Mara incident involving hippos and lions after PCPB had conducted its investigation. They noted that the incident in Mara was when they were first aware that Furadan was being closely linked to lion poisoning. They provided a detailed explanation of what was found and explained how they concluded that the weight of evidence did not support a connection between Furadan and the incident of secondary poisoning. As part of their investigation, they evaluated the methods used in the Government Chemist Lab and the KEPHIS lab and highlighted that the latter used a superior method for identification and quantification. They made no judgment about the Government Chemist Lab in general, but noted that in the specific case of the Furadan incident, the method was unreliable.
- [REDACTED] reported that there have been no lion killings in the past four years on his ranch. He feels that much of this is attributable to the Lion Guardian program. However, outside of his ranch lion poisoning is still a big problem.

Crocodiles:

- [REDACTED] reported that in Tanzania Furadan is linked to crocodile poaching. Poachers shoot and kill hippos and then lace them with Furadan. The crocodiles feed on the dead hippos and die. The advantage for the poachers is that the crocodile skins are intact and they can sell them for large sums of money.

[REDACTED] had pictures of blue granules on the hippos and around the crocodiles' mouths. This was the first real hard evidence linking Furadan to wildlife poisoning FMC has seen. Everything else to date has been anecdotal.

Hyenas:

- [REDACTED] stated that she had originally been studying hyenas in Laikipia for her Ph.D. thesis. She reported that due to Furadan poisoning, the hyena population she was studying all died and that is why she is now studying behavior of predators in relation to livestock depredation, and also the population effects from poisoning.

General Discussion

- **Incident reporting:** FMC requested copies of the incident reports documenting the poisonings since they have not received any to date. FMC also stated that there is a process in place for handling wildlife poisonings which involves submitting official reports to PCPB. ██████ asked who PCPB was. FMC described who they are and their function. FMC stressed the importance of submitting the incident reports to PCPB so the problems can be handled effectively. ██████ reviewed the protocol they use when they find animal carcasses. It was very comprehensive.
- **Analytical laboratories:** ██████ relayed that *LWL* has not found an analytical lab that provides reliable results. They have tried several in Nairobi and found the equipment is antiquated, the techniques are not appropriate, and their samples have gotten mixed up. FMC recommended they try the KEPHIS lab which is a world class lab that can test for Furadan using high performance liquid and gas chromatography techniques which are superior to thin layer chromatography.
- **Status of Furadan globally:** FMC reviewed the registration status of Furadan in the USA and the EU. Carbofuran was first registered in the United States in 1969 and is available in granular and liquid formulations. In 1991, the USEPA and FMC agreed to phase down and limit the use of granular formulations to minimize risk to birds. Growers began to use the liquid formulation in place of granulars. There have been no confirmed reports of bird mortality from labeled uses of Furadan since 2000. The US EPA is currently evaluating Furadan's re-registration eligibility and the product's benefits. In March 2009 EPA approved FMC's voluntarily cancellation of most Furadan uses. In July 2007 the European Commission issued its decision not to include carbofuran on Annex I listing. Concerns had been identified late in the review process and consequently certain risk assessments could not be concluded. FMC had submitted the additional data two years before the decision, but these were not reviewed because they were submitted after the legal deadline. The Commission stated that the decision did not prejudice the submission of a new application for registration which FMC did in April 2008. The new application is under review.
- **Options for Kenya:** The likely impact of the Furadan withdrawal from Kenya was discussed. FMC raised concerns that farmers who use the product correctly would be penalized by the withdrawal of Furadan and that poisoning of wildlife may not decline unless underlying causes are addressed. Product stewardship ideas were explored that could ensure that the product could be used responsibly if it were ever to be reintroduced into the market: licensing users, having them sign for products, requiring evidence of growers being trained on proper use, monitoring the distribution channel, and limiting the number of distributors. Ideas for developing an unpalatable Furadan product were discussed as well. However, FMC committed that the product would never be re-introduced into the market unless they were assured that it would only be used responsibly and not to poison wildlife.

Path Forward

- **Monitoring:** In terms of monitoring and reporting poisoning incidents it was emphasized that Furadan is not the only poison available, although it was noted that it is currently the cheapest and most widely product available, even in areas without agriculture. In gathering evidence, FMC suggested looking for external signs including blue or purple granules, presence of blue or purple color, or consistent sized granules with no color (in case in color has leached out). Granules should be looked for in stomach, mouth, and on the ground around the carcass. If no evidence of Furadan is

found, then look for other causes. Mocap, a granular organophosphate product, looks similar. FMC noted that the problem with the wildlife conflict is much bigger than just Furadan due to cultural, legal, and enforcement issues as well as the improper use of the product.

Action Items

1. [REDACTED] will send [REDACTED] the protocol they use in field so specific information on Furadan can be added to it.
2. *LWL* will submit official incident reports to PCPB with a copy to FMC.
3. [REDACTED] and [REDACTED] will buy back any Furadan they find in Chula Hills, store it in a secure location, and let FMC know what they have so Juanco can come pick it up.

***FMC MEETING ON WILDLIFE
POISONING USING FURADAN
APRIL 17, 2009***

Kenya Wildlife Service / FMC Meeting on Wildlife Poisoning using Furadan

Kenya Wildlife Service (KWS) offices
Nairobi, Kenya
April 17, 2009

Present:

- ██████████ - KWS, Biodiversity, Research, and Monitoring
- ██████████ - FMC, Commercial manager for East Africa and India
- ██████████ - FMC, Director of global regulatory affairs and compliance
- ██████████ - FMC, Global product stewardship manager for agricultural products

██████████ welcomed the visitors and after introductions the agenda was agreed upon:

- Description of Furadan withdrawal and buy-back program
- Slide presentation by KWS on wildlife poisonings
- General discussion
- Path forward

FMC expressed the following points at the beginning of the meeting:

- Thanked everyone for attending the meeting, particularly on such short notice
- Desire for this meeting to be the first stage of an on-going dialog and exchange of views where we can learn from one another
- Listed other stakeholders they had met with during the week
- Goals for the meeting:
 1. Understand the existing data that ties Furadan specifically to wildlife poisonings
 2. Discuss strategies to address the situation over the long term
 3. Establish a clear and consistent process for information sharing and reporting on any future poisoning incidents

MINUTES OF THE MEETING

Furadan Withdrawal and Buy-Back Program

- FMC noted that after the initial reports of lion poisoning in the Maasai Mara, no product was sent to Kenya since last May and that the buy-back of Furadan had started recently. Withdrawal and buy back is taking place in Kenya. No more product is being distributed to Tanzania and Uganda. After some time an assessment will be done in each country individually to decide on whether it can be re-introduced while ensuring that it will be used responsibly.

Slide Presentation - Summary Points (Charles Musyoki)

- 88% of the Agrovet stores in Kenya carried Furadan. A teaspoon of Furadan can be purchased – the store owner will open a container and wrap the teaspoon of Furadan in newspaper for transport.
- [REDACTED] reported that he went to an Agrovet store and asked for a product to kill stray dogs and they gave him Furadan.
- Reviewed amounts of Furadan that would potentially be required to kill lions and hippos on an acute basis. KWS cited amounts that were considerably lower than what FMC estimated. These differences were determined to be due to KWS using: 1- lower animal weights and 2 - technical product vs. formulated product acute oral tox values.
- Incidents reviewed:
 - April 2004 (Athi River Ranch): 187 vultures died after feeding on dead cow laced with Furadan. Pastoralist confessed to using Furadan. No blue granules were observed. Five spotted hyenas and two jackals also died.
 - April 2005 (location?): 30 vultures died after feeding on a dead cow laced with Furadan
 - May 2007 (northern Kenya – not an agricultural area): 5 lions died. Blue granules were observed and confession by pastoralist to have used Furadan
 - June 2007 (northern Kenya – not an agricultural area): 2 lions and 15 vultures died. Blue granules were observed and confession by pastoralist to have used Furadan
 - August 2007 (northern Kenya – not an agricultural area): 4 lions and 2 hyenas died. Blue granules were observed and confession by pastoralist to have used Furadan
 - October 2007 (Laikipia): 9 hyenas poisoned allegedly with Furadan. Ph.D. student had to abandon here study.
 - December 2007 (Laikipia): 8 lions poisoned allegedly with Furadan.
- 100 lions lost per year due to poisoning from 2001 – 2008; 75 of them from Furadan (equates to < 10 per year)
- FMC requested copies of the slide presentation, animal and bird census information, field protocol, and incident reports. KWS outlined the proper procedure for requesting information.

General Discussion

- **Lions:** FMC expressed concern about the potential impact of Furadan on lion populations in Kenya. FMC explained that the action to withdraw Furadan was based on the judgment that Furadan has the potential to cause major damage to lions. The decision was to pull back the supply and sort through the problem. KWS ([REDACTED]) stated that there were 20,000 lions in Kenya in 1989 and now there are <2000. Tourism is #1 for Kenya and there needs to be a balance between agriculture and tourism issues.
- **Maasai Mara incident:** FMC reviewed their independent investigation of the Maasai Mara incident involving hippos and lions after PCPB had conducted its investigation. They noted that the incident in Mara was when they were first aware that Furadan was being closely linked to lion poisoning. They provided a detailed explanation of what was found and explained how they concluded that the

weight of evidence did not support a connection between Furadan and the incident of secondary poisoning. As part of their investigation, they evaluated the methods used in the Government Chemist Lab and the KEPHIS lab and highlighted that the latter used a superior method for identification and quantification. They made no judgment about the Government Chemist Lab in general, but noted that in the specific case of the Furadan incident, the method was unreliable.

- **Incident reporting:** FMC requested copies of the incident reports documenting the poisonings since they have not received any to date. FMC also stated that there is a process in place for handling wildlife poisonings which involves submitting official reports to PCPB. ██████ stated that he was told that KEPHIS re-routes samples for analysis to the Government Lab. FMC and KWS agreed that there is a need for reliable analytical techniques to be used.
- **Status of Furadan globally:** FMC reviewed the registration status of Furadan in the USA and the EU. Carbofuran was first registered in the United States in 1969 and is available in granular and liquid formulations. In 1991, the USEPA and FMC agreed to phase down and limit the use of granular formulations to minimize risk to birds. Growers began to use the liquid formulation in place of granulars. There have been no confirmed reports of bird mortality from labeled uses of Furadan since 2000. The US EPA is currently evaluating Furadan's re-registration eligibility and the product's benefits. In March 2009 EPA approved FMC's voluntarily cancellation of most Furadan uses. In July 2007 the European Commission issued its decision not to include carbofuran on Annex I listing. Concerns had been identified late in the review process and consequently certain risk assessments could not be concluded. FMC had submitted the additional data two years before the decision, but these were not reviewed because they were submitted after the legal deadline. The Commission stated that the decision did not prejudice the submission of a new application for registration which FMC did in April 2008. The new application is under review.
- **Options for Kenya:** The likely impact of the Furadan withdrawal from Kenya was discussed. FMC raised concerns that farmers who use the product correctly would be penalized by the withdrawal of Furadan and that poisoning of wildlife may not decline unless underlying causes are addressed. Product stewardship ideas were explored that could ensure that the product could be used responsibly if it were ever to be reintroduced into the market: licensing users, having them sign for products, requiring evidence of growers being trained on proper use, monitoring the distribution channel, and limiting the number of distributors. Ideas for developing an unpalatable Furadan product were discussed as well. However, FMC committed that the product would never be re-introduced into the market unless they were assured that it would only be used responsibly and not to poison wildlife.

Path Forward

- **Monitoring:** In terms of monitoring and reporting poisoning incidents it was emphasized that Furadan is not the only poison available, although it was noted that it is currently the cheapest and most widely product available, even in areas without agriculture. In gathering evidence, FMC suggested looking for external signs including blue or purple granules, presence of blue or purple color, or consistent sized granules with no color (in case in color has leached out). If animals are still alive, take careful notes about symptoms. Take pictures. Granules should be looked for in stomach, mouth, and on the ground around the carcass. If no evidence of Furadan is found, then look for other causes. Mocap, a granular organophosphate product, looks similar. FMC noted that the problem with the wildlife conflict is much bigger than just Furadan due to cultural, legal, and enforcement issues as well as the improper use of the product.
- KWS noted the following needs:

- Aggressive public awareness program on Furadan safe use
- Education for the Agrovets shops owners/proprietors on agricultural products
- Adding a statement to the Furadan label regarding illegal use
- Interministerial task force meeting including Minister of Agriculture, PCPB, AAK, NGO's and KWS to address human wildlife conflict as a whole

Action Items

1. Submit reports of wildlife poisoning to PCPB with a copy of FMC [REDACTED]
2. Find a laboratory that has reliable technical capabilities and equipment [REDACTED]
3. Work to initiate the interministerial task force; write to the Minister of Wildlife requesting assistance with this [REDACTED]
4. Submit official requests to KWS director [REDACTED] for [REDACTED] slide presentation, animal census information, incident reports, and toxicology protocol used when poisoned animals are found [REDACTED]

G

***COMMUNICATIONS FROM THE
COMPANY TO KENYA WILDLIFE
SERVICE***

[REDACTED]

From: [REDACTED]
Sent: Tuesday, May 12, 2009 6:18 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Furadan and Wildlife - Request for information

Dear Dr. Kipnetich,

I hope this finds you well. I wanted to check to see if you had any questions about my request for information outlined below.

Also, could you please confirm that you received my email and when I may expect to receive the information? The information will be most helpful to me in further understanding the issues.

Thank you for your help in this matter.

With regard,

Linda

Linda W. Froelich
Global Product Stewardship Manager
FMC Corporation
1735 Market Street
Philadelphia, Pennsylvania USA
215-299-6183 (office)
267-250-6328 (mobile)

From: Linda Froelich
Sent: Friday, April 24, 2009 2:21 PM
To: 'kipnetich@[REDACTED]'
Cc: [REDACTED]
Subject: Furadan and Wildlife - Request for information

Dear Dr. Kipnetich,

Allow me to introduce myself. My name is Linda Froelich and I am the Global Product Stewardship Manager for FMC's agricultural products business. As you know, our product Furadan has been implicated in lion poisonings in Kenya. My colleagues and I were all shocked to learn the extent to which lion poisonings have been occurring in Kenya and it is very troubling that our Furadan product is being linked to these tragic events. We have been disturbed by this issue since it was first reported to us last year that two lions had been poisoned. That is why we took immediate action to halt further sale of the product to our distributor in Kenya. It was not until we watched the US news program "60 Minutes" produced CBS News shown on US broadcast television on March 29, that we learned the full magnitude of this problem.

Consequently, we have undertaken very aggressive steps to get all remaining Furadan product off the shelves in Kenya as a precautionary measure.

Last week a team of three people from FMC (our regional manager from India, our director of global regulatory affairs, and myself) came to Kenya to monitor the progress and effectiveness of our Furadan Buy-Back Program, learn about the firsthand experiences of conservationist groups and explore ideas for working together, and to understand more about the human-wildlife conflict and current programs from government officials like KWS. On Friday of last week we had a very productive meeting with [REDACTED], [REDACTED], [REDACTED], and [REDACTED] all members of your Biodiversity, Research, and Monitoring team to discuss the situation. [REDACTED] gave an excellent slide presentation detailing the incidents over the past several years and we had a very good discussion.

FMC is committed to ensuring that wildlife is not poisoned by our product. To that end we would like to work together with KWS on this issue. To help us in this endeavor we are requesting the information listed below so we can fully understand what has happened and to determine the best course of action going forward. Mr. [REDACTED] indicated to us that the proper procedure was to make an official request to you.

1. [REDACTED] slide presentation to FMC on wildlife poisoning (April 17, 2009)
2. All wildlife poisoning incident reports involving Furadan including information on whether they were intentional or accidental and who may have caused the incident
3. The toxicological protocol that is used when poisoned wildlife are found (so we can add specific information to help determine the cause, i.e. look specifically for blue granules or blue color, the symptoms of Furadan poisoning to look for)
4. Census information on total numbers of animals and birds that have been affected over the past 10 years

Please let me know if you have any questions about our requests and when we might expect to receive the information. I look forward to hearing from you and working with your team.

Best regards,

Linda

Linda W. Froelich
Global Product Stewardship Manager
FMC Corporation
1735 Market Street
Philadelphia, Pennsylvania USA
[REDACTED]
[REDACTED]

H

1996 MINUTES

Tel (0381) 20155/6/7/8 or 9
Telex: 57098 'Workstop'
Facsimile (0381) (21978 or 20045)

*Copy to R. Pinder
done on 29.4.96*
Chepkembe
P.O. Box 223
Kericho
Kenya

10 April 1996

The Managing Director
Hoechst East Africa Ltd
P.O. Box 30467
NAIROBI

→ FMC Corporation
P.O. Box 46179
NAIROBI

The Managing Director
FMC Corporation
2000 Market Street
Philadelphia 19103

RECEIVED
23 APR 1996

Dear Sirs

FURADAN 50

Furadan 50 as you rightly warn on the directions for use is highly toxic to birds, game and livestock. Unfortunately this knowledge is being exploited by farmers who are baiting with Furadan where wild fowl feed and are killing large numbers.

I have found areas where such slaughter has taken place, usually only marked by the residues of the bait and feathers. Other residents report that in one 700 acre area of rice between 100 and 150 birds are being poisoned daily and subsequently sold. Local wild fowl populations cannot support such devastating attrition and some species could be wiped out if this practice continues.

It seems unnecessary at the present time to use such an environmentally unfriendly chemical, and I urge you to incorporate an unpalatable flavour into Furadan which makes it undesirable to birds, game and livestock. I look forward to receiving your reaction to this proposal.

Yours faithfully

G. N. Paterson
G N PATERSON

Copies to:

The Director,
Kenya Wildlife Services,
P.O. Box 40241,
NAIROBI

Post-It® Fax Note	7871	Date	
To	R. Pinder	From	A. Chalian
Co./Dept		Co.	
Phone #		Phone #	
Fax #		***GSA & OMB Memorandum M-07-16***	

Total six pages

Cont... Furadan 59

- 2 -

The Director
East African Wildlife Society
P.O. Box 20110
NAIROBI

Mr Mark Stanley Price
African Wildlife Foundation
P.O. Box 48177
NAIROBI

Mr J P d'Huart
World Wide Fund for Nature
P.O. Box 62440
NAIROBI

The Managing Director
Pesticide Chemicals Association of Kenya
P.O. Box 60723
NAIROBI

229409

MINUTES OF MEETING HELD ON 24 JULY 1996 AT NI KENYA SAFARI CLUB

SUBJECT: FURADAN AND ENVIRONMENT

PRESENT: See attached list of attendants

PROCEEDING

This meeting deliberated on the following issues:

- 1 The case of Furadan causing mortality to ducks especially in the rice growing schemes in Ahero and Mwea resulting from:
 - i) Ducks feeding on the product directly in the field and/or from a bait.
 - ii) Ducks feeding on rice treated with Furadan at 25 days after transplanting.
- 2 Possible secondary poisoning from eating ducks killed by Furadan.
- 3 Birds dying after feeding on wheat/barley seeds dressed with Furadan.
- 4 Resultant decline on duck population generally vis-a-viz effects on biodiversity. An indication of 100 ducks being killed with Furadan per week.

REACTION ON ABOVE ISSUES

- 1 Case of baiting ducks:

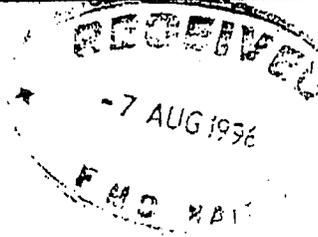
This was noted to be an illegal or criminal act which could be handled by KWS and PCPB who are empowered to prosecute such cases.

- 2 Ducks dying due to feeding on rice treated with Furadan:

This is not possible from a technical point of view. There are no residues of the product in the crop at harvest to cause any toxicity.

- 3 Secondary Poisoning to humans:

This again was noted that it is not possible. Furadan is metabolized in the animal body. The metabolites are of no toxicological significance implying a no chance of secondary poisoning.



- 4 Birds dying after feeding on wheat/barley seeds treated/dressed with Furadan:

Such exposed seeds which are fed on by birds are found at turning points of seed planters.

These planters could be modified to ensure that the seeds are completely buried in the soil even at such turning points. It was noted that Furadan is such a useful product for the purpose of pest management in cereals.

- 5 Decline on biodiversity:

Indication on number of ducks killed was based on hearsay. While it is difficult to dispute the figures only an objective study/survey can verify this indication.

RECOMMENDATIONS/PROPOSALS TO AVERT SIMILAR MIS-USE OF PRODUCT IN FUTURE

From the on-set it was noted that Furadan is currently the safest of the soil applied insecticide/nematicide from the applicators point of view. It was also noted to be very effective for the purpose of pest management in a wide spectrum of pest and crop sectors.

For these reasons the meeting resolved that the push for a ban of the product due to reports of product mis-use was out of the question. Hence, the meeting made the following proposals aimed at averting mis-use of Furadan:

- a) That FMC Research Laboratory look for an appropriate additive to the current formulation to make the product un-attractive and/or repellent to ducks and other birds. It was further agreed that this be accomplished in about 3 years from now. By the end of this period an implementation should be achieved or a report on that pursuit be availed.
- b) In the short term, the meeting resolved the following:
 - i) A strong campaign be undertaken to publicise/educate the local people on the dangers of killing birds using furadan. Print (posters) and radio media should be considered in this undertaking.

Responsibility

Safe Use Project, Distributors of Furadan and FMC

11) ~~relative to environmental~~
relative to environmental
use of Furadan.

Responsibility

Distributor of Furadan (Agrevo) and FMC

nb: It was noted that most of such information is already contained in the current label, BVT would look at possibility of adding more to emphasize on effects on birds.

iii) NIB - to hold seminars in Ahero and Mwea Rice Schemes to educate farmers and their staff on usage of Furadan and the legal implications of misuse. Safe Use Project and PCPB would also participate in these forums.

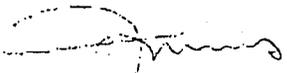
iv) KWS in conjunction with the local administration (in Ahero and Mwea) undertake to immediately inform the public about the illegality of killing birds and more so with agricultural chemicals. KWS to immediately start being on the look out for people said to be baiting ducks with Furadan with a view of arresting and prosecuting them. Any arrest made should be publicized to deter future indulgence into the habit.

The sale of dead ducks in hotels should also be banned.

v) A committee to formulate and co-ordinate plans/programmes addressing all issues as indicated above was proposed. This to comprise of:

F M C
AGREVO
K W S
P C P B
N I B

The committee to convene the first meeting on 23 July 1996 at 10.00 AM in the office of Agrevo E A Ltd.


F M MIANO
AGREVO EAST AFRICA LTD

FMM/WHO
02/08/96

I

From: [REDACTED]
Sent: Saturday, January 22, 2011 3:26 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: FMC Meeting - January 20, 2011
Importance: High

Hello All,

On Thursday January 20th, [REDACTED] and I met with [REDACTED] and a number of chemists at the FMC Ewing lab.

We had a productive meeting.

The product in the sample bottle that [REDACTED] collected was tested. Even though the label states it is Furadan 5G from FMC, the test results show the product in that particular bottle is not Furadan and no carbofuran was detected.

The product in the bottle is unknown at this time. Further testing will be done to find out what it is and the results will be reported to us. From the results we got so far, the best guess is that it is some type of insecticide. The toxicity is unknown at this time. It could be quite toxic.

This opens up a whole new set of questions.

We have to keep in mind this is only one bottle. In order to figure out what's going on, we need to gather additional samples and other information. We are in the process of discussing strategy, the way forward and the next steps. There are many possibilities. As plans and strategies unfold, we will keep you updated and ask for your input and assistance.

[REDACTED] is willing to cooperate and continue the conversation regarding the pesticide issues in Africa that involve FMC. [REDACTED] and I will be in touch to facilitate further meetings.

Please refrain from posting these results in blogs and websites until more 'Furadan' samples can be obtained and we have a strategy in place. Otherwise, this material may disappear from shelves, yet still be readily available to do damage at some point in the future.

Although we are sure we won't all agree on everything, our hope is we can all work together and keep the end goal in mind, to make positive changes to benefit the wildlife and people of Africa.

Kind regards,
[REDACTED]

[FMC Note: The author is a representative of Defenders of Wildlife.]

INSECTICIDE/NEMATOCIDE/MITICIDE

for the control of many
inhabitant soil and foliar pests
of agricultural crops

Kiwa
Wadudu

GUARANTEE

Contains: 5% w/w Carbonfuran
10% w/w Inerts

Commercial and Agricultural class
PCPB Reg. No. PCPB(R) 0046
TPRI Reg. No. NE/003

READ THE LABEL
SOMA HAZARDOUS

CAUTION
HARMFUL

KEEP LOCKED
OF REACH OF CHILDREN

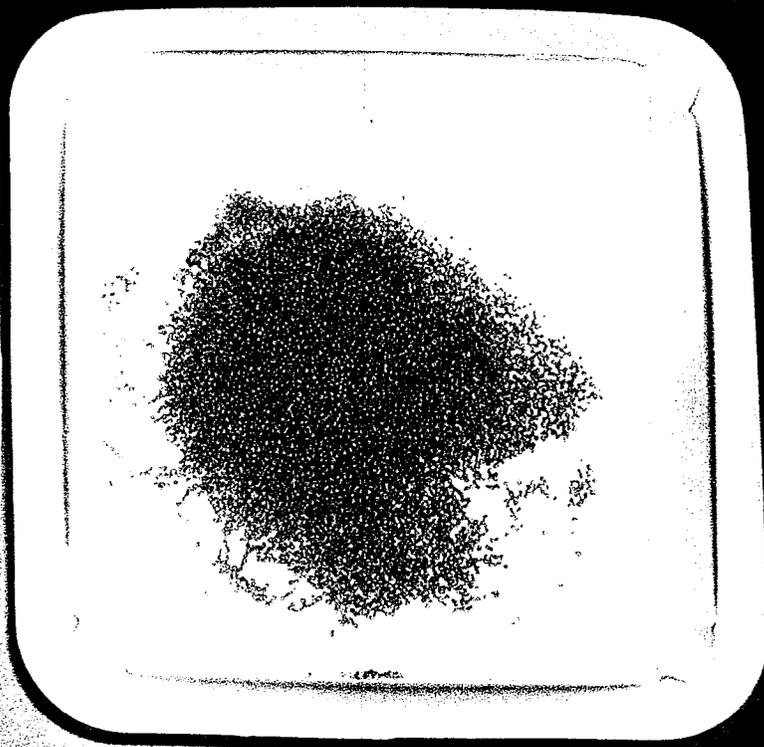
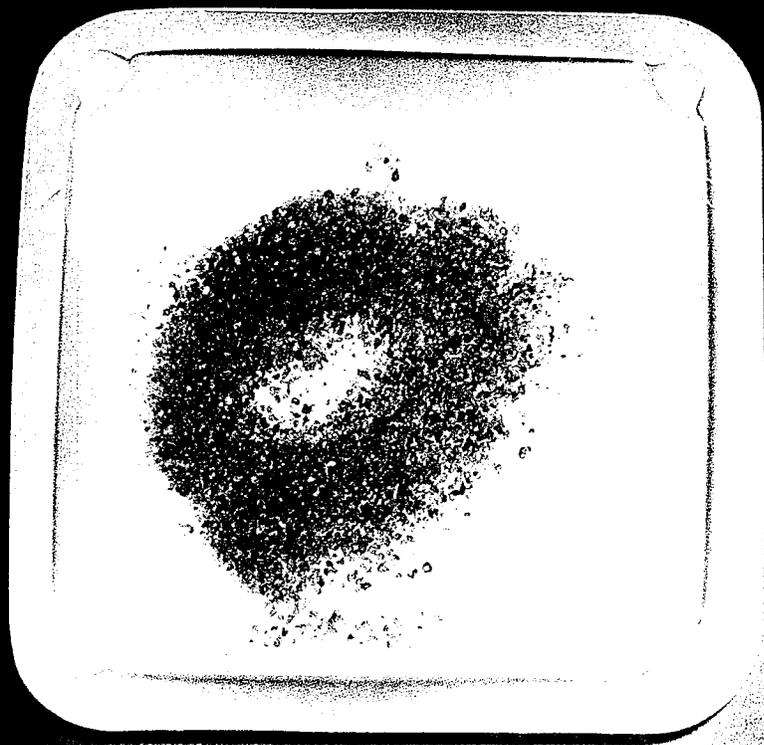
Batch No.:

Date of man.:

Shelf life: 3 years
unopened containers
of manufacture in a
dry place

Manufactured by:





J

From: [REDACTED]@fmc.com]
Sent: Monday, January 24, 2011 9:30 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Poisoned Lions

Dear All,

Below is the email exchange between [REDACTED] and [REDACTED]. There are some very graphic photos of dead lions at the bottom of the email string which I believe are forwarded from [REDACTED] through [REDACTED] a conservationist who has been involved in an Amboselli Lion Project (see email message signed "R" to [REDACTED]). In one of the pictures there are blue granules sprinkled on the lion carcass. When you enlarge the picture, the granules are of inconsistent size and are angular in shape similar to the Ugandan product we analyzed last week which was not carbofuran. I will communicate this to [REDACTED] so be sure she is aware.

In [REDACTED] response to [REDACTED] she suggests training the game scouts on how to safely collect samples of granules sprinkled on carcasses so the granules can be tested. I'll be very interested in his response to her suggestions. Prior to [REDACTED] and I meeting with [REDACTED] in August 2009 we had sent him a protocol outlining what to look for and what to do when coming upon a dead carcass suspected of being poisoned. He told us it was not useful to him because people would not respond if they could not answer all the questions in the protocol.

Next steps:

1. Put results of our analysis of the Ugandan product on FuradanFacts. Will keep information at a high level so the counterfeiters do not have the details of what we found.
2. Contact [REDACTED] about the exchange below and the timing for meeting with Defenders.

Regards,
[REDACTED]

From: [REDACTED]
Sent: Sunday, January 23, 2011 11:50 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Poisoned Lions

Hello [REDACTED] and all,

Thanks for your input and photos, [REDACTED]. This is very important and valuable information, as you know.

I can't answer for FMC's position, but at the meeting we had last Thursday, I heard nobody from FMC say that they believed there was no more Furadan in Africa. We did not discuss that point directly. I did question Linda about how the buy-back program was conducted and if there was some sort of business registration to work from in order for them to locate all of the stores to check for Furadan. She told me that Juanco went to the stores that they had distributed it to, for the buy-back.

I'd like to thank [REDACTED] for taking the personal risk of collecting the sample that was tested at our meeting. Everyone should keep in mind that was *one sample*, and now there are even more unanswered questions.

From this latest information you've sent, I think it would be exceedingly helpful if the community game scouts could be trained to safely collect samples of the granules sprinkled on any carcass as soon as they find it. Those granules could then be tested to find out if they are Furadan, or something else. We can give you guidance on how to collect the sample. Let us know if you need the

2/4/2011

necessary equipment such as vials, gloves, etc. Although the identity of the poison is insignificant to a dead lion or other wildlife, it will be important regarding the way forward, and to understand exactly what is going on and how to end this slaughter.

All of this information and effort is extremely important in order to continue working together in a meaningful, cooperative manner.

Thanks for all your input and efforts,
Kind regards,

[FMC Note: The author of the above e-mail is a representative of Defenders of Wildlife.]

On Jan 23, 2011, at 3:45 AM [redacted] wrote:

Hello [redacted] et al.

I do note that [redacted] is copied here.

Is it the FMC position that there is no Furdan in East Africa any more?

Note this just in from the Kenyan anti poaching teams in Maasailand.

I hope you enjoy the images.

All the best

Dear [redacted] and [redacted]

Here are some pics and storey of the Lion I told you about, killed accross the border in TZ,

[redacted] and [redacted].....see the pic of what is obviously Furadan, feel free to use it as you wish,

Will update on any other details as they come out.

R

----- Original Message -----

From: [redacted]

To: MPT <mailto:[redacted]> ; [redacted]

[redacted] ; [redacted] ; [redacted]

Sent: Saturday, January 22, 2011 12:30 AM

Subject: Poisoned Lions

Poisoned lions

It has been a very busy and bad week for MPT considering the death of 5 lions by poisoning from the Tanzanian farmers using Furadan. The first lioness was poisoned on 2nd of January 2011 after killing a cow inside a boma at Kitenden area on the Tanzanian side. We were notified about the death of the lioness by community game scouts from Tanzania working under AWF on 5th of January who found the carcass by luck when they were on daily patrol. We went up to the community game scout post and they gave us the GPs coordinates of where they saw the carcass and they also managed to take a few pictures. The pictures showed that the carcass was almost 3 days old and most of it had been eaten by hyenas and vultures. We abandon the search and decided to continue

from where we left the next day because it was already getting late. Using the GPs coordinates we were able to locate where the lioness died the next day. At the site we found only a few scattered bones, it was even hard to identify if it was indeed a lion. I'll send pictures that were taken by AWF game scout because they are more detailed than the ones I have. We decided to use an informer in order to get the full extent of the matter and he was able to give us the following details.

- • The lion was poisoned by a man known as Samanya ole Samaki(owner of the cow killed by the lioness)

-

- • Four hyenas and a vulture died after eating the lioness carcass.

GPS coordinates of the carcass – **0308275 9688511**

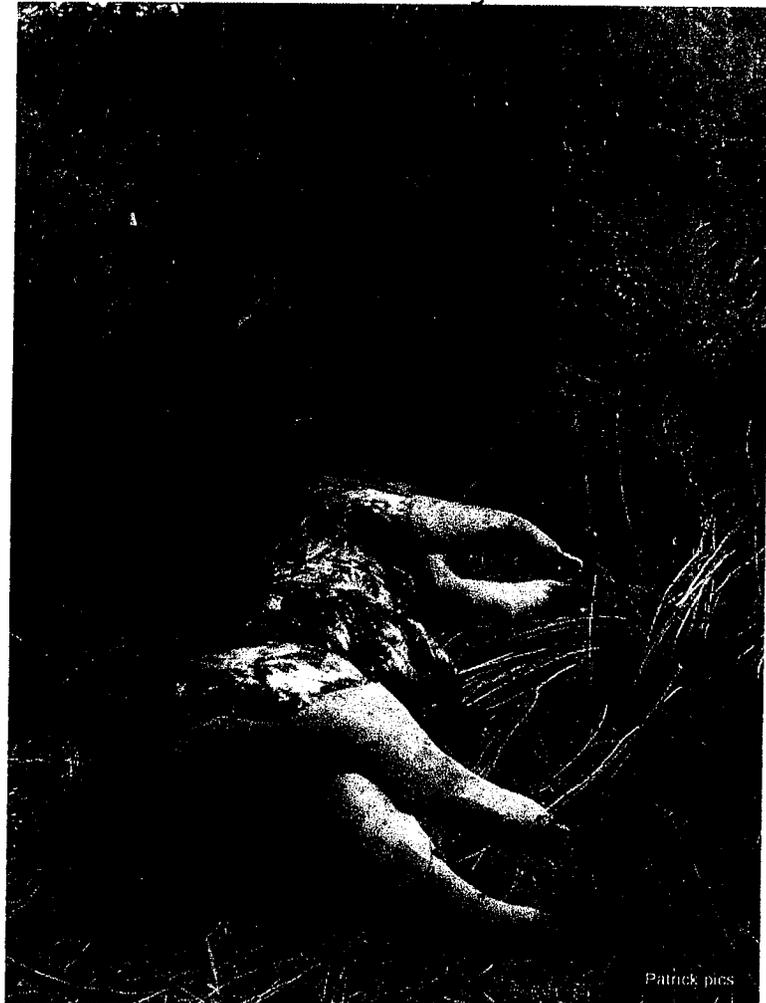
On 19th of January we received another report from our informer that four lioness have died as a result of poisoning using Furadan. The lions were killed in retaliation for killing a cow which had a small calf belonging to the same guy, Samanya ole Samaki. We went the next day to look for the carcasses and we were joined by the zonal warden of TANAPA and a few rangers from Tanzania. We were able to find only one carcass of a male lion. All the canines had been removed, claws and a big part of the skin was also missing. We tried to convince the warden to burn the lion carcass to prevent the death of other animals that may feed on the carcass but he decline. It also appeared as if Furadan was sprinkled on the lion carcass probably targeting hyenas. The search resumed the next day but we didn't find anything so we abandon the search. On 21st we received another report that only one lion returned to feed on the carcass of the poisoned cow and not four as reported 2 days ago. We also heard that the 3 lions *all females* were spotted together lying under a tree and they looked okay. It also seemed like TANAPA will not take any action against the owner of the cow responsible for poisoning the 2 lions. There were also rumors circulating around that any person from Kenya entering Tanzania to follow up on the issue will be arrested or beaten up by the local community.

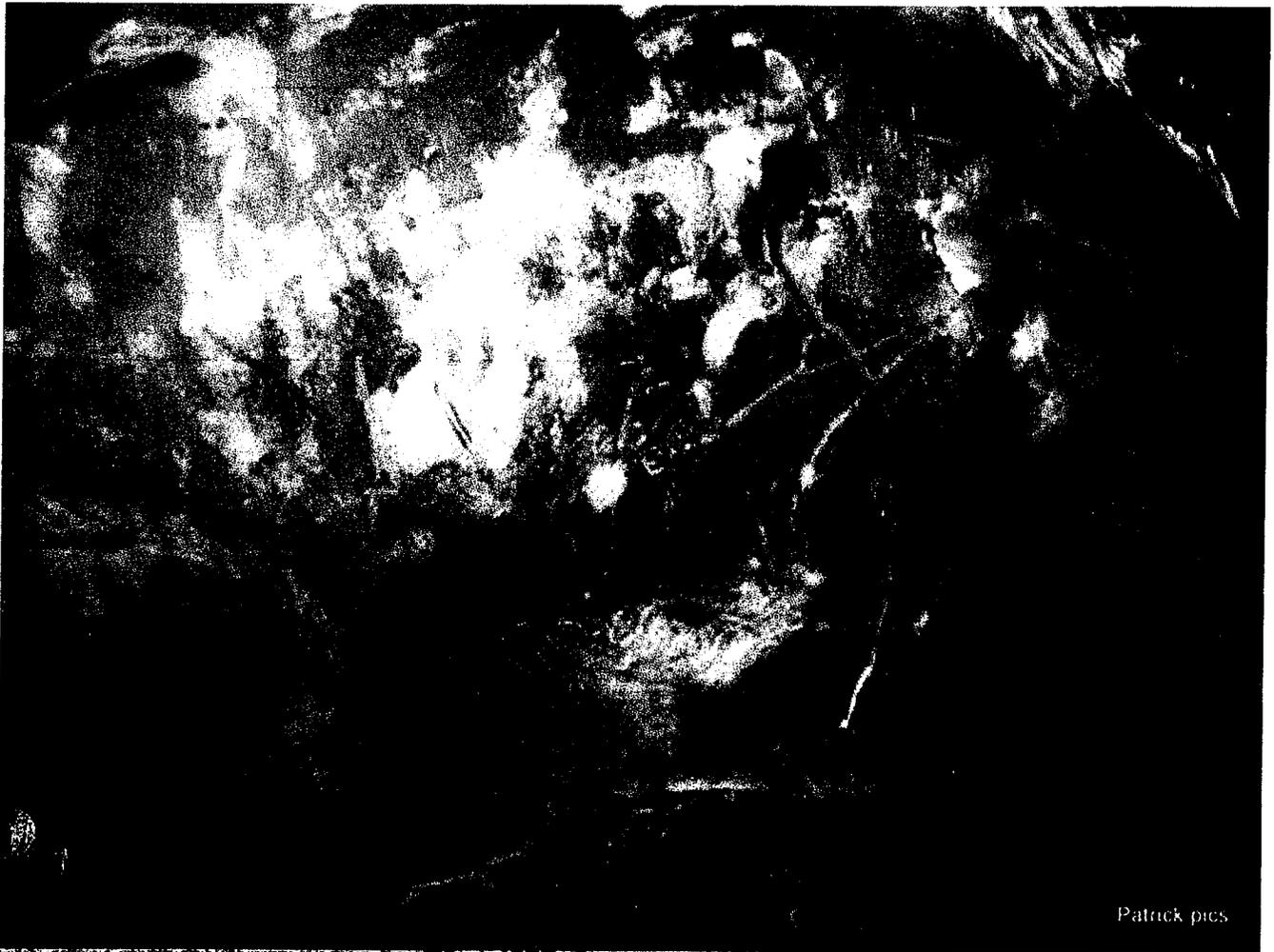
GPS coordinates of the poisoned Male lion – **0309137 9685792**

GPS coordinates of the poisoned cow – **0308944 9685608**

----- End of Forwarded Message

----- End of Forwarded Message





Patrick pics





K

STRYCHNINE DOCUMENTS

+

11

Pest Control Products Board

From: Laurence Frank [lgfrank@uclink.berkeley.edu]
Sent: Friday, June 06, 2003 7:56 AM
To: pcpboard@todays.co.ke
Cc: 'David Mead'; Laikipia Wildlife Forum; Kenya Wildlife Service - Laikipia Station
Subject: RE: Frederick Muchiri: Predator Poisoning in Laikipia

Dear Frederick,

Many thanks for the report you sent me last week. I am attaching my response for your consideration.

Best,

Laurence Frank

Dr. Laurence Frank, Director
Laikipia Predator Project
Mpala Research Centre
PO Box 555
Nanyuki

Tel: + (0) 176-32758
Fax: + (0) 176-32750

oel -
Cambridge →

13-Aug-03

ps 1

LAIKIPIA PREDATOR PROJECT

MPALA RESEARCH CENTRE

UNIVERSITY OF CALIFORNIA, BERKELEY

*Mpala Research Centre
P.O. Box 555
Nanyuki, Kenya
Phone: + (254) (0) 176 32758
Fax: + (254) (0) 176 32750*

*Museum of Vertebrate Zoology
3101 Valley Life Sciences Building
Berkeley, CA 94720-3160 USA
Phone: + (510) 848-0418
Fax: + (510) 642-8321*

Email: lgfrank@uclink.berkeley.edu

13 August, 2003

Frederic Muchiri
Pest Control Products Board
Richard Sikuku
Agrochemicals Association of Kenya

Dear Mr. Muchiri and Mr. Sikuku:

Many thanks for your report on your visits to Laikipia. You clearly gained a lot of information, which gave you a comprehensive view of the attitudes of pastoralists and farmers toward wildlife. You certainly appreciate the tensions between wildlife conservation and the human population. I am sure that your visit was very important in reminding people that poisoning of wildlife is illegal, and that this practice will now be less common.

I am sorry that I was not there to meet you, but I gather that you got good information from my assistant Steven Ekwanga. On your next visit, it would be worthwhile for you to talk to biologists and conservationists, as well as pastoralists and farmers. Unfortunately, there are a number of inaccuracies in what you were told, and in the future I hope you will be able to meet with wildlife experts.

It is almost certainly untrue that populations of predators have increased; although lions still occur on conservation properties, they have essentially disappeared elsewhere and populations of hyenas are also almost certainly declining due to persecution. In fact, it is not at all clear that predator attacks on livestock have actually increased, although people may feel that they have; I have worked on predators for over thirty years, and people have always felt that "there are more than there used to be", even though populations have been in steady decline. It is certain that all wildlife has disappeared in agricultural areas, and declined dramatically on pastoralist lands. Although predators avoid humans, there is less wild prey and even though they are few in number, hunger may force predators to attack domestic stock.

Although people may deny poisoning, it is indeed happening on an increasing scale. I would guess that only a few people are responsible for poisoning, but they can have a very serious effect on predator populations. We have seen cases where whole prides of lions have been poisoned in a single night; a group of five was poisoned in eastern Laikipia a few days ago. In Masailand whole lion populations have nearly disappeared in recent years.

It is entirely untrue that lions and leopards are "clever animals" who will not return to a kill. I have captured and released over one hundred lions and 25 leopards in Laikipia, every one of them when they returned to a kill. Similarly, when lions and leopards are shot it is virtually always when they return to last night's kill. It is, in fact, very easy to poison most predators precisely because they reliably return to kills. Only wild dogs and cheetahs are exceptional in that they do not return to kills and are probably rarely poisoned.

B 2

Wild dogs have indeed increased in the last few years, and the Samburu-Laikipia Wild Dog Project is monitoring them very closely, including all reports of attacks on domestic stock. In fact, they have found that wild dogs rarely attack stock, and the few attacks have occurred largely when the dogs wandered onto agricultural land where there is no wild prey. The Laikipia wild dogs spend only about 9% of their time on settlement lands, but over 70% of the livestock attacks have occurred there (however, as you noted, many of these attacks have killed multiple small stock, which is very painful for the owner). The report you received of wild dogs attacking bomas at night is probably false: these animals are diurnal and avoid people. I have never heard of an attack on a boma.

As you so rightly noted, in many cases livestock are not well protected from predators; good protection can dramatically decrease livestock losses, and peoples' intolerance of predators. The main purpose of my project is to help communities improve livestock husbandry to better protect stock from predators, reducing the need to kill these animals.

I have a few comments on some of your recommendations under section (g):

1. Wild dogs are among the rarest animals in the world (there are less than 5000 left in all of Africa) and are classified as Critically Endangered. They are therefore stringently protected and it would be highly illegal to kill them, under both Kenya and International law. The return of wild dogs to Laikipia is a major conservation achievement and a strong tourist attraction, especially on the communally owned areas where the dogs have settled. Again, in spite of what you were told, attacks by wild dogs on domestic animals have been uncommon on the group ranches and nonexistent on commercial ranches.

Virtually all hyena depredation occurs when hyenas force their way into poorly built bomas; we are working with the local people to improve boma construction. Hyenas come around settlements at night to scavenge on bone and other takataka lying around; we encourage people to dispose of animal wastes so that they do not attract hyenas in the first place.

2. People frequently state that problem predators should be translocated. In fact it is virtually impossible to translocate predators due to their territorial behavior, so this is not an option for predator management. In the case of persistent problem leopards, shooting is probably the only realistic option.

3. It is simply untrue that lions and leopards are not poisoned.

4. While people may deny using Furadan, the blue crystals obtained by Mr. Masere as being the pesticide used to poison predators were identified as Furadan.

As you note, Kenya abandoned compensation for wildlife – human conflict when corruption at all levels totally undermined the system. With a new commitment to honest government, it may well be time for Parliament to revisit the issue, as just compensation would dramatically improve tolerance of wildlife.

I think it is worth remembering that wildlife tourism is one of Kenya's primary foreign currency earners, and that wildlife is disappearing at an alarming rate all over Kenya EXCEPT in Laikipia. Due to conservation efforts, wildlife is increasing and this area is rapidly becoming a major tourist destination. As you learned, the Masai communities are building their own lodges and attracting tourism, but they can only do that if they can offer wildlife, and especially predators: tourists want to see lions. The Kenya Wildlife Service, the Laikipia Wildlife Forum, and the Laikipia Predator Project are all trying to help these communities profit from tourism by helping them find ways to live with predators.

I want to thank you very much for the strong interest you have taken in predator conservation. Your visit will have strongly reminded people that poisoning is not acceptable, and I am sure that it will have a very positive effect. Now that we are aware of proper channels, we will make sure that you are promptly

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informed of suspected incidents, and I hope to be able to meet with you should you make another visit to Laikipia.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Laurence Frank". The signature is written in a cursive style with a large, sweeping initial "L".

Laurence Frank, Ph.D.

Cc:

KWS, Laikipia Office
Laikipia Wildlife Forum
David Mead

27th January 2005

PCPB/31/II/173

Mpala Research Centre
P.O. Box 555
NANYUKI
Tel: (0) -- 62-32575, Fax: 32750
Attn: Lawrence Frank -- e-mail lgfrank@berkeley.edu

SAMPLE ANALYTICAL RESULTS

You will recall the various meetings we have had over lion poisoning in Laikipia and investigations done to get to the killing agent.

Two investigations have been done and the last one was at Muggie Ranch where frozen samples of viscera of the poisoned lions were taken and stored at Mpala Research Centre awaiting analysis. These samples were delivered to our offices with additional liver samples from suspected poisoned lions.

The samples were analyzed with specific interest on Carbofuran and Strychnine. The result of analysis are as indicated below;

Analytical report

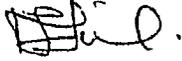
Sample	Carbofuran	Strychnine
Stomach contents of female hyena	Not detected	Not detected
S28 -- stomach contents	Not detected	Detected
LF08 -- stomach contents	Not detected	Detected
LF90 -- stomach contents	Not detected	Detected
Liver	Not detected	Detected

The results indicate that strychnine is the poison that was used to poison lions as it was detected both in the stomach and the liver. Since these samples were drawn from different ranches and at different times, it would be correct to conclude that strychnine is in the wrong hands and your future investigations should focus on that line.

P. 5

It is therefore true to say that contrary to the common belief that carbofuran was being used to kill the lions, strychnine, which is normally used by Veterinary department to bait dogs is the poison that the locals use in killing the lions.

Regards.



F.N. Muchiri
FOR: CHIEF EXECUTIVE/SECRETARY

C.C. David Mead - e-mail davidmead@kenyawe.com

Director
Veterinary Services
P.O. Private Bag - 00625
KANGEMI - NAIROBI

Chief Executive Officer
Agrochemicals Association of Kenya
P.O. Box 13809
NAIROBI



REPUBLIC OF KENYA

PEST CONTROL PRODUCTS BOARD RECEIVED 10 JAN 2005 SECRETARY'S OFFICE P. O. Box 13794, NAIROBI.

ORIGINAL

GOVERNMENT CHEMIST'S DEPARTMENT

P.O. Box 20753-00202 NAIROBI Telephone: 2725806/7 Fax: 2717567

REGISTRATION

my copy for necessary action. [Signature]

CERTIFICATE OF ANALYSIS

Report Reference No.: P/VET/VOL.I/2004(17)

Lab. Sample No.: VT 27/04

Sender:

Sender's Reference:

The Chief Analyst, Pest Control Products Board, Box 13794, Nairobi- Date Received 00800.

Description of Sample:

- 1. Stomach contents of female spotted Hyena. Examination Required
2. LFO8 stomach contents.
3. S28 stomach contents.
4. LF90 stomach contents.
5. Liver

03/12/04

Examination Required:

Carbofuran and Strychnine

Analytical Report:

Table with 3 columns: Sample, Carbofuran, Strychnine. Rows include Stomach contents of female hyena, S28 stomach contents, LFO8 stomach contents, LF90 stomach contents, and Liver.

Date:

23/12/04

awn/nwg

GPK 616-5m-6/2003

[Signature]

E. W. NJOGU

For: Government Chemist

13.7

pcpboard

From: Laurence Frank [lgfrank@berkeley.edu]
Sent: Thursday, February 17, 2005 12:58 PM
To: ~~Dr. Thomas Manga~~
Cc: pcpboard; Laikipia Wildlife Forum; Claus Mortensen; alayne Mathieson; David Mead; Nicholas Georgiadis; Seamus MacLennan; research@KWS.org
Subject: Predator Poisoning

Dear Dr. Manga,

I was extremely pleased to meet you and Dr. Kinyua today to discuss the predator poisoning incidents in Laikipia. Dr. Muchiri's finding of strychnine in poisoned lions was a critical breakthrough, and it is marvellous that the Vet Dept. is following up so thoroughly.

As I said, we are losing lions and other predators at a frightening rate, not only in Laikipia but other in parts of Kenya, as well. I will let you know promptly when we get other cases. Please do not hesitate to get in touch at any time, and I would be grateful to receive news of your investigations.

Sincerely,

Laurence Frank

Dr. Laurence Frank
Laikipia Predator Project
Kilimanjaro Lion Conservation Project
PO Box 555
Nanyuki
KENYA

Tel: + (0) 62-32575
Fax: + (0) 62-32750

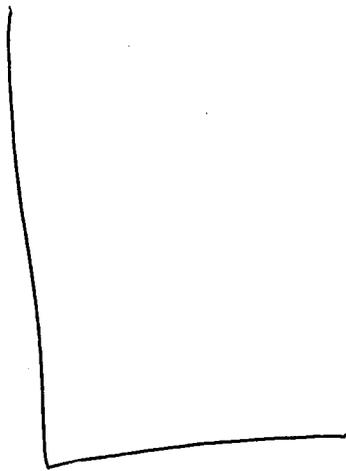
IRED - Inter Reg. Eligibility Decis
- EPA - Evaluation (rules)
benefits → Rec.

→ NOT final decision

→ 600 ac - before 1989

Sept 2007 → Dlyer - 2007 - final

→ Worst Scenarios - p8



***2003 MINUTES/MEAD
LETTER/AMENDED FURADAN LABEL
FOR KENYA***

→ FURADAN / KENYA

WATERFOWL AND PREDATOR PROTECTION
FROM LEGAL AND ILLEGAL USE OF FURADAN

HELD AT KER & DOWNEY SAFARI'S HEADQUARTERS
ON 12th MARCH 2003 AT 9.00 A.M.

PRESENT

David Mead – Honorary Warden, Kenya Wildlife Service
[REDACTED] – Senior Inspector, Pest Control Products Board
[REDACTED] – Administrator and Training Manager, Agrochemicals Association of Kenya
[REDACTED] – Country Manager, Southern & East Africa, FMC Agricultural Products Group
[REDACTED] – Regulatory Affairs Manager, Europe & Middle East/Africa, FMC Chemicals
[REDACTED] – Technical Consultant, (GIFAP Safe Use Project)
Laurence Frank – Laikipia Predator Project (LPP)

IN ATTENDANCE

[REDACTED] – Taking minutes

INTRODUCTION

The Meeting was called to discuss two issues relating to Furadan 5G and attendant problems:

- a. The poisoning of ducks and other waterfowl.
- b. The increasing occurrences of predator poisoning, primarily in Laikipia and the Chyulu/Kimana/Amboseli eco-system.

BACKGROUND – DM/JA

1. Ducks and Waterfowl

- a. Throughout the '90's, but getting steadily more critical, ducks were being targeted by poachers in the Mwea and other rice-growing areas in Kenya by illegal baiting with Furadan mixed with rice grain. Ducks were being immobilised and caught prior to death – eviscerated, and sold in the illegal 'bushmeat' market. Witnesses reported seeing pick-up trucks full of duck carcasses, and as a consequence of this wholesale slaughter, duck populations were rapidly diminishing in these hitherto prolific areas.
- b. Through the use of Furadan as a pesticide on rice-growing crops, significant numbers of waterfowl e.g. Ibis, Spoonbills, Herons, Storks and other waders were being killed by ingesting the product.

These issues were addressed at the Furadan Environmental Meeting at the MKSC on 24th July 1996, but the various actions determined at that time, though laudable, failed to solve the problem and the rapid decline in the above species continued unabated. DM brought this serious issue to the attention of FMC which finally led to their passing a Resolution to "de-register the product from rice-growing areas and to restrict the sale to 5 kg packs or larger". This timely action by FMC was greatly appreciated and as a direct result, wildfowl populations increased significantly.

In late 2002, it became apparent that Furadan was again being sold in 200 g. packs, and since this was contrary to the FMC Resolution, DM brought this to their attention.

DM's primary concern was that if the product was again available in such small, cheap and easily obtainable quantities, and since duck populations had increased markedly, there may be a resurgence of poisoning of duck for 'bush-meat'.

Co-incidentally, LF reported the incidences of the poisoning of predators, in the areas noted above, by 'salting' predator-killed livestock with Furadan. DM then requested LF to address the meeting with his findings and concerns.

2. Predator poisoning – LF:

LF is involved in the Laikipia Predator Project and reported that there was an increasing intolerance by livestock owners to predator killings of their livestock. There have been many occurrences of predator poisonings with Furadan suspected as the prime agent. The LPP has adopted a three pronged approach to this issue :

- a. Educating local communities as to the commercial values, through tourism, of predators – particularly the large cats, but also hyenas. A number of communities have already established very successful tourist facilities (community-owned lodges) and thereby generating significant remuneration from wildlife. There is an increasing interest in community conservation, from which returns from tourists viewing wildlife more than compensate for the losses of livestock. This is an ongoing and expanding movement.
- b. Reducing livestock/predator conflict by the LPP's efforts to identify inexpensive means of strengthening 'boinas' (stockades) to restrict access at night by predators, including having alert dogs as an early warning device.
- c. Attempting to restrict the availability of any product that can be used to poison predators- which was the main point of his attendance at this meeting.

DM added that the Wildlife (Conservation and Management) Act, permitted landowners to kill any animal in defense of human life, livestock or crops.

Having covered the background and concerns, the meeting was opened for comments and suggestions from the floor.

COMMENTS

1. FM made an invaluable point, that the Wildlife Act notwithstanding, the PCPB can, and do, prosecute offenders for Misuse of Products. A most helpful and encouraging piece of information which will go a long way towards resolving the two key issues concerning ducks and predators. Successful prosecutions on these grounds, and given full support by the PCPB, should have considerable impact on the conservation of Kenya's wildlife heritage, particular to the aforementioned issues.
2. LF asked what action he should take and what sort of report was required by the PCPB. FM/RS advised:

- a. Telephone the office of the PCPB (254-2-446115) immediately together with e-mailed information (pcpboard@todays.co.ke) marked for FM's attention, or in his absence, Mr Peter Amukoa.
- b. Take samples from the 'salted' carcasses, if possible, and certainly from the animal poisoned, and retain these under refrigeration.
- c. Identify the owner of the livestock killed, as the most likely culprit.
- d. Full details of the incident, including location, species involved and date of occurrence/evidence

The PCPB stated they will make every effort to visit the site and collect those samples taken, for analysis, with a view to determined prosecution of offenders. **ACTION – PCPB/LPP**

3. [REDACTED] commented on the high degree of efficiency and effectiveness of the PCPB, and furthermore he recommended that all significant information was communicated to the national press. He also suggested that the PCPB may care to make an interim statement to the press after LF has provided them with a concise background of previous occurrences. This would also include the PCPB's commitment to prosecuting offenders which will result in heavy penalties for the misuse of product, and the serious illegality of re-packaging the product into small and unlabelled packages. It is hoped that this press coverage will have considerable impact on potential offenders by stressing the risks they run. **ACTION – PCPB/LPP.**
4. FM/RS commented on the matter of small packs vs larger and explained that properly labeled small packs was the correct stewardship of the product. They stressed that otherwise there was a likelihood of larger packs being broken down for re-sale into smaller quantities without the essential labeling. They submitted that ducks were not dying due to small packs, but rather to the large packs being broken down. These opinions from qualified experts were accepted as logical and informed. The issue of smaller packs was accordingly agreed to, in principle, subject to how things went in the future. If it did not work, then the issue would have to be re-visited. PCPB/AAK would continue to keep a check on sales outlets to see if it were possible, by covert means, to buy small and unmarked quantities. Any of us, as interested parties, should also report any similar findings to them for action.
5. DM asked FMC to confirm that the de-registration from rice growing areas would remain in force and requested that in addition, that the labeling include something specific to 'prohibit use in rice growing areas' and with a warning that 'product misuse is a serious offence'.
6. DJ approved the continuation of sales in the smaller packs of 200 g, and confirmed that they would include the requested information on their labeling with effect from the next re-run. He would e-mail DM as to what form this would take. **ACTION – FMC/DM.** He went on to say that as far as he was concerned the issue of ducks was now closed, subject only to any resurgence of illegal baiting. He requested that DM/LF correspond with him direct as confusion could arise if their USA office was approached. DM accepted this provided that he was kept aware that USA was being updated and that he was sent copies of the relevant correspondence between [REDACTED] USA to confirm this. [REDACTED] accepted this. **ACTION – FMC [REDACTED].**
7. JA pointed out the marketing problems of FMC and that any ill-will towards their product is a major concern of theirs. He also commented that the issue of large packs vs small packs was a two-edged problem, but agreed that it could remain on the 'back-burner' unless future developments indicated that it be re-addressed. He reiterated that Furadan was an excellent

product for the agricultural sector, and it was hoped that provided its negative side to Kenya's wildlife was carefully controlled and monitored, there would be no call for pressure to withdraw the product altogether. He again stressed the need for good prosecutions and media focus on culprits. DM concurred with this 'wait and see' way forward. **ACTION (re prosecution) – PCPB/AAK.**

8. DM requested that the PCPB/AAK send him a copy of any statement or notification to the press (basically a photocopy from the newspaper), in case he missed it. This was agreed. **ACTION – PCPB/AAK.** DM would pass these on to LF. **ACTION – DM.**
9. LF asked DJ if nothing could be done to make the product totally unpalatable by both taste, and smell, to carnivores and birds? DJ remarked that this was in progress, but what may work for carnivores may not work for birds and vice versa. **ACTION – FMC.**

CONCLUSION

DM concluded that we had gone about as far as could be realistically expected for the present and requested that all parties make a concerted effort, work together, and keep each of the others informed. In this way, we would be able to work towards our undisputed and common goal of preserving Kenya's wildlife. He then thanked everyone for their active participation and valuable inputs.

There being no further business, the meeting ended at 12.30 p.m.

FMC Chemical, sprl
Agricultural Products Group

Boulevard de la Plaine 9/3
B-1050 BRUSSELS
Belgium
Tel. 32 2 645 95 84
Fax 32 2 645 96 55

FMC

**KER & DOWNEY SAFARIS LTD
P.O. Box 86
KAREN 00502
NAIROBI
KENYA**

Attention: Mr David Mead

Brussels, 22th April 2004

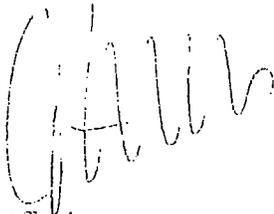
Dear Mr Mead,

Following our meeting last year and in agreement with the PCPB, we have amended the label of our product **FURADAN SG** regarding the mention of the limitation of use on paddy rice. This use restriction is clearly mentioned as you can see on the copy of the new label that is enclosed for your information.

I also take this opportunity to confirm that we are currently working on this formulation to make it less palatable for birds, which is the group the most at risk as you identified it. This takes time, because the palatability has to be tested under real condition.

Should you have any comment or question, or need any additional information, please do not hesitate to contact me.

Yours sincerely,



Florence Troubac
Regulatory Affairs Manager
Europe, Middle East, Africa
FMC Chemical sprl, APG

Tel: 00 32 2 645 95 47

Fax: 00 32 2 645 96 55

cc Philippe Quiniou FMC

RS

MAELEZO

Furadan 5G ni dawa inayoponyia ndani ya mimea ineyotumika kwa kuzuia wadudu na nematodes kwa rchanganywa wadudu wasiozoharibu mimea punde zimesainipocia

MACHARI ZA UBERAJI NA UTUMAJI

Furadan 5G haina uchafu wa vumbi. Vaa mwezi ya kujingira kama (mifano, owerol nyapasi, buti na glavu za raba zilizowekwa kizababu.) Unaposhughulika nayo usipunguza mecha, uwa, kula, kumata sigara au kuniyama chochoto. Baada ya shughuli vaa nguo zote za kazi, ziocha vizuri kwa maji ya sabuni kisha vaa nguo nyong'ona zote. Ngao zilizochafuka wakati wa kazi zitafuwa na kupigwa pasi kwanza kabla kujazuliwa tena.

UTUMAJI

Chosho kichokafuka dawa usikubuni kwa matumizi mengine yoyote. Klabo, iburija na kutichoma au kutafuka mbali na vizio vya maji. Dawa ambayo haikutumika usiwaga katika njia ya maji. Dawa iliyowagika kwa bahati mbaya kutima zitumie kwa kutumia kikatikaji cha vumbi (vacuumcleaner) au kufika ulikaweya taratibu ulikidhihi mwananyiko auyo wa purjo. Vyombo vya dawa vilivyomurika viondo na kusafisha saharu iliyochafuka kwa kutumia na chocha majinjaji au juu la magadi. Uchafu wote ukaweya na kuingiza katika pipu tayari kwa kutafuka au kutichoma. Mafisho pipu lilibakafuka kote na mnyakho masulu wa kutakasa pombe na maji, mbali na vizio vya maji. Vaa nguo za kanga unaposhughulika mbaki vyema dawa.

MACHARA KWA MAZINGIRA

Furadan 5G ni sumu kwa kawaida na viumbe wengine wa majari chunga kama vile maji kwa njia ya maji. Dawa hi ni sumu kwa ndege, miguu na wanyama wa pori. Hata hivyo mimea iliyotambika dawa hi katika vipimo vilivyofika haina dhara kwa miguu au majari wasiozambabwa mwa ya kazi.

HUDUMA YA KIMANA

Watu wasiozambabwa mgonjwa aliyepata na sumu wasidurikwa kupitia mataplehi yote, au njia nyong'ona inayoweza kusambabwa auvui hiyo. Vaa glavu za raba wakati ulimwafika mgonjwa.

Endapo imesawazwa: Mfanyo mgonjwa akawa bado atajipa kwa kumpo glavu moja yau mbali za kawaji na kuingiza kadole safi mdomoni uliokubwa kuzuri

Kuingiza machoni: Oka vizuri kwa muda wa dakika 15.

Ukubwa ndani: Mwanjwa mgonjwa mshai jalipo na hama safi kizingitika ngazi. Ngao zilizochafuka zinau na kuzitika. Ngazi zote vizuri kwa maji ya sabuni. Kwa namna yoyote iki pata mshababu ya daktari herika.

ILAJI KWA MIFUAMA

Dawa hi shari itumie kuingirwa na masigizo yaliyo kaweya kibandiko. Ni hatia chini ya sharia ya madawa ya kusangazwa wadudu wafishu, kutawia au kuhitachi dawa hi katika hali toyo tabana.

THIBITISHO

Dhama ya majuzaji ni kwanza yaliyo kaweya kibandiko ambayo ni lazima yafutwe kibandiko. Mfaruzi lazima akubali hatari zozote zinazoweza kutichoma na matumizi ya dawa hi kwa binadamu au mwa lazima akubali dawa hi katika hali hiyo.

JAMBI YA KUTUMIA

Furadan 5G hutumiea kwenye udongo. Dawa yoweza kutumiea kabla, wakati au baada ya kupanda. Mara zote hakikishi upo unyavu wa kutisha wakati au mara tu baada ya kutumia. Matumizi ya dawa kabla ya kupanda ni kwa njia ya kutawanya au kutawaga matumizi. Purjo zote zichanganywe vizuri kwenye udongo wa juu kwa chini. 3 hadi 5. Wakati wa kupanda ni kwa njia ya kutawanya au kutawaga majijani. Purjo zote zichanganywe vizuri kwenye udongo na juu kwa chini 3 hadi 5. Wakati wa kupanda Furadan 5G yoweza kutumiea katika mizondo yanyo mbegu au kuchanganya na udongo wa kutumika. Matumizi baadaye Furadan 5G kutawaga juu ya wataji wa mimea iliyopanda au kutawagile pande zote za kazi huku kichanganywa taratibu na udongo. Katika mawala ya kutumia dawa usiwaga kutunguka kamili au nusu kwa kila mimea kichanganywa udongoni.

Furadan 5G hudhibiti wadudu wa udongo kwa njia ya mguso ya wadudu kwenye majari kwa mwingilio wa ndani kwa ndani.

MNEA MIZUJI

KAHAWA

Tia gm 40 ya purjo za Furadan 5G kwa hali ya kutabaka dawa iki kivila cha majari ya witi na ichanganywe udongoni mara moja kwa mwaka wakati mwa zilizozaka.

MAZI

Tia gm 1 ya purjo za Furadan 5G kuzungusha kila mbegu wakati wa kupanda kabla kujazuliwa kwa udongo.

MAHADI

Tia gm 2 ya purjo za Furadan 5G kuzungusha kila mbegu wakati wa kupanda kabla kujazuliwa kwa udongo.

MBOGA

1 gm ya purjo za Furadan 5G katika shimo la kupanda kabla ya kupanda au kupandikiza

Mara mbili kwa mwaka mwanjwa mwa mwa, 10 gm za Furadan 5G kuzungusha kila shimo (niכה 3-4) baada ya kuanza majari na changanywa udongo.

MIZI

Mara mbili kwa mwaka mwanjwa mwa mwa, 10 gm za Furadan 5G kuzungusha kila shimo la kupanda kisha changanywa na udongo.

PARETO

Wakati ukupandikiza, 10 gm za Furadan 5G katika shimo la kupanda kisha changanywa na udongo.

TUMBAKU

Tawaya gm 20 za Furadan 5G katika kila mta mwa na changanywa taratibu katika kila kila kabla ya kupanda.

WITALIIBICHE

(NB: including Kales -subuma witi) MPAKAWA MATUWAZI

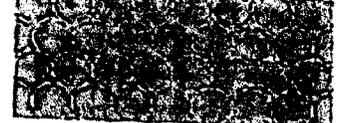
USITUMIE KWA KUKUZA MCHELE WA MAJINI ILI KUZUIA UJAJI WA NDEGE

Furadan 5G

INSECTICIDE/NEMATOCIDE/MITICIDE
For the control of many important soil and foliar pests of agricultural crops.

GUARANTEE
Container: 5% w/w Carburetor
95% w/w Inerts

Commercial and Agricultural class
PCPB Registration No. PCPB(R)-0046
TPPB Reg No. NE003



READ THE LABEL BEFORE USING SOMA MAELEZO KABLA YA KUTUMIA

CAUTION HARMFUL TO MAN **TAHADHAR MACHURU**

KEEP LOCKED AWAY AND OUT OF REACH OF CHILDREN **IFUNGHE MBALI NA WATOTO**

Shelf life: 3 years in original unopened container after date of manufacture in a cool dry place
Mafisho Ralimat: Mfaka 3 baada ya tarehe ya kutengenezwa kwenye chombo chake halisi mabaki pazaru na paipo na joto jingi

Date of manufacture: (28 added) 28 added
Batch No.: MMYYYYY
Expiry date:

25 KG

Distributed by: **Jenaco SP Ltd**
Specialty Products & Services
Jenaco Centre, Nairobi-Ngong Rd
P O Box 381, Karen, Nairobi 00502
Tel: 045-46206
Fax: 045-46190
Email: info@jenacogroup.com
www.jenacogroup.com

Manufactured by: **FMC Corporation**
10054537-15062388



DESCRIPTION

Furadan 5G is a systemic insecticide/nematocide for the control of soil insects & nematodes pests as well as early foliar feeding insects on coffee, bananas, vegetables, maize, pineapples & beans.

DIRECTIONS FOR USE

Furadan 5G is soil applied. The product can be applied pre-plant, at planting or post plant. In all cases ensure adequate moisture during or immediately after application. Pre-plant applications is done as broadcast or band over the row before planting. The granules should then be incorporated into 3 to 5cm of the topsoil. At planting Furadan 5G can be placed in the furrow with seed or mixed with the covering soil. Post plant applications is done as a band over the row crop or side dressing on both sides of the row and worked lightly into the soil. For perennial crops a semi circular or circular band around each plant is applied and worked into the soil.

CROP PESTS

COFFEE Leaf miner, Root knot nematodes, root mealybugs, scales (cotton and lilac egg), white grub.

POTATOES Tubarmoth, green aphid, cotton aphid, white grub, cutworm, root nematodes, potato aphid

MAIZE Maize stalk borer, spotted stalk borer, cereal stalk borer, pink stalk borer, Armyworm, white grub, Leaf hopper vector for maize streak virus, maize aphid, spotted beetle cutworm.

VEGETABLES Bagrada Bug, Diamond blackmoth, cabbage sawfly, bean aphid, bean leaf thrips, onion thrips, striped blister beetle, whitefly, bollworms, golden wing moth, maruca pod borer, bean fly, cotton aphid, green peach aphid, cutworm white grubs, root knot nematodes

BANANAS Banana weevil Burrowing nematodes, Root lesion nematodes, banana thrips.

PYRETHRUM Pyrethrum thrips, red pyrethrum mite, root nematodes.

TOBACCO Tobacco whitefly, green peach aphid, Africa bollworm, tobacco stem borer, cutworms, root nematodes, tobacco cricket.

MURSERIES Cutworms, wire worms, black cereals beetle, white grub, mole cricket, dusty kales - cutworms (NB: including brown beetle, armyworm, root knot nematodes)

USITUMIE KWA KUKUZA MCHELE WA MAJINI ILI KUZUIA UJAJI WA NDEGE

Do not apply on paddy rice due to toxicity on water birds

Una limitations

DO NOT APPLY ON PADDY RICE DUE TO TOXICITY ON WATER BIRDS

Do not apply on paddy rice due to toxicity on water birds

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***CORRESPONDENCE FROM COMPANY
TO PROPONENT
DATED DECEMBER 22, 2010***

From: Andrea Utecht
Sent: Wednesday, December 22, 2010 6:25 PM
To: FISMA & OMB Memorandum M-07-16***
Subject: Response to your proposed commitment letter

Dear David:

We have given careful thought to your most recent proposed commitment letter in the context of our current product stewardship programs and practices. We believe, however, that your proposal requires undertakings that go far beyond the control of one company. Also, we are obligated to balance your concerns with the concerns of all our shareholders, and we do not feel that your proposal properly strikes that balance.

FMC is very committed to the robust and effective stewardship of our products. As you will recall when we met on December 9, we walked you through a number of the steps we take to steward our products around the globe, and specifically in South and East Africa. Many of the examples we shared with you at that meeting had been unknown to you. Some of the Product Stewardship programs / efforts that we described, and which are but a few of the examples of our global product stewardship programs, are:

- Despite having received no definitive proof of any deliberate misuse of carbofuran, we stopped all Furadan sales in Kenya effective May 2008, stopped all sales in Uganda and Tanzania effective May 2009, and stopped all sales to South Africa and Zambia effective January 2010.
- We instituted Furadan buyback programs in Kenya in May 2009 and in Tanzania and Uganda in September 2009 that spanned several months and covered more than 25,000 kilometers. These involved visiting hundreds of Agrivet shops to buy back any Furadan found at up to ten times the original price. All Furadan repurchased was packed and shipped out of Africa.
- We made an offer to local authorities and wildlife conservationist groups to fully fund the analysis, at a reputable laboratory, of wildlife specimens from incidents of suspected "misuse" – this offer still stands.
- We have developed and are implementing a phased program to withdraw Furadan and other products from any markets in which we cannot assure that these products' safe use is a national priority, and/or effective product stewardship cannot be generally implemented.
- We have established a Sustainability Council of members representing non-government organizations, including large cat preservation, whose remit is to provide us with independent external expertise and recommendations.
- We informed you that it is highly likely that FMC's withdrawal of Furadan from these markets has opened the door to generic carbofuran, and that FMC has no control over how these generic products are stewarded.
- We offered for you to undertake a trip at our expense to East Africa to see for yourself the situation on the ground and to talk with whomever you choose, irrespective of whether you withdraw your shareholder proposal or not. The goal would be for you to come back to us with your perspectives on any additional practical actions that we could be taking to further decrease the conflict between wildlife and

2/3/2011

humans in these countries and that are in FMC's shareholders' best interests. This offer remains open through June 2011.

Unquestionably, we will continue our efforts to reduce the incidents of misuse of any of our products, and in doing so we will keep your recommendations in mind. We want to thank you for the news article you sent yesterday and have already begun to look into the incidents. We certainly appreciate your interest in this issue; unfortunately at this point we believe that further negotiations would not be productive.

Sincerely,

Andrea Utecht

Please be advised that this transmittal may be a confidential attorney-client communication or may otherwise be privileged or confidential. If you are not the intended recipient, please do not read, copy or re-transmit this communication. If you have received this communication in error, please notify me by e-mail (andrea.utecht@fmc.com) or by telephone (call us collect at 215/299-6990) and delete this message and any attachments. Thank you in advance for your cooperation and assistance.

Andrea E. Utecht
Vice President, General Counsel and Secretary
FMC Corporation
1735 Market Street
Philadelphia, PA 19103
Phone: 215/299-6990
Fax: 215/299-6728

2/3/2011

David Brook

FISMA & OMB Memorandum M-07-16

Sent Via Email and Federal Express Standard Overnight & OMB Memorandum M-07-16***

January 24, 2011

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Chief Counsel
100 F Street, N.E.
Washington, D.C. 20549

Re: Shareholder Proposal by David Brook Reply Letter
Product Stewardship and Human Equality: FMC Corporation

Dear Sir/Madam:

This letter has been prepared to assist the staff of the Division of Corporate Finance ("Staff") of the United States Securities and Exchange Commission ("SEC") with a reply to the request by FMC Corporation, ("FMC") dated December 29, 2010, to exclude the shareholder proposal of David Brook, ("Brook Proposal") dated November 16, 2010, (which included an annotated version provided later¹, included as Exhibit 1) from the 2011 annual proxy statement. The Proponent believes that the information provided in this letter will overwhelmingly convince the Staff that the Brook Proposal has merit, that FMC has failed to sustain its burden to exclude the proposal and the SEC should therefore allow the Brook Proposal to proceed to a discussion and vote by all shareholders of FMC.

I. INTRODUCTION:

Like so many legal issues, FMC's arguments and the length of their documents present the appearance of a carefully thought out and documented corporate approach toward product management. Unfortunately, like the story of the emperor's new clothes, when you begin to peel away the layers of rhetoric and misinformation, the SEC will identify that nothing could be further from the truth. As detailed below, after careful research of these issues and discussions with corporate officers, including an in-person meeting, it appears that FMC has spent more time and effort on building a public relations program than on building a credible, effective stewardship program.

FMC's materials (and this additional information) show that it has no effective corporate understanding or control over the misuse of its pesticide products. FMC has not presented a single written policy or procedure as to how its supposed product "stewardship" program is

¹ As was mentioned in the original cover letter, page 3, an annotated Shareholder Proposal was supplied to FMC on December 9, 2010, in order to provide FMC with the documentary sources supporting the Brook Proposal. A copy of the annotated Brook Shareholder Proposal is attached as Exhibit 1.

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OFFICE OF CHIEF COUNSEL
DIVISION OF CORPORATION FINANCE

implemented. The Brook proposal was specifically submitted for that reason, since a diligent review of FMC information, governmental sources, not for profit organizations and discussions with those people and organizations on the ground in Africa, the United States and Canada, indicated that there is no real or substantially implemented FMC product stewardship program. This is not to state that FMC has not taken defined actions to respond to allegations of one product's misuse through intentional poisonings, namely Furadan, but therein lies the problem. FMC's entire approach to these issues has been driven only by ad-hoc reaction to crisis. FMC has never taken the steps to create a pro-active product management program which is capable of accurately identifying product misuse and then implementing predetermined measures to correct and prevent future incidents. Its efforts have only involved one pesticide, namely Furadan. The Brook Proposal (if adopted) would establish comprehensive pro-active corporate-wide policies and procedures to credibly manage all of its agricultural products, not just one.

The logical conclusion which may be drawn by the SEC from FMC's own submittals is that it has failed to demonstrate sufficient indicia of a corporate commitment towards product management and towards prevention of product misuse. Corporations, like government, take very specific steps to put in place expressions of corporate philosophy. This process usually involves steps to identify issues, research those issues, bring stakeholders together for discussions of issues and possible solutions, drafting policies, approving policies, getting more stakeholder meetings, drafting procedures, submitting those procedures for reviews by stakeholders and upper management and then ultimately adopting, usually in some formal process, these policies and procedures to implement a corporate philosophy. Most corporations, like government, keep literal policy and procedure books, usually indexed by number, with established operating authorities as to what policies have been adopted and what procedures are established and how they will be implemented and who within the corporation will be responsible for proper implementation and oversight.

These policies and procedures provide management and all employees with a written understanding of their corporate expectations and responsibilities. This is especially important today, since a corporation for example, with a strong leader and no policies, may find itself in trouble should that person leave. There is the increased likelihood that without the stability and predictability of written policies and procedures that the corporate direction may be forgotten or misdirected. After review of all available and requested information from FMC and one detailed meeting with the FMC Vice President of Agricultural Products Group and the FMC Vice President, General Counsel and Corporate Secretary² it has become apparent that FMC has not institutionalized through the adoption of policies or procedures any product stewardship program. It appears that since FMC operates without some form of organized corporate control over its supposed program, there can be no implementation, let alone substantial implementation of any stewardship program. Superficially the FMC arguments sound good in theory, but the lack of any documentation, other than the word "stewardship" overwhelmingly demonstrates that in practice FMC has not, as a corporation, committed to any real product stewardship program.

It is also important to place a caveat on all of the information which was actually provided by FMC and the information which is being submitted as legal support for the Brook

² The Assistant General Counsel and the Manager of Global Product Stewardship were also present at this meeting.

Proposal. There is a vast amount of information about Furadan, (some about Marshal, a second FMC pesticide alleged to have been misused for poisonings³) and other pesticides which FMC manufactures and sells. Some documents like rule adoptions, dietary studies, and endangered species reports are extensive with literally thousands of pages of studies and analysis. I have made a diligent effort to truthfully and accurately prepare this proposal and document its legitimate purpose. As a shareholder of the company, who does not oversee the manufacture of these complex chemical compounds, I have done my best to research these issues and provide reputable sources as support for the Brook Proposal. I also do not have the resources of a multi-national company, like FMC, to produce all sorts of company information in my support. That is why this proposal makes sense and is not duplicative of existing company programs, especially since FMC has only spoken about Furadan, one of its pesticides and the Brook Proposal deals with all of the FMC products, which in the United States equates to approximately 97 other FMC branded insecticides, herbicides and fungicides⁴. It would also include an unknown number of products which are only sold outside of the United States and for which there is no corporate obligation to report incidents which occur outside the United States in the United States.

I will note however, that the information which I have gathered from across the world indicates that there is an unresolved problem with the misuse of Furadan and now it appears also Marshal. This problem continues into the year 2011. I also will note that considering the resources of FMC to gather information in support of its position that it has an active product stewardship program, the actual information it provided is pretty scant and substantively not really company-based. While the SEC is spending time reviewing the documents presented in support of the Brook Proposal, I also think it is important for the SEC to also look at what FMC has NOT provided in support of its arguments. Put simply, based upon what it has provided, (and that is all that we can go on) FMC has not included much, if any documentation in support of its "substantially implemented" position. FMC has not provided any information to show that the Brook Proposal is false and misleading, and FMC has not shown that the subject of the Brook Proposal is part of its "ordinary business operations," since the Brook Proposal raises sufficiently significant social policy issues as discussed below.

It is also critical to identify that FMC has neglected to mention that while it has a legal obligation to report incidents of misuse to the EPA for its U.S. registered pesticides, like Furadan, it has no obligation to report any incident of misuse for pesticides which are not registered in the U.S., like Marshal. I mention Marshal, since there are allegations of its misuse in Africa for intentional poisonings⁵, (Report enclosed as Exhibit 2) and Marshal (carbosulfan) breaks down into carbofuran (basically Furadan) but FMC has no governmental obligation to track or report these issues. While some of their pesticides like Furadan are registered in the United States and others like Marshal are not, the Brook Proposal would require FMC to establish a stewardship program for all pesticides, like Marshal, which appear to be slipping through the stewardship cracks.

³ Marshal, is also a carbamate pesticide with a chemical name of carbosulfan. It is not registered in the United States.

⁴ See, FMC's Professional Solutions webpage at: <http://www.fmcprosolutions.com/Home/ProductLibrary.aspx> and <http://www.fmccrop.com/product/list/>

⁵ See, Lion poisoning incident reports from April 25, 2010 and bird poisoning report from October 29, 2010 and photographs of Marshal 350. (Exhibit 2)

FMC has been deceiving itself about the serious adverse impacts which Furadan has been having on the world's environment. The purpose for this proposal is to begin to address this long-standing history of "head-in-the-sand" corporate management. The plethora of readily available information of criminal acts and current investigations of crimes, reliable scientific research with documented scientifically peer reviewed reports, confirms that FMC has not provided the SEC with a truthful explanation of the serious problems with its sale and distribution of Furadan and other dangerous pesticides⁶. As will be detailed below, this very carefully orchestrated presentation by FMC failed to disclose many of the facts underlying the sad history of Furadan and the failure by FMC to control this highly toxic pesticide. This information also confirms that FMC's only focus has been to react to Furadan issues in its "stewardship" program, when it has become apparent that at least one other FMC pesticide, named Marshal, is now alleged to being misused for intentional poisoning of wildlife. A "stewardship" program which addresses only one pesticide is not a stewardship program.

This reply letter will systematically review FMC's information and provide responses that will detail, with documentary information, why FMC's assertions are not supportable by its record, nor information in the public domain. The letter will also provide the critical information that will confirm why the Brook proposal is worthy of review by all of the shareholders of FMC and why the SEC should reject FMC's request to exclude this proposal.

A. WHAT'S THE PROBLEM?

The following brief explanation is provided in order for Staff to better appreciate why the Brook Proposal was advanced⁷. FMC produces agricultural pesticides as well as other chemical products. Furadan is an FMC N-methyl carbamate pesticide (chemical name is carbofuran⁸) made in granular and liquid form. Furadan acts as a cholinesterase inhibitor⁹, for which the United States Environmental Protection Agency ("EPA") concluded in 2009 that the:

"...dietary, worker, and ecological risks are unacceptable for all uses of carbofuran. All products containing carbofuran generally cause unreasonable adverse effects on humans and the environment and do not meet safety standards, and therefore are ineligible for reregistration."¹⁰ (Enclosed as Exhibit 3)

⁶ See, National Marine Fisheries Service, Endangered Species Act Section 7 Consultation Biological Opinion, April 20, 2009 Report at: <http://www.nmfs.noaa.gov/pr/pdfs/carbamate.pdf> (at 591 pages), See, EPA Carbofuran Webpage for reference information:

<http://www.epa.gov/oppsrrd1/reregistration/carbofuran/> See, enclosed affidavits in Exhibits 7 and 8.

⁷ The information provided as to Furadan in this section is based upon the writer's understanding of this chemical compound and while I believe all of it to be accurate, with sources provided, I welcome the reader to independently confirm its accuracy.

⁸ Chemically, Furadan is: C₁₂H₁₅NO₃ with a the full chemical composition of: 2,3-dihydro-2,2-dimethyl-7-benzofuranyl methylcarbamate.

⁹ See, Extension Toxicology network description of Cholinesterase Inhibition at: <http://extoxnet.orst.edu/tibs/cholines.htm>

¹⁰ See, EPA Carbofuran Cancellation Process Cover Pages, November 2010 attached as Exhibit 3 and also at: http://www.epa.gov/oppsrrd1/reregistration/carbofuran/carbofuran_noic.htm

As an insecticide, Furadan is applied to operate as a “systemic,” which means it is meant to be drawn into the plant’s vascular system through its roots, so when an insect bites the plant it eats some of the poison. In layman’s terms, Furadan acts by disrupting the enzymes(s) that allow for the proper firing of nerve impulses and the insect’s nervous system simply spasms out or shuts down (or both) and its internal control over all of its organs stops working and the insect dies. The problem is that very small amounts of Furadan will also perform the same disservice to humans, wildlife, fish, birds, waterfowl and any creature in between which comes into contact with it and ingests it. It is odorless and tasteless. It is an indiscriminate poison. Furadan is very effective at killing everything that happens to get it into its system. Just to put this pesticide in perspective, in the granular form, if ingested, about a quarter of one teaspoon of Furadan will kill you, or in a liquid form approximately 7 drops will kill a human being¹¹.

Furadan is still officially a registered pesticide in the United States and its use has been extensively researched by many branches of the federal government and State governments, universities and not for profit groups, including EPA and the National Marine Fisheries Service (NMFS.) The general consensus is that it’s intentional use in the United States has created many problems, leading to the EPA’s May 15, 2009 Final Rule for Tolerance Revocations¹², which has determined that no residues of carbofuran (Furadan) are allowed in foods produced domestically. The EPA Final Rule went into effect on December 31, 2009, and it included domestic and imported foods. On appeal, the imported foods provisions were not accepted by the United States Court of Appeals, so imported foods, such as coffee, bananas, sugar cane and rice are still allowed to have residues of carbofuran¹³. FMC has appealed.

As an example of the seriousness of its concerns towards its intentional use, NMFS stated on April 20, 2009, “NMFS concludes that pesticide products containing carbaryl and carbofuran are likely to jeopardize the continuing existence of 22 listed Pacific salmonids (Salmon species) as described in the this Opinion¹⁴ (Emphasis added.) NMFS is stating that its research indicates that it is likely that carbofuran use may cause the extinction of 22 different species of Salmon in the United States. When Furadan was widely used in the United States, it was listed as a restricted pesticide, which meant that only licensed applicators could purchase and apply it. FMC stated in its letter that EPA only based its revocation decision on “computer models.” (P.13, Full Paragraph 2) EPA stated that it looked at three lines of evidence in assessing ecological risks, which included a screening level risk assessment, a refined assessment and field data with carbofuran.¹⁵ FMC is wrong.

¹¹ Based upon a person weighing 150 Lbs. Source: www.chemicalbook.com

¹² See, Carbofuran; final Tolerance revocations: Final Rule, Federal Register Vol. 74, No. 93, Pages 23046-23095, Friday, May 15, 2009, and also the Order Denying FMC’s Objections and Requests for Hearing, Federal Register, Vol. 74, No.221, Pages 59608-59686, Wednesday, November 18, 2009.

¹³ See, National Corn Growers Association, et al. v. Lisa Perez Jackson, 613 F.3d 266, 2010.

¹⁴ Please recognize that the study conducted by NMFS also included research into carbaryl as well as carbofuran, but the seriousness of the conclusion as to the impact of carbofuran is still made. See, April 20, 2009 letter and supporting documents by the NMFS sent to the EPA:
<http://www.nmfs.noaa.gov/pr/pdfs/carbamate.pdf>

¹⁵ See, March 7, 2006, Reregistration Eligibility Science Chapter for Carbofuran, Environmental Fate and Effects Chapter, Page iii, go to: <http://www.epa.gov/oppsrrd1/reregistration/carbofuran/> and look for EPA docket: EPA-HQ-OPP-2005-162-0080. Document is 532 pages.

In the United States, Furadan has been intentionally misused in successful attempts to poison what certain people decided were undesirable animals, like coyotes and raccoons, with the unintentional side effect of killing hawks, Bald Eagles, and any other animal that has the misfortune of eating the carcass of the original poisoned animal. Furadan has no odor or taste, so the animals eating the baited carcass have no warning that they are eating the poison. FMC would like to suggest that this is an old problem, but it is not. In 2010, there were four criminal convictions in the United States, (that I know of) where there were confirmed misuses of Furadan, resulting in the death of Bald Eagles, hawks, vultures, raccoons, migratory birds and dogs. These incidents and the criminal convictions of the responsible individuals occurred in New York State, Kentucky, Ohio and Connecticut¹⁶. The Connecticut case, December 2010, is especially troubling, not just for the irresponsible behavior of the man convicted, but for the Massachusetts company that willingly sold the Furadan without even identifying if the buyer was licensed to purchase it¹⁷. The burden of proof in a criminal trial is “beyond a reasonable doubt,” so there is no doubt that Furadan was involved in each of these incidents. (See, December 10, 2010, copy of State of Connecticut Press Release enclosed as Exhibit 4.) The Furadan incidents have continued, and as recently as January 12, 2011, there was a news report from Claiborne County, Tennessee involving the intentional poisoning of dogs¹⁸ with an active criminal investigation currently occurring right now.

The Brook Proposal would include stewardship in the United States, as well as Africa, for which FMC has said nothing in its arguments to the SEC. The issue of misuse and poisonings in the United States should have been addressed by FMC in its materials since problems continue in the United States even after FMC voluntarily cancelled its registrations for all but six crops in the United States¹⁹. It is also interesting to note that FMC has failed to include incident²⁰ data that it has collected from around the world on product misuse or other incidents, since this may not be helpful to their arguments that everything is under control.

The problem with Furadan is that in other countries, especially in countries which have no licensed applicator laws, Furadan can be purchased by anyone who has the money. In 2008, CBS's 60 Minutes reported (Transcript included as Exhibit 5) that it cost about two dollars for a

¹⁶ U.S. Fish and Wildlife Services: “Kentucky Man Sentenced for Poisoning Hawks and Vultures,” February 18, 2010, See, <http://www.fws.gov/southeast/news/2010/r10-015.html>, Allegany County, New York Man enters Guilty Pleas to Poisoning Two Bald Eagles, March 9, 2010, See, <http://www.dec.ny.gov/press/63388.html>. See, information on the Ohio conviction: <http://www.epa.gov/compliance/resources/cases/criminal/highlights/2010/bee-richard-06-08-10.pdf> See also, Winter Poisoning of Coyotes and Raptors with Furadan-Laced Carcass Baits, Journal of Wildlife Diseases, 32(2) 1996, pp. 385-389. See also background information on Raptors: Poisoning of Raptors with Organophosphorous and Carbamates Pesticides with Emphasis on Canada, the United States and the United Kingdom, Pierre Mineau, et al., Journal of Raptor Research, 33(1):1-37, 1999.

¹⁷ See press release from the Connecticut Department of Environmental Protection: <http://www.ct.gov/dep/cwp/view.asp?A=3847&Q=469794>

¹⁸ See, <http://www.wbir.com/news/article/152070/2/Claiborne-detectives-investigate-poisoned-dogs>

¹⁹ See, National Corn Growers Association, et al. v. Lisa Perez Jackson, 613 F.3d 266, at 270, 2010.

²⁰ See FMC's own submission, Section H, Page 26, which indicates that EPA changed the reporting requirements in 1998 so “minor incidents, solitary deaths need only be reported in some aggregate fashion.

bottle in Kenya²¹. Specifically in Africa, in recent years it has become the poison of choice by certain people who have used it not just to intentionally poison wildlife, but to poison waterfowl and fish which are apparently being sold for human consumption²².

B. SPECIAL NOTATION: FAILURE TO COMPLY WITH STAFF BULLETIN NO. 14C

It should also be noted that FMC has neglected to comply with Staff Legal Bulletin No. 14C, dated June 28, 2005, Section G, since it has failed to provide the SEC with all correspondence the company has exchanged with the shareholder proponent. FMC has failed to include a copy of the annotated Brook Proposal which provided the company with a detailed annotated version of the proposal containing 16 footnotes which provided FMC with over 30 citations to scientific, governmental, educational, criminal convictions and press reports as independent background and support for the proposal. Without a copy of this annotated proposal, the SEC might believe that allegations made by FMC about false information were correct. This failure to disclose and provide this information to the SEC is extremely significant, especially in light of the fact that if shareholders are not committed to communicating with the SEC, then the SEC may be basing its decisions upon flawed and misleading and certainly deficient information provided by a corporation. If there is such a thing as SEC imposed "sanctions" for this failure to disclose, the SEC should consider such an action against FMC. There is no valid excuse for FMC's failure to disclose this information. The annotated Brook Proposal is included as Exhibit 1.

FMC has also failed to provide the SEC with the detailed email correspondence and two drafts of a proposed agreement between the proponent and FMC to establish a credible stewardship program at FMC²³. Review of this agreement is extremely insightful, since it will confirm that FMC does not have, nor does it desire to implement a credible or effective stewardship program. Copies of this information is provided in this response and it will confirm not only that FMC has not been forthright in its dealings with the SEC, but this additional information provides added support to the validity of the Brook Proposal. (See email correspondence and FMC letter, with proponent's letter showing proposed ideas for creating a credible product stewardship program, attached as Exhibit 6.)

C. THE TWO COMPONENTS OF THE BROOK PROPOSAL:

The purpose for this shareholder proposal is twofold:

First, FMC has no written coherent corporate policy to control its sale of highly toxic pesticides and other chemicals that have been used to intentionally (and unintentionally) poison

²¹ See copy of transcript from story attached as Exhibit 5 and website link for actual video story: <http://www.cbsnews.com/stories/2009/03/26/60minutes/main4894945.shtml?tag=mncol:lst:1>

²² See, Measuring the conservation threat to birds in Kenya from deliberate pesticide poisoning, Martin Odino, July 30, 2010. See also, Evidence for revoking registration of carbofuran in Kenya, Paula Kahumbu, May 17, 2010.

²³ The Stewardship Proposal was exchanged in letter format with FMC. A copy of this proposal and accompanying email correspondence is included as Exhibit 6.

wildlife across the earth. People have also died from intentional and unintentional poisoning from Furadan²⁴. While the evidence that Furadan and other FMC products, like Marshal have been intentionally misused is growing, the ability of FMC, to effectively deal with this issue is lacking. Based on all available information, the Brook Proposal was drafted, since it appears that if there is any willingness of FMC to confront these issues, it seems to be driven more by its concern towards bad public relations, than by any organized corporate approach towards proper investigation and solutions to these critical problems.

The Brook proposal offers an imminently reasonable approach to better understanding the issue and it then allows the company to craft appropriate informed solutions to this problem. The proposal would recommend withdrawal of products where there is documented misuse, until the company can identify the cause and control it. The Brook Proposal would for the first time have FMC prepare a Stewardship Report identifying misuse and most importantly set up a process whereby FMC would identify and propose changes to prevent further misuse.

Second, the Brook Proposal seeks to have FMC establish a human equality declaration and policy. Human rights issues impact all companies like FMC that conduct manufacturing and sales internationally. This intended policy declaration would propose establishing the United States as the benchmark country for FMC to determine appropriate handling and exposure for its operations. This component of the Brook Proposal would deal with all of FMC's operations, not just its pesticides. This proposal is perfectly within the realm of any corporation to determine how it can best establish a philosophy of human rights in the form of an equality declaration as to how it intends to treat all people and as a policy it would allow FMC to be guided by these principles. It should initially be noted that FMC has no policy as it relates to treating all people equally, regardless of nationality, when it comes to the use and exposure to its pesticides and all other chemical products that it manufactures.

II. RESPONSE TO THE FMC ARGUMENTS:

FMC has made three arguments in support of its position that the Brook Proposal should be excluded from its 2011 annual proxy materials. It should be noted that the burden of proof to sustain this position rests squarely upon FMC as stated at 17 C.F.R. 240.14(a)(8)(g.) and in addition, the SEC will not consider any basis for exclusion that is not advanced by the company²⁵.

I respectfully maintain that a careful reading of the FMC arguments, combined with the supplementary information and documents which are being provided by the proponent, will convincingly show that FMC has failed to meet its burden and that there is more than adequate legal support for this proposal to be heard by the shareholders of FMC.

²⁴ See article on 3 year old accidentally ingesting Furadan:
<http://news.nationalgeographic.com/news/2009/11/091113-boy-killed-lions-pesticide-furadan.html> and Romanian singer's suicide with carbofuran: http://illfolks.blogspot.com/2010/07/no-more-manole-madalina-manole-birthday_29.html

²⁵ Staff Legal Bulletin No. 14, July 13, 2001.

FMC has generally stated that the Brook Proposal should be excluded because:

- FMC has “substantially implemented” the objectives of the proposal, and
- The information contained in the proposal is “materially false and misleading,” and
- The proposal deals with a matter that is relating to the “ordinary business operations of the Company.”

Brief Answers:

FMC has not substantially implemented the components of the Brook Proposal, since it has not adopted policies or procedures that it has disclosed or taken sufficient actions to address the concerns raised in the proposal. FMC admits that it has no policy on human equality, so factually there can be no implementation whatsoever.

The information contained in the proposal is not false, nor is it misleading, since all statements in the Brook Proposal are supported by reliable independently documented and verified sources.

The Brook Proposal raises sufficiently significant social and environmental policy issues which transcend the day-to-day business matters, since FMC’s failure to act, as directed by the language in the Brook Proposal may, among other things, be contributing to the extinction of at least one animal species.

ARGUMENT

**A. FMC HAS NOT SUBSTANTIALLY IMPLEMENTED THE COMPONENTS OF THE BROOK SHAREHOLDER PROPOSAL,
or,**

“Actions Speak Louder Than Words”²⁶”

FMC has argued that the nature of the Brook Proposal and its current programs coincide sufficiently as to maintain that the Corporation has already “substantially implemented the objectives sought by the proponent.” (Page 3, second paragraph.) If this had been true, I would not have submitted the Brook Proposal in the first place. The genesis for the Brook Proposal originated from a careful analysis of the available FMC corporate investor information and other documents, governmental reports and regulatory documents, discussions with experts in different fields, media reports and an examination of the available misuse problems across the world with FMC’s products, which indicated that if FMC was doing something, it was not working. FMC can state that it has a product stewardship program that is the functional equivalent of the Brook Proposal, but without presenting some form of objective criteria to show that to be the case, all that the SEC is left with is hollow words. A factual analysis of what FMC is actually doing compared to the components of the Brook Proposal as detailed within this letter

²⁶ Sometimes the easiest way to separate fact from fiction is to look at what someone is actually doing, since, “talk is cheap” and since corporations are profit driven, sometimes they are better at presenting an image which does not always reflect what they are actually doing.

will show that FMC is not doing what the Brook Proposal would establish and even if it is doing something, it has certainly not substantially implemented the objectives of the Brook Proposal.

1. **APPLICABLE LAW AND THE COMPONENTS OF THE BROOK PROPOSAL**

Under Rule 14a-8(i)(10), a shareholder proposal may be excluded if the company has already substantially implemented the proposal. First, it is insightful and telling to observe that that FMC has stated that it believes that it has substantially implemented the “objectives” sought by the proponent, it does not state it has implemented the proposal. (P3, Second paragraph.) FMC is a sophisticated corporation with more than adequate legal representation, and one is left to believe that it picks its words very carefully. So, initially it appears that FMC has openly admitted that it only believes that it has substantially implemented the “objectives”, but it has admittedly failed to state that it has substantially implemented the “proposal.”²⁷

The general policy underlying the substantially implemented basis for exclusion of a shareholder proposal is to “avoid the possibility of shareholders having to consider matters which have been favorably acted upon by management.” Release No. 34-12598 (July 7, 1976) The Staff has stated “a determination that the company has substantially implemented the proposal depends upon whether [the company’s] particular policies, practices and procedures compare favorably with the guidelines of the proposal.” Texaco, Inc., (avail. Mar. 28, 1991) FMC has even argued that “A proposal need not have been implemented in full or precisely as presented for it to be omitted as moot under Rule 14a-8(i)(10) – all that is required is that the company has in place policies and procedures that address the proposal’s essential objectives satisfactorily.” (P. 3, Paragraph 1) Quoting the 1983 Release and Caterpillar, Inc. (avail. Mar. 11, 2008); Wal-Mart Stores, Inc. (Avail. March 10, 2008); The Dow Chemical Co. (avail. Mar. 5, 2008); and Johnson & Johnson (avail. Feb 22, 2008.)

While there are varying interpretations of what “substantially implemented” means in practice, there are some common criteria that Staff examines in order to determine if a comparison of what currently exists at FMC parallels the Brook Proposal. First, what has the company done to manifest its intent to adopt the components of such a proposal? In Dow Chemical Company, (avail. Feb. 24, 2000) (“Dow”) a proposal was made regarding genetically-engineered agricultural products to withhold distributing until tests could show no harm to humans, animals of the environment. While the proposal was ultimately withdrawn, the information which Dow produced in its response is extremely insightful as applied to FMC. Dow provided the SEC with detailed information as to the nature of its product stewardship programs. Dow’s information allowed an objective observer to identify components of its programs which confirmed that this program was real and it had integrated these programs into its daily operations:

²⁷ Could this word choice be a distinction without meaning? No. There is no logical explanation other than an admission that FMC is fine tuning words to avoid the conclusion that it cannot demonstrate substantial implementation of the proposal but only what it calls its “objectives.” The rule states “already substantially implemented the proposal,” not its objectives.

Finally, Dow has in place a long-standing Environment, Health & Safety ("EH&S") policy designed to ensure that all of its products and operations, including its agricultural products, meet Dow's standards for safety. This policy incorporates Dow's Responsible Care initiative, which is driven by EH&S excellence, public participation and dialogue.ⁿ²⁴ The Responsible Care initiative contains six codes of management practice, including a "Product Stewardship" program. Under this program, Dow has implemented systems and processes for evaluating, monitoring and addressing both the risks associated with, and the societal concerns raised by, its products, including those that are genetically engineered. These systems and processes include a "Business Risk Review," through which Dow conducts risk evaluations for new and existing products and their applications. These various reviews address the entire life cycle of a product, starting at the discovery phase. The "Societal Concern Evaluation" is a disciplined process of considering the public perception of Dow's products and how they might be received by consumers and concerned citizens. In conducting this evaluation, teams of Dow employees [*43] address a checklist of 40 or more questions. Finally, once its products are brought to market, Dow has ongoing "product stewardship" programs to ensure the proper use of its products by customers. (Emphasis added.) 200 SEC No-Act. Lexis 301, 42-43.

The analysis conducted by Dow above provided information which, if questioned, would have provided independent verification of a detailed corporate commitment to stewardship. Through adopted policies and procedures which involved public participation and dialogue the reader could examine the implemented systems and processes set up to evaluate, monitor and address risks associated with its products. Dow's reviews evaluated its products and included a societal concern evaluation with teams of its own employees addressing a checklist with 40 questions to ensure that its products were properly used. None of this has happened or has been coherently documented and presented to the SEC by FMC.

The proponent suggests one simple possible test for the SEC to utilize to determine what, if any substantial implementation of the product stewardship program really exists at FMC, it's called the "transferability test"²⁸. It is based upon the following very hypothetical premise; what if all senior management at FMC was changed tomorrow? What stewardship program would exist at FMC the day after that? If FMC really had all these programs in place, then nothing would be different, since there would be written policies and procedures, guidance, guidelines and internal memorandum on how all of these programs would work and how the new officers would continue where the old ones left off, like those at Dow. But, that is not the case here. If we look at FMC's submissions, it becomes very obvious, very quickly that virtually no "stewardship" would exist, since all actions which FMC suggests that it took to implement its programs were ad hoc and possibly only decided upon by one or two people, not "the Management." Without the direct involvement of the Board and the Senior Executive Officers, it is hard to imagine that FMC can claim that any program exists. The actions which FMC has argued were part of a larger product stewardship program, like moratoriums, or buybacks apparently were ad hoc, with no objective policy direction, except that someone decided to do

²⁸ This terminology was created by the writer, but it does seem to fit as an appropriate legal test in this situation.

something. Without the ability of FMC to demonstrate transferability, there can be and is no substantial implementation of any product stewardship program.

FMC has no such policies, procedures, public participation components, identified systems or processes set up to monitor and assess risks and teams of employees to monitor product use. While the products which Dow manufactures and the products which FMC manufactures are different, the issues and the way that they are addressed should still be the similar or the same. FMC has failed to show in any of its materials that it has institutionalized any components of the Brook Proposal and thus it cannot objectively maintain that it has substantially implemented it.

2. **ESTABLISHMENT OF A LEGITIMATE STEWARDSHIP PROGRAM**

The Brook Proposal initially calls upon the Board to establish:

a legitimate product stewardship program by: Implementing immediate moratoriums on sales and withdrawals from the market of Furadan, and any other FMC pesticide, where there is documented misuse of products harming wildlife or humans, until FMC effectively corrects such misuse;

i. **There is no substantial implementation of a product stewardship program within the FMC Corporation**

FMC claims that it has a “longstanding product stewardship program that is endorsed by executive management.” The problem is that what FMC calls a “stewardship program” and what the proponent calls stewardship are two very different things. FMC has not provided one written policy or procedure in its materials signed by or endorsed by executive management. If it is so longstanding, one would have thought that the FMC could have written it down and provided a copy to the SEC. How can FMC dispute the request to establish a “legitimate” stewardship program, if it has never taken the time to actually get executive management to formally endorse it’s “stewardship program” in writing? How can FMC argue that it has such a “legitimate” stewardship program when it has not ever produced a single policy or procedure in its submitted materials to the SEC to prove this is a real program and that it actually works? While certain people at FMC may be interested in these issues, without some formal endorsement by the Board and management there can be no effective and consistent corporate stewardship. FMC’s materials submitted as exhibits seem to indicate that it calls safe product use by it employees and farm workers as “product stewardship.” This does not address issues such as preventing intentional misuse or properly documenting the reasons for that misuse. Adoption of the Brook Proposal would be the first time that FMC actually established these stewardship steps.

In order to attempt to understand what FMC is actually saying publicly about its stewardship programs, a quick look at its own website is insightful. It appears that based upon FMC’s own representations on its website that its “stewardship” program consists of a one page explanation²⁹ and it only relates to Furadan. Its “performance metrics, product stewardship”³⁰

²⁹ <http://www.furadanfacts.com/CommitmenttoStewardship/tabid/3809/Default.aspx>

page provides nothing about any FMC programs, but it does provide references to a group called the American Chemistry Council, which is an unrelated business entity. This is not an FMC program.

FMC states that it recently created the position of Global Product Stewardship Manager. (P. 5, Paragraph 1) This is a positive step, but it does not mean that FMC has implemented the specifics of the Brook Proposal, since there is no information as to the details of the role this person will play or if that single person has a budget to perform any work and/or who they report to and what is done with their recommendations.

FMC has stated that it established the “Stewardship Network at FMC in June 2009. (P. 5, Paragraph 2) That’s nice, but since 2009, what reports have they prepared and what recommendations have they made? The submittal by FMC is devoid of any documents to demonstrate that this “network” is operational or that it functions with any corporate funding or guidelines. Could it be so “informal” that they have not gotten around to preparing any reports, yet? FMC states that this “network” facilitates direct reports to USEPA of adverse effects from pesticides. This activity is not voluntary, as FMC is mandated by federal law to report all such incidents as required by the Federal Insecticide Fungicide and Rodenticide Act, so that can’t be called FMC’s program and it has nothing to do with the substance of the Brook Proposal.

FMC states that it has withdrawn sales of Furadan in Kenya and other parts of Africa. Nevertheless it argues that there is no proof that the misuse of Furadan was the cause of lion poisonings. That action is inconsistent. The Brook Proposal calls for FMC to act where there is “documented misuse” which means that FMC would devote resources to identify what caused a death and whether it was caused by an FMC pesticide. FMC currently has no means nor has it devoted resources to objectively identify these animal and human deaths and injuries. The Brook Proposal calls for moratoriums on sales and withdrawals of Furadan, and any other FMC pesticide, where there is documented misuse of products harming wildlife or humans, until FMC effectively corrects such misuse. (Emphasis added.) FMC is only admitting or addressing that it has or may have a problem with Furadan only. The Brook Proposal has been written to establish corporate actions to address all pesticide products, not just Furadan. As discussed within, there are new allegations that other FMC products, namely Marshal, is being intentionally misused and FMC currently has no mechanism in place to identify or address this issue proactively. These differences alone, with FMC just looking at one pesticide versus all of them in the Brook proposal demonstrates that FMC has not substantially implemented the Brook Proposal

The differences between what FMC has done and what the Brook Proposal calls for are many. FMC admits that it withdrew Furadan even though it argues there was no “connection” between Furadan (carbofuran) and the death of the animals. Why? Does FMC know more than it is telling or could one argue this is not sound policy to act without any objective information. The Brook Proposal calls for action when there is “documented” misuse, which requires better information gathering, testing, necropsies, etc., by FMC or its agents. FMC has been informed that Marshal (carbosulfan) is allegedly being misused for intentional poisonings in Kenya, yet FMC has done nothing that the proponent is aware of to investigate and document this potential

³⁰ <http://www.fmc.com/AboutFMC/ResponsibleCare/PerformanceMetrics/ProductStewardship.aspx>

misuse³¹. Marshal is still readily available in Kenya, Tanzania and Uganda and while it is not as potent as Furadan, it is still sufficiently deadly and can still be utilized for intentional poisonings.

The Brook Proposal covers all FMC products, FMC's program does not. There was an identified poisoning death of a 3 year old child in Kenya from Furadan ingestion, on or about October 26, 2009³². FMC makes no mention of humans in its materials, but the Brook Proposal would cover stewardship addressed to protecting wildlife as well as humans. Most importantly, one more distinction between what FMC claims to be doing, is that the Brook Proposal would establish corporate criteria to maintain moratoriums, until FMC "effectively corrects" such misuse. FMC has no such policy and while FMC claims it has stopped sales in Kenya, Tanzania and Uganda, there are reports that Furadan is still available in neighboring countries³³. Also, see Exhibits 7 and 8 within the attached exhibits.

ii. **There is no substantial implementation of a product stewardship program on the ground in Africa or elsewhere.**

As an initial example of that wide gap between FMC theory and reality as to substantial implementation, the following statement prepared by Dr. Laurence Frank, Director, Living with Lions, Museum of Vertebrate Zoology, University of California is provided for some background information about what is really happening on the ground in Africa, enclosed as Exhibit 7. Dr. Frank has been involved with predator biology and conservation issues in Kenya for over 40 years and he has authored 79 scientific papers and 10 articles specifically on the biology and conservation of African predators. He regularly travels to Africa for research. Dr. Frank has identified that today, the greatest threat to large predators in Africa is from retaliatory killings and Furadan is still the leading intentionally misused poison for that purpose. He describes an incident as recently as January 2, 2011, on the Tanzania side of the Kenyan border whereby Furadan was used to kill a female lion and later one male lion.

This death by Furadan issue is not new and he has met with FMC as far back as 2003 to try to convince the company to stop sales and better control this problem. He indicated that nothing changed until CBS 60 Minutes ran an episode about lion poisonings in 2009. His own belief is that Furadan is still available in Tanzania, contrary to what FMC has stated. While FMC denies that Furadan is being used, the few people who are getting caught and the others who speak about their poisonings are confirming that they are using Furadan to continue this sad destructive cycle of death. (Please be aware that the photographs included of these poisonings may be disturbing to view.)

While Dr. Frank is involved with large predatory mammals, Mr. Martin Odino, is involved primarily with birds in Kenya. Martin has his Bachelor of Science Degree in Zoology and he has spent the last four years on the ground in Kenya researching bird poisoning incidents

³¹ Lion Poisoning Incident Report, dated April 22, 2010 and Wildlife Direct Press release, dated May 13, 2010, enclosed as Exhibit 2, was provided to FMC by the proponent.

³² www.youtube.com/watch?v=u0HhYK4oK0w

³³ See, Wildlife Direct article from November 20, 2010 discussing origins of Furadan from Uganda at: <http://stopwildlifepoisoning.wildlifedirect.org/>

and the role of Furadan in these continuing events. Martin's statement as to his experiences is enclosed as Exhibit 8. It becomes apparent after reading his observations directly from Kenya, that whatever FMC may be telling the press and/or the SEC, that its "stewardship" program is not actually working on the ground in the place where it claims to have a handle on the problem. Martin's in-person recent (January 2011) observations confirm that Furadan is still readily available and it is the poison of choice by poachers who are using it to kill larger waterfowl birds, presumably for human consumption. One can only imagine what is happening on the ground in places where FMC has never been confronted by the press or active concerned citizens.

Dr. Frank's statement and Mr. Martin Odino's statement truly show a dysfunctional FMC product stewardship program on every level in the field. So one can only ask the questions. Does FMC actually have any stewardship program on the ground in Kenya or anywhere? If there is any FMC stewardship program, what are the actual components of it? If Furadan continues to be used to poison wildlife, can anyone state that a supposed moratorium on sales is even working? Since poisonings are continuing in 2011, then what part of this "stewardship" program is working better now, than in 2003? What report and knowledge of this 2011 event is even known at FMC? If, as claimed by FMC, there was an effective moratorium on the sale and a buy back program for Furadan, why is it still showing up in 2011? What can be said about the success of the buyback program by FMC? What efforts has FMC made to address what appears to a thriving possible Furadan black market program? Has FMC ever conducted an audit of its sales and its inventories and its buyback program to determine if it ever got its outstanding stocks of Furadan back? Does FMC even know what stocks of Furadan it sold or is selling in these countries? Is the FMC distributor acting honestly?

Dr Frank's and Mr. Martin Odino's statements raise more questions than answers, since if FMC actually had a substantially implemented product stewardship program there would be actual answers to these questions and a working program to stop all of these continuing senseless killings.

FMC raised some other matters that it claims have a connection to product stewardship. It mentioned "Vision 2015." (P. 6, Paragraph 3) Proponent reviewed this document online, which appears to have been released on or about December 2, 2010, and cannot identify any item related to stewardship. This document appears to be a glossy business marketing plan with no focus towards product stewardship.

FMC has provided two attachments listed as exhibits C³⁴ and D, and it has suggested that it enhances its stewardship programs, but these are only employee internal safety documents and while they are good for employees, the Brook Proposal is focused on how FMC establishes a credible stewardship in the real world, not at its production facilities. There are no lions

³⁴ It should be noted that FMC erroneously placed the last page of its Exhibit "H" at the end of Exhibit "D" which happens to be the "Conclusion" by EPA which openly states that "Taken together data from incidents reports and the available field studies do demonstrate that when carbofuran is used as currently registered, adverse effects in wildlife can and do occur in field conditions. Including: Mortality, Sublethal effects, Incapacitation, Reproductive effects."

jeopardized with poisoning at FMC facilities. FMC Exhibits E, F and G appear to be safety training for applicators, more than what one would consider stewardship issues.

FMC has provide its Exhibit "L" and suggested that its shows the "permissible levels of carbofuran residues in hundreds of different types of foods" by the European Union. I am not an expert, but I do notice that all of these foods listed, except citrus and oilseeds have a little "star" notation next to them. That star definition at the top of the page appears to indicate that the level set is the "lower limit of analytical determination." What I think that means is that if any level registers in a test of for example almonds, then it is unacceptable and would be banned. At a minimum, without a better explanation, this information and claims by FMC may be misleading to the reader. The SEC is directed to The European Commission Decision and an appeal decision, referenced in the Brook Annotated Proposal (footnote 6) which concludes with "Carbofuran should therefore not be included in Annex I to Directive 91/414/EEC³⁵. EEC Directive 91/414, Annex I, is a list of substances that are allowed in plant products. It would appear that based upon the Decision of the European Commission that carbofuran is not allowed as an Annex I chemical. The conclusion is that no carbofuran is allowed in foods in Europe.

3. PREPARATION OF AN ANNUAL STEWARDSHIP REPORT

The Brook Proposal calls upon FMC to further implement the product stewardship program by:

Preparing and publishing, at reasonable cost, excluding propriety information, a product stewardship report by October 2011, and annually thereafter, addressing all documented product misuses worldwide since 2005 and proposing changes to prevent further misuse including: working with foreign governments in training and educational programs, licensing applicators, restricting access, incorporating bittering agents and funding programs to prevent loss of livestock and wildlife;

FMC cannot claim that it has ever begun to implement any component of this portion of the Brook Proposal. FMC management and its shareholders have no baseline of information to determine what is happening with its pesticide products worldwide. The first way to find out is to identify what incidents and events have occurred and where they have occurred and what pesticide was involved in order to understand the scope of any problem. This proactive approach to product stewardship has never been presented to management by management or the shareholders. FMC cannot argue that it has substantially implemented this component of the proposal since it has never produced any report of this type. But the most important part of this section of the Brook Proposal will be the ability of FMC to identify trends and other issues and to devote resources to "proposing changes" to prevent further misuse, something for which there is no currently organized corporate approach. This reporting would also provide information

³⁵ See, European Commission, SANCO/10054/2006 final, September 7, 2007, http://ec.europa.eu/food/plant/protection/evaluation/existactive/list_carbofuran.pdf as a review of 2007/416/EC, dated June 13, 2007 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:156:0030:0031:EN:PDF>

which is not being reported to EPA, since it would include all incidents without setting minimum dead animals and it would include pesticides not registered in the United States. (See, footnote 20.)

Staff, as discussed in the *Lowe's Companies, Inc.* ("Lowe's") (Avail. March 21, 2006) decision, has rejected numerous no-action requests based on Rule 14a-8(i)(10) where companies have taken far more significant steps towards implementation of a proposal than FMC actually has suggested it has in this case. See, e.g., *The Coca-Cola Co.* (Jan. 19, 2004) (Provision of information relating to stock option grants by race and gender to a third party, resulting in public report, insufficient where shareholders sought direct access to data); *3M Company* (March 2, 2005) (requesting implementation and/or increased activity on eleven principles relating to human and labor rights in China not substantially implemented despite company's comprehensive policies and guidelines, including those that set specific expectations for China-based suppliers); *The Dow Chemical Company* (February 23, 2005) (Proposal seeking report relating to toxic substances not substantially implemented by a public report that fails to address core concerns raised by the Proposal, and where several statements were materially misleading). ExxonMobil lost two challenges despite its claims that it had reported extensively on the topic of the proposal (*ExxonMobil* (March 24, 2003) and *ExxonMobil* March 17, 2003)). (Pages 29-30.) See, also, *DeVry, Inc.*, (Avail. Sept. 25, 2009), Staff refused to exclude a proposal by the People for the Ethical Treatment of Animals, where even though veterinarian hospitals had some procedures in place, the nature of the proposal and the details which it sought to implement were sufficiently different to sustain a substantially implemented exclusion argument.

4. ENHANCED CREDIBILITY THROUGH INDEPENDENT REPORT PREPARATION

The Brook Proposal finally adds one more layer of credibility to the stewardship program by:

"Establishing an independent scientific advisory panel to prepare these reports;"

FMC argues that it has created its "Sustainability Council" and that this group will perform some independent role in the company's operations. While this step is commendable, there is no indication in the FMC materials that this group would play any role in what the Brook Proposal is calling for, which is preparing the annual reports on product misuse. The name "Sustainability Council" itself raises questions as to what its role might be as it relates to product misuse, since sustainability has nothing to do with the issues raised by the Proponent. FMC has also provided no charter or mission statement for this group, so one can only guess as to what purpose this group will or will not serve.

The objectivity of FMC's membership on this "council" could be questioned, since FMC admits providing "significant financial support" (P. 7 Paragraph 3) to at least one organization, Panthera and then it appoints it to this "independent" council. First it appears that this council meets only every six months, and there is no independent oversight. What can it get done if it meets every six months? Second, FMC fails to indicate how it intends to take the information gathered or whether it can simply decide to reject the findings if it doesn't like them. The Brook Proposal will have transparency in its structure, since FMC will agree to retain independent

advisors, no differently than when it hires outside auditors to perform financial and other reviews. This suggestion that "Sustainability Council" will be independent and prepare reports as envisioned by the Brook Proposal is structurally flawed and FMC cannot even begin to suggest that it has anything to do with implementing this component of the Brook Proposal.

FMC's position with regard to the annual report and the independent preparation is also not unlike the decision in *Lowe's Companies, Inc.* ("Lowe's") (Avail. March 21, 2006) whereby proponent requested Lowe's to, "issue an annual report to shareholders ... reporting its progress toward implementing the company's wood policy." Lowe's argued that it had substantially implemented the proposal since it had prepared the "Lowe's Wood Policy Status Report," which it argued had substantially implemented the proposal. Staff disagreed and refused to exclude the proposal.

Proponent, Domini Social Investments, argued with many parallels, that, "As discussed above, the Company's Status Report consists of anecdotes, misleading information, and numerous material omissions. When the Supporting Statement of the Proposal's request for a "company-wide review" is considered, the Status Report also falls considerably short of the mark, providing no quantifiable data on any of the recommended indicators." (Page 28) In Lowe's, there was at least some Company wide report, but with FMC, there has never even been an attempt to prepare any type of report as envisioned by the Brook Proposal. In *Wendy's International* (February 21, 2006), a proposal filed by the Proponent sustained a challenge under Rule 14a-8(i)(10) when Proponent argued that the proposal's request for a "company-wide review of policy, practices and indicators related to measuring long-term social and environmental sustainability" had not been performed, despite the publication of the company's corporate social responsibility report. Similarly, in *Kimberly-Clark Corp.* (January 30, 2006), existing company disclosure, materially better than Lowe's disclosure and FMC's non-disclosure, it could not render the proposal moot, as the Company's disclosure contained misleading information, and no evidence of the specific study requested by the proposal. These cases support proponents position that even if FMC could show it had some independent review (which it does not) that it is not sufficient to exclude the Brook Proposal.

5. **ESTABLISHMENT OF HUMAN EQUALITY
DECLARATION INTO FMC CORPORATE
RESPONSIBILITY PRINCIPLES**

The last component of the Brook Proposal provides for:

"Incorporating in the FMC Corporate Responsibility Principles a human equality declaration stating that FMC will treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits."

Simply stated, there can be no suggestion of substantial implementation of this proposal by FMC, since FMC admits that it has no such corporate responsibility principle and there is no actual or anticipated implementation of this proposal by FMC. This component of the Brook Proposal is therefore fully appropriate for presentation and discussion by the shareholders as to its appropriateness for adoption by the Board.

FMC has made a series of arguments that it operates under the FAO Code of Conduct and is a member of the American Chemistry Council and that the company has a Code of Ethics. These are all good things. It should be noted that the FAO Code of Conduct is strictly voluntary and there is no enforcement of it. Regardless, as that saying goes about comparing apples and oranges, the Brook Proposal is different, it has not been substantially implemented, therefore the SEC should not concur with FMC's request to exclude this provision.

6. THE MEETING WITH FMC CORPORATE OFFICERS

In an effort to avoid involving the SEC and in the interest of compromise the proponent met with officers of FMC at their Headquarters on December 9, 2010, specifically with Ms. Andrea Utecht, Vice President, General Counsel and Secretary; Milton Steele, Vice President and General Manager Agricultural Products Group; Michael F. Reilly, Assistant General Counsel and Linda W. Froelich, Manager, Global Product Stewardship. The meeting, which lasted approximately two and one half hours involved an open discussion about FMC's efforts at product stewardship and the proponents efforts to convince FMC to support the proposal. The discussion covered a wide range of topics and while FMC argued it had established these programs, it could not articulate how it had actually implemented them in Africa and other places where allegations of product misuse is occurring. FMC offered to work with the proponent to establish this written defined policy if proponent agreed to withdraw his proposal. The meeting ended with a positive belief on the part of the proponent that FMC would agree to adopt the substance and principles of the Brook Proposal, after negotiating the language, if the proponent would withdraw the proposal.

FMC's Andrea E. Utecht, Vice President, General Counsel and Secretary sent a letter detailing what it proposed, enclosed as Exhibit 6. The FMC proposal was a little light on details. When proponent developed an objective and verifiable approach to product misuse and submitted to the FMC, it was rejected, twice, without even the offer of discussing alternate language. While no program is without improvement, this proposal would have established a clearly defined credible stewardship program at FMC. Management's failure to even negotiate wording changes indicates that FMC has not even partially implemented what the proponent believed embodied a credible stewardship program. While FMC maintained that the scope of the proposed stewardship outline exceeded the shareholder proposal, Management never even discussed one single point of it.

As can be seen in this draft, FMC agreed that after the meeting that, "we have determined that we have mutual interest in finding ways, where feasible, to improve the current practices used to investigate and report potential misuse events in developing countries. In particular, both parties agree there is benefit to be derived from having a more formalized, objective system, whereby such incidents may be investigated by an independent party, with the results both verified in reputable labs using appropriate protocols and reported accurately to interested parties."³⁶ (Emphasis added.) The response by the proponent and suggestions for detailing how to implement a better system of stewardship was then provided to FMC, via emails³⁷.

³⁶ Quote from original letter by FMC's Andrea E. Utecht.

³⁷ The emails which were exchanged are also included.

Apparently FMC then determined, either these ideas might work and/or it was unwilling to commit to establishing a more objective program which is envisioned in the Brook Proposal.

If FMC had substantially implemented any components of this proposed compromise, as it has suggested in its letter, one would have thought that it would have at least brought these up as part of this negotiation. It did not. This shows that while FMC claims to have a robust stewardship program, when it came time to pin the corporation down on the specifics of a detailed process, there was an unwillingness to commit to defined components of any plan. A copy of this draft settlement letter for proper implementation of this Stewardship Plan by proponent is enclosed as Exhibit 6.

FMC also failed to provide a copy of this proposal to the SEC and even though it was a draft, proponent maintains that it is still "communications" as defined by the SEC rules and should have been provided by FMC as part of its obligation to disclose all communications and to give a flavor for FMC's approach to these issues. There was never any agreement by the parties to consider this or any other communication "confidential," so it sheds light on how little FMC is interested in a legitimate product stewardship program, since many of these proposed steps would substantially enhance its ability to better manage alleged misuse incidents.

B. THE INFORMATION PROVIDED IN THE BROOK PROPOSAL IS TRUTHFUL AND IT IS NOT FALSE OR MISLEADING

FMC has devoted substantial resources, almost seven pages, of its letter arguing that the Brook Proposal should be excluded under Rule 14a-8(i)(3) since it alleges that the proposal and the supporting statement are materially false and misleading. Nothing about the Brook Proposal is materially false or misleading. FMC raises one complaint about the actual proposal and twelve about the supporting statement. Knowing that any issue relating to Furadan and its use and misuse is controversial, proponent on December 9, 2010, provided FMC with an annotated version of the proposal complete with 16 footnotes and over 30 sources of reliable information to support each statement. A Copy of the Brook annotated shareholder proposal is enclosed as Exhibit 1. While a few comments should be made as to FMC's remarks, and rather than address every challenged statement, and be sure that I can, proponent relies upon Staff's current guidance on this issue from Staff legal Bulletin No. 14B, ("SLB 14B") dated September 15, 2004. Rule 14a-8(i)(3) as interpreted by Staff prohibits a company from moving to exclude a proposal merely because it objects to factual assertions. As Staff has noted in Bulletin 14B, a company's statement in opposition to the proposal is the proper forum for disputing the facts. The Bulletin states:

Accordingly, we are clarifying our views with regard to the application of rule 14a-8(i)(3). Specifically, because the shareholder proponent, and not the company, is responsible for the content of a proposal and its supporting statement, we do not believe that exclusion or modification under rule 14a-8(i)(3) is appropriate for much of the language in supporting statements to which companies have objected. Accordingly, going forward, we believe that it would not be appropriate for companies to exclude supporting statement language and/or

an entire proposal in reliance on rule 14a-8(i)(3) in the following circumstances:

- the company objects to factual assertions because they are not supported;
- the company objects to factual assertions that, while not materially false or misleading, may be disputed or countered;
- the company objects to factual assertions because those assertions may be interpreted by shareholders in a manner that is unfavorable to the company, its directors, or its officers; and/or
- the company objects to statements because they represent the opinion of the shareholder proponent or a referenced source, but the statements are not identified specifically as such.

We believe that it is appropriate under rule 14a-8 for companies to address these objections in their statements of opposition.

As SLB 14B confirms, the supporting statements in the Brook Proposal are not the kind of statements that are subject to the exclusions under Rule 14a-8(i)(3). FMC generally objects that the statements are not supported, materially false, misleading, or unsubstantiated and these are exactly the grounds that SLB 14B addresses as not appropriate for exclusion. Therefore the company's forum for addressing its concerns should be in its opposition statement.

As to FMC's comments on the Brook Proposal relating to a declaration of human equality, it appears that FMC completely misunderstands the basis for this proposed principle. There is no intent to impugn or judge FMC's current activities. This portion of the proposal is meant to fill a void and begin to establish an additional component of the FMC's Corporate Responsibility Principles. In the absence of any action, which is the case, there is no implied value placed upon FMC and FMC seems to misunderstand this issue as a Furadan issue, when it is meant to open a discussion over all products and how the company should best operate uniformly in the international marketplace.

As to each of FMC's other objections, proponent has supplied outside sources of information for each of the statements provided in the Brook Proposal, but a brief reply may be helpful. FMC seems to object to every source of information, recognizing that the proponent simply identified sources of information, including the United States Environmental Protection Agency, which was the source for a number of statements. FMC is also splitting hairs as to other issues raised as to the United States and Europe "banning" residues of carbofuran in foods. EPA has eliminated tolerance levels in domestic foods, that means zero carbofuran levels in domestic foods. FMC admits that EPA did "revoke all domestic carbofuran tolerances." That is a ban. The European Union performed the same basic function. It is not understandable as to why FMC is objecting. The statement about "millions" of migratory birds being unintentionally poisoned was taken from a number of sources, including, EPA and directly from a study report by Pierre Mineau, PhD³⁸, a world renown avian pesticide expert. The number may have been

³⁸ See, Direct Losses of Birds to Pesticides – Beginnings of a Quantification, Pierre Mineau, USDA Forest Service Gen. Tech. Rep. PSW-GTR-191, 2005. http://www.fs.fed.us/psw/publications/documents/psw_gtr191/psw_gtr191_1065-1070_mineau.pdf
Pierre Mineau, PhD. is a Senior Research Scientist in Pesticide Ecotoxicology National Wildlife

low, during the peak of the use of Furadan in the United States. See also the American Bird Conservancy's fact sheet on Carbofuran, which stated that the EPA's estimate was up to 2 million birds a year were killed by carbofuran³⁹. This information was provided to FMC as part of the annotated Brook Shareholder Proposal. FMC has stated that its Exhibit "H" shows that less than 11,000 migratory birds have been affected by Furadan. The proponent has read FMC Exhibit "H" twice and cannot find any reference to this number.

FMC must be joking when it argues over the statement about unrestricted sales in third world countries. The 60 Minutes episode clearly shows their reporter, Bob Simon, going into an Agrovet store, in an undercover fashion and buying Furadan, no questions asked. As to irresponsible use, this information was heavily footnoted in the Brook Proposal and the focus of the 60 Minutes report was on the misuse of pesticides, including Furadan to poison lions. FMC has actually supplied an official copy of the laboratory analysis of the Republic of Kenya, Government Chemist's Department as its Exhibit "K" which confirmed that "carbofuran (furadan)" was detected in the stomach contents of a lion and a hippopotamus. If FMC does not agree with the Government of Kenya, that is between it and the government.

As to Marshal, FMC was provided with allegations that Marshal is being misused. The Proponent simply transmitted this information and annotated it in his proposal. FMC admits the problem has spread to other countries, since allegations were made which ultimately later led in 2010 to it stopping the sale of Furadan in South Africa. As to jeopardizing reputation and profitability, does FMC enjoy receiving bad press and does bad press help its reputation and profitability? The answer certainly cannot be "yes."

FMC states that Furadan is "heavily regulated in worldwide markets" and it sells only to licensed distributors. (P. 15, Paragraph 4) What FMC fails to disclose is that unlike the United States, where only licensed applicators are able to purchase Furadan (and other restricted use pesticides) in much of the rest of the world's under-developed countries, like Kenya, Uganda, and Tanzania, there are no licensed applicators, so the prerequisite to purchase, is money, not training or some demonstration of competence in understanding the serious dangers of handling these poisons.

FMC states that proponent misrepresented information as to the unrestricted international sale of Furadan and cites to and includes the "document that proponent refers to substantiate this claim, attached hereto as Exhibit M." (P 15-16) It is curious that FMC has now acknowledged that it read the annotated version of the Brook Proposal, since this was the only location for this source provided to FMC, yet FMC has failed to inform the SEC and failed to attempt to refute all of the other citations provided in the Brook Proposal. As to this citation, FMC is in error, this citation was referring to the fact that Furadan is not just creating harm in far away countries, as evidenced by the reference to this article mentioning threats to wildlife, not just in Kenya but also South Africa and Uganda. (Page 2, first new paragraph of its Exhibit "M".) The statement made by the proponent is supported by this article.

Research Centre, Science and Technology Branch, Environment Canada & Adjunct Research Professor, Department of Biology, Carleton University

³⁹ <http://www.abcbirds.org/abcprograms/policy/toxins/profiles/carbofuran.html>

FMC also argues that the proponent's use of an article about human deaths from exposure to carbofuran (Exhibit N) was materially false since it was not FMC's product that killed these people. While the proponent is not aware of whether FMC sells its products in Senegal, the basis for the proponent's statement is still valid. The Brook Proposal asks FMC to acknowledge a basic human principle of equality and FMC cannot argue that its sale and distribution of Furadan and many other pesticides is handled completely differently in "third world countries." If this term is not understood, then proponent would be more than happy to amend its proposal to change this to "undeveloped" or "underdeveloped" countries. The policy issue is still the same, in these undeveloped countries FMC allows for greater opportunity for poisonings and other misuse towards people and wildlife than the way it treats people in the United States to potential exposures to these same products. Not everyone may agree with this policy proposal, but the merits should be decided by no one other than the shareholders.

That last issue relates to that morning cup of coffee, something near and dear to many of us. FMC admits in its own materials that it succeeded in overturning the USEPA tolerance revocation for residues of carbofuran in four imported foods, including coffee, that is why "it is possible that residues of it were in your morning coffee." (Emphasis added.) This is a truthful and accurate statement. See, footnote number 19.

C. THE BROOK PROPOSAL DOES NOT DEAL WITH MATTERS RELATING TO FMC'S ORDINARY BUSINESS OPERATIONS

FMC has broadly argued that the Brook Proposal should be excluded, under Rule 14a-8(i)(7) stating that it could be burdensome and "not in furtherance of any investor related determination." FMC has not elaborated on its claims, nor explained why it believes that the Brook Proposal is of a nature that it involves the company's ordinary business operations. FMC has cited to many prior matters, but it has failed to articulate how the Brook Proposal involves the day-to-day ability of management to run the company or how the proposal seeks to micro-manage the company such that it justifies its exclusion. Proponent maintains that since FMC has failed to make a coherent argument discussing the two prong test involved in analyzing activities constituting (or not constituting) the company's ordinary business operations, that the SEC should summarily reject FMC's request.

Proponent relies upon Staff's guidance as the basis for interpreting and distinguishing proposals that involve the company's ordinary business operations and those that do not. Staff Legal Bulletin No. 14A, July 12, 2002 ("SLB 14A") and Exchange Release No. 34-40018, May 21, 1998 ("ERN 40018") both discuss what types of proposed activities may involve ordinary business operations. Initially, to paraphrase both SLB 14A and ERN 40018, proponent maintains that the substance of the Brook Proposal does not involve the day-to-day activities of FMC, like workforce, hiring or production, nor would the proposal act to micro-manage the company. Proponent maintains that the Brook Proposal raises sufficiently significant social policy issues and would not be excludable, because the subject matter transcends the day-to-day business matters and raises policy issues so significant that it would be appropriate for a

shareholder vote. The subject matter of the Brook Proposal includes credible establishment of an FMC product stewardship program, the objective reporting on product misuse, proposed changes to prevent misuse and it proposes an addition to the FMC Corporate Responsibility Principles to add a human equality declaration.

Extinction is a word that all too often today involves some form of human failure. The continued use and misuse of Furadan and other FMC pesticides, may be contributing to the extinction of lions in Africa and certain Salmon species in the United States. Extinction is forever. The question to the shareholders is whether FMC is doing enough to properly steward its products? Can and should FMC take new definitive actions to investigate misuse and stop it? What is the proper role of a corporation when it makes products which may be contributing to the loss of species across the planet? How can a chemical company which purposefully manufactures poisons, take steps to act honestly and build trust and its reputation by acting responsibly in the international community in which it operates? What is the role of a chemical manufacturer to treat all people equally when it comes to potential human exposures in the handling of its products and in the foods that people across the world consume?

The Brook Proposal, directly and indirectly asks the shareholders, management and the Board to consider and to debate all of these issues. These are significant social policy issues. The Brook Proposal is one possible answer to some of these questions. Proponent maintains that the Brook Proposal raises sufficiently significant social, environmental and human rights issues such that there can be no justification for excluding it under the Rule 14a-8(i)(7) exclusion.

The Brook proposal raises completely different issues than the cases cited by FMC. *Coca Cola, Co.*, *Marriott International, Inc.*, *Walmart Stores, Inc.*, and *Walgreen Co.*, all involved proposals which attempted to directly impact consumer marketing decisions. The *Lowe's* and *Home Depot* cases again dealt with direct marketing of products and there is really no comparison with the social importance of glue traps or soda to the issues raised in this matter.

If one were to examine a case with parallels, it would be *Devry, Inc.*, (Avail. Sept. 25, 2009) whereby People for the Ethical Treatment of Animals ("PETA") submitted a proposal to enact a policy prohibiting all medically unnecessary surgeries [on animals.] While Devry argued that the proposal implicated ordinary business, PETA, argued that the issues which its proposal raised transcended the day-to-day business operations and that it raised policy issues so significant that it would be appropriate for a shareholder vote. PETA cited to the *Wyeth* decision, (Avail. Feb 4, 2004,) *Wendy's Int'l* (Avail. Feb. 8, 2005) *Hormel Foods Corp.* (Avail. Nov. 10, 2005) and *Woolworth Corp.* (Avail. April 11, 1991) as support for its position as does the proponent. Staff was unable to concur that Devry could exclude the PETA proposal under Rule 14a-8(i)(7.) Staff in this matter should draw the same conclusion and allow the Brook Proposal to proceed.

III. CONCLUSION

The Brook Proposal offers an opportunity for FMC to establish a real product stewardship program. While FMC has made numerous statements about the broad extent of its

“stewardship” programs, the problem is that other than providing glossy colored papers and some crisis generated decisions, it has failed to demonstrate that it even has a single actual functioning program or person on the ground in Africa (or other continents) taking defined steps to ensure that its pesticides and chemicals are not misused for poisoning animals or people. FMC has no written policies or procedures which it has provided to the SEC (or to Proponent) which detail how it actually deals with the issues which have been raised in the Brook Proposal.

How can FMC claim that it has this problem under control when it has failed to even accurately define the problem and it has failed to provide a single document which shows that it has actually put in place what it is so good at talking about? Most significantly, the two statements by Dr. Frank and Martin Odino speaks volumes about the lack of any product stewardship program controls on the ground in Africa. Unfortunately, the proof is in the poison and the poison, Furadan is continuing to be available and be used for the unnecessary slaughter of African wildlife. Since FMC has not substantially implemented the Brook Proposal, the SEC should refuse to concur that FMC may exclude the Brook Proposal on the grounds that it has been substantially implemented.

FMC has also misdirected the focus of this issue by presenting arguments to suggest that the Brook Proposal and mostly the supporting statement provides materially false and misleading information. As demonstrated in the annotations and other supporting documents, the information provided in the Brook Proposal is accurate and truthful. In this situation, the SEC should follow SLB 14, refuse to exclude and encourage FMC to address its objections in their statement of opposition.

Finally as to the FMC argument that the Brook Proposal relates to its ordinary business operations, FMC has failed to substantively argue the two prong test as established by the SEC. This is sufficient grounds for the SEC to reject FMC’s request. But, in addition the Brook Proposal raises sufficiently significant social issues such that the subject matter transcends the day to day business matters by raising significant policy issues, such as wildlife poisonings, possible extinction and human equality principles which are so significant that it would definitely be appropriate for the shareholders to decide.

The Brook Proposal, if allowed to proceed to the shareholders, will help make FMC a better corporation. The importance of this proposal is twofold. First, it will mark a new beginning in the way that FMC acts to more credibly manage the full life cycle of its pesticide products in a fashion that will ultimately improve the use, as well as avoiding the misuse of these products. Second, it will hopefully allow FMC to question its operations and question prior management decisions, in the hopes that the corporation will stop fighting everyone who suggests that doing the “right” thing is as important, if not more important than just corporate profits. The question that the FMC Board of Directors, Management, all of its employees and ultimately its shareholders should ask themselves is simply, “What do I say to my wife, my husband, my children and my grandchildren when they ask me if I worked for (or held stock in) that company that killed the lions or took definitive steps to save the lions?”

Please help those who want to give the lions and other threatened wildlife their "voice" at the annual meeting of the Board of Directors by rejecting FMC's request to exclude the Brook Proposal.

Should Staff request any additional information, clarifications or wording changes to the Brook Proposal please let me know, so that I may follow your direction. If transmittal of your determination is possible via email, that would be the simplest means of delivery sent to

FISMA & OMB Memorandum M-07-16

Respectfully Submitted,



David Brook

Cc: Ms. Andrea Utecht, General Counsel FMC
1/24/11 1:47 PM

Shareholder Proposal by David Brook
Product Stewardship and Human Equality: FMC Corporation

INDEX OF REFERENCED EXHIBITS

1. Annotated David Brook Shareholder Proposal, dated, December 9, 2010.
2. Lion Poisoning Incident Report in The Masai Mara, dated, April 22, 2010, and Wildlife Direct Press release, dated May 13, 2010.
3. EPA Carbofuran Cancellation Process Cover Pages, dated, November 2010.
4. State of Connecticut Press Release, dated, December 10, 2010.
5. Transcript of CBS's 60 Minutes report: "Poison Takes Toll on Africa's Lions", dated, July 25, 2009.
6. The Draft New and Improved Stewardship Proposal letter from FMC with proposed revisions by David Brook, with email correspondence included, dated, December 2, 2010 through December 21, 2010.
7. Statement by Dr. Laurence Frank, PhD., Use of Furadan to Eliminate Lions and Other Carnivores in Kenya, dated, January 23, 2011.
8. Statement by Martin Odino, Use of Furadan for Wildlife Poisoning in Kenya, dated, January 23, 2011.

1

**IMPROVING FMC's PRODUCT STEWARDSHIP PROGRAM AND
CORPORATE RESPONSIBILITY PRINCIPLES**

FMC's Furadan insecticide is killing more than just insects¹. Furadan (carbofuran) is being used to intentionally kill large mammals such as lions in Africa². Millions of migratory birds in South and North America have been unintentionally poisoned by Furadan³. Even America's national symbol of freedom, the bald eagle, has been poisoned by Furadan⁴. USEPA banned all carbofuran residues in domestic foods, effectively prohibiting its use in America on December 31, 2009⁵. The European Union banned residues in foods in 2007⁶.

While Furadan use is restricted in the United States, FMC has allowed its unrestricted international sale in corner stores in many third world countries⁷. Anyone can buy it for a few U.S. dollars⁸. Furadan is not just creating harm in far away countries⁹, in the U.S., carbofuran has been

¹ See, National Marine Fisheries, Endangered Species Act Section 7 Consultation, Biological Opinion, dated April 20, 2009, for the loss of Pacific Salmon, www.nmfs.noaa.gov/pr/pdfs/carbamate.pdf - 2009-04-21, Page 481-482 for conclusions on impacts of continued registration of carbofuran. See, USEPA Interim Reregistration Eligibility Decision for Carbofuran, August 3, 2006, EPA-738-R-06-031. See, USEPA Reregistration Eligibility Science Chapter for Carbofuran, March 7, 2006, EPA-HQ-OPP-2005-162-0080. See, Evidence for Revoking Registration of Carbofuran in Kenya, Paula Kahumbu, May 17, 2010, as to reported incidents of misuse in Kenya. See, The Hazard of Carbofuran to Birds and Other Vertebrate Wildlife, Pierre Mineau, National Wildlife Research Centre, Canadian Wildlife Service, 1993.

² See, Footnote 1, above, and See, CBS Sixty Minutes Episode: <http://www.cbsnews.com/stories/2009/03/26/60minutes/main4894945.shtml>. See, Ray of Hope in the fight against lion-killer pesticide, the East African, Rupi Mangat, June 15, 2009, <http://www.theeastafrican.co.ke/news/-/2558/610826/-/r2heu5z/-/>.

³ See, Direct Losses of Birds to Pesticides – Beginnings of a Quantification, Pierre Mineau, USDA Forest Service Gen. Tech. Rep. PSW-GTR-191, 2005. See, Birds and Pesticides: Are Regulatory Decisions Consistent with the Protection Afforded Migratory Bird Species Under the Migratory Bird Act? Pierre Mineau, Wm. & Mary Envtl. L. & Pol'y Rev., Vol 28:315, 2003. See, American Bird Conservancy Press Release, August 3, 2006, "Pesticide Ban Follows Millions of Bird Deaths," <http://www.abcbirds.org/newsandreports/releases/060803.html>. "Carbofuran manufacture to be banned in the USA?" Wildlife Extra, March 2010, http://www.wildlifeextra.com/do/ecco.py/view_item?listid=1&listcatid=1&listitemid=6899&live=0#cr, Birds: Bellweathers of Watershed Health, Lynne Trullo, http://cfpub.epa.gov/watertrain/moduleFrame.cfm?module_id=17&parent_object_id=263&object_id=263.

⁴ U.S. Fish and Wildlife Services: "Kentucky Man Sentenced for Poisoning Hawks and Vultures," February 18, 2010, See, <http://www.fws.gov/southeast/news/2010/r10-015.html>, Allegany County, New York Man enters Guilty Pleas to Poisoning Two Bald Eagles, March 9, 2010, See, <http://www.dec.ny.gov/press/63388.html>. See also, Winter Poisoning of Coyotes and Raptors with Furadan-Laced Carcass Baits, Journal of Wildlife Diseases, 32(2) 1996, pp. 385-389. See also background information on Raptors: Poisoning of Raptors with Organophosphorous and Carbamates Pesticides with Emphasis on Canada, the United States and the United Kingdom, Pierre Mineau, et al., Journal of Raptor Research, 33(1):1-37, 1999.

⁵ USEPA Carbofuran; Final Tolerance Revocations; Final Rule, Federal Register, Volume 74, Number 93, 23046-23095, May 15, 2009. Carbofuran: Order Denying FMC's Objections and requests for Hearing, Federal Register, Volume 74, Number 221, 59608-59686, November 18, 2009.

⁶ European Commission, SANCO/10054/2006 final, September 7, 2007, as a review of 2007/416/EC, dated June 13, 2007, See also: <http://www.furadanfacts.com/RegulatoryInformation.aspx>.

⁷ See, CBS Sixty Minutes Episode: <http://www.cbsnews.com/stories/2009/03/26/60minutes/main4894945.shtml>

⁸ See, CBS Sixty Minutes Episode: <http://www.cbsnews.com/stories/2009/03/26/60minutes/main4894945.shtml>

⁹ See, Carbofuran and its Toxic Metabolites Provide Forensic Evidence for Furadan Exposure in Vultures (Gyps africanus) in Kenya, Peter O. Otieno, et al., Bull Environ Contam Toxicol, Published online: April 7, 2010, <http://www.peregrinefund.org/pdfs/ResearchLibrary/2010Carbofuran.pdf>.

found in the umbilical cord blood of women in Manhattan¹⁰ and it is possible residues of it were in your morning cup of coffee, since residues are allowed in certain imported foods¹¹.

The irresponsible and unregulated use of Furadan through a lack of product stewardship by FMC in Africa, Asia and South America is creating a nightmarish result prompting CBS Sixty Minutes to document the intentional misuse of this product to exterminate lions in Kenya. (<http://www.cbsnews.com/stories/2009/03/26/60minutes/main4894945.shtml>) There are new reports that Furadan and Marshal (carbosulfan) are being intentionally misused to exterminate wildlife in other African countries, including Uganda, Tanzania and South Africa and to poison fresh water fish and waterfowl sold for human consumption¹².

While FMC acted to stop sales in Kenya¹³, it has not stopped the problem from spreading to other countries¹⁴. FMC has failed to responsibly control the misuse of Furadan, thus jeopardizing FMC's reputation and profitability. As shareholders, the next embarrassing news story or potential litigation over FMC's failure to practice honest product stewardship may harm our investments.

FMC should also amend its Corporate Responsibility Policies, since it affords Americans greater protections from exposure than third world people¹⁵, who are allowed unlimited exposure to Furadan¹⁶.

RESOLVED, the Shareholders request the Board establish a legitimate product stewardship program by:

- Implementing immediate moratoriums on sales and withdrawals from the market of Furadan, and any other FMC pesticide, where there is documented misuse of products harming wildlife or humans, until FMC effectively corrects such misuse;
- Preparing and publishing, at reasonable cost, excluding propriety information, a product stewardship report by October 2011, and annually thereafter, addressing all

¹⁰ USEPA Carbofuran; Final Tolerance Revocations; Final Rule, Federal Register, Volume 74, Number 93, page 23087 and study in reference note 118 on Page 23093, May 15, 2009.

¹¹ See National Corn Growers, et al. v. Lisa Jackson, 613 F.3d 266, July 23, 2010. See also, "Furadan Facts" as to Court of Appeals Decision; <http://www.furadanfacts.com/ProductMisuse.aspx>.

¹² See, Evidence for Revoking Registration of Carbofuran in Kenya, May 17, 2010, as to reported incidents of misuse in Kenya and Measuring the Conservation Threat to Birds in Kenya from Deliberate Pesticide Poisoning, Martin Odino, July 30, 2010. See, Wildlife Direct website article on vulture poisoning, <http://stopwildlifepoisoning.wildlifedirect.org/>. See, Lion poisoning incident reports from April 25, 2010 and bird poisoning report from October 29, 2010 and photographs of Marshal 350. (Sent as a PDF document.)

¹³ See, Furadan Facts, www.furadanfacts.com/FAQs.aspx.

¹⁴ See Analytical Report, October 6, 2009, Paul G. Allen Family Foundation Wildlife Chemistry Laboratory, Botswana Predator Conservation Trust. (Sent as a PDF document.)

¹⁵ USEPA Carbofuran; Final Tolerance Revocations; Final Rule, Federal Register, Volume 74, Number 93, 23046-23095, May 15, 2009. Carbofuran: Order Denying FMC's Objections and requests for Hearing, Federal Register, Volume 74, Number 221, 59608-59686, November 18, 2009.

¹⁶ See, "Bad for America, Good for Africa" New African Magazine, December 1, 2010, http://www.biyokulule.com/view_content.php?articleid=3137. See also, Investigation of deaths in an area of groundnut plantations in Casamance, South of Senegal after exposure to Carbofuran, Thiram and Benomyl, Maria, Ugenia Nia Gomes Do Espirito, et al *Journal of Exposure Analysis and Environmental Epidemiology* (2002) 12, 381-38810.1038/sj.jea.7500239 10.1038/sj.jea.7500239, <http://www.nature.com/jes/journal/v12/n5/full/7500239a.html>.

documented product misuses worldwide since 2005 and proposing changes to prevent further misuse including: working with foreign governments in training and educational programs, licensing applicators, restricting access, incorporating bittering agents and funding programs to prevent loss of livestock and wildlife;

- Establishing an independent scientific advisory panel to prepare these reports; and
- Incorporating in the FMC Corporate Responsibility Principles a human equality declaration stating that FMC will treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits.

I, therefore, urge Shareholders to vote **FOR** this proposal.

The following is not part of the proposal.

Submitted on: November 16, 2010

By: David Brook

FISMA & OMB Memorandum M-07-16

Owner of 75 + shares, since on or about July 29, 2009.

12/9/2010 11:39 AM

2

Lion poisoning incident in the Masai Mara on 22nd April 2010

Incident: Poisoning of three lions

Date of incident: 22nd April* 2010

Threat: Lions

Method: Dead cow laced with pesticide to kill lions

On the 25th of April investigators confirmed the deaths of three lions in the Masai Mara which occurred on the 22nd of April 2010. The lions lay dead in a boma belonging to a Masai family. A lioness had just died about 5-10 meters away from the cow carcass at GPS co-ordinate 36M 0761391,UTM9877716. The carcasses of a juvenile male and second lioness lay some 30m away.

They noticed that there were piles of dead flies around the cow carcass and that the lions had not yet been scavenged. The bodies were quite decomposed. .

Community rangers with the KWS team arrested one man named, Oletaito Olemaito, who admitted that he had poisoned the lions with his neighbors. He also produced a container, which he had used to poison the lion that contained pink powder. The same pink coloring was visible on the laced meat of the cow carcass used for the poisoning.

The suspect revealed that the cow carcass that was laced belonged to him and other family members and that it had been killed by lions on the 22/04/2010 when his herd's boy was grazing livestock. He and his family decided to take the law into their own hands and kill the lions in order to save their other cattle. Upon searching a homestead that he led us to, he identified a 100g tin with a pinkish powder that the suspect claimed to have used when poisoning the cow carcass.

Investigators destroyed the carcasses by burning to avoid more mortality of scavengers, and risks to the environment

The suspect was taken by the KWS to the Narok police station and booked under this booking number: OB NO 29/27/04/2010. He was released on bond on the 28/04/2010 as the investigating officer from the police department requested for a new sampling of the specimen to be done afresh as per their procedures so that the findings of the evidence to be used during prosecution

On the 28th of April the suspect was released and no charge reached the prosecutors office.

The lion samples were refrigerated and flown to Nairobi on the 27th of April. The KWS veterinarian in Nairobi collected them that morning.

We urge the PCPB to confirm receipt of this report and to investigate and report back to us on the findings.

Sequence of Events of lion poisoning in the Lemek Hills, Narok South District

Recorded by Marc Goss

At 8pm on the 24th of April 2010 MNC Sn. Warden Benson Ketele reported that our Ngoswani rangers had been informed that lions had been poisoned near their gate.

Benson arrived at Ngoswani at 8:30pm that night but could not enter the area where the lions were reported to be lying dead, due to large numbers of elephant. Benson returned to his station for the night.

On the morning of the 25th at 8am Benson arrived our Ngoswani Gate and was escorted some 4km from the gate to where the lions were. Upon confirming the deaths of three dead lions we reported the incident to the KWS intelligence department Narok, and KWS Mara veterinarian. The veterinarian previously instructed our team on how to take samples, which we did with the KWS Lemek rangers and Intel. Dept.

At the scene we noticed that there were piles of dead flies around the cow carcass and that the lions had not yet been scavenged. They had been dead for about two days, due the rate of decomposition.

Our rangers with the KWS team arrested one man named, Litato Maitai, whom admitted to the group that he had poisoned the lions with his neighbors. He also produced a container, which he had used to poison the lion that contained pink powder. The same pink coloring was visible on the laced meat of the cow carcass used for the poisoning. He was taken by the KWS to the Narok police station.

On the 28th the suspect was released and no charge reached the prosecutors office.

The lion samples were refrigerated and flown to Nairobi on the 27th of April. The KWS veterinarian in Nairobi collected them that morning.

Some three weeks later we have had no feedback regarding the test results.

Suspected Poisoning in the Mara

We at WildlifeDirect were informed of the incident on Friday, October 29. We immediately left to visit the scene to collect evidence and assess the situation. We counted 25 (Ruppells Griffon, White Backed, and Hooded) vultures, a Tawny eagle, and a Bateleur eagle, dead in the area where they had been discovered by game scouts of a conservation project in Siana area, Predator Aware, in the vicinity of a wildebeest carcass that had been laced with poison by suspected cattle herders.

The pink colouration and powdery form of the substance found sprinkled on the well-eaten wildebeest carcass point more towards Marshal than Furadan. It is known that local herders have been using Marshall (a pink substance) to kill fleas and other external parasites by dusting their sheep and goats with this substance. Game scouts believe that the poison was intended for lions and other large predators, which the herders may have targeted in retaliation for suspected predation on their livestock. We could not establish why the local community would lace a wildebeest.

KWS officers had picked two intact carcasses the previous day. On this day we collected beaks, crops, and talons, which we delivered to a professor at the Kenya Polytechnic University College (a constituent college of the University of Nairobi) for independent toxicology testing. We also collected a sample of the pink powder we found next to the carcasses. KWS too got this powder to test independently. Together with the Mara scouts, KWS, and the police, we formed a team, and after taking samples, we decided to gather the carcasses and destroy them by burning, to avoid cross contamination.

.....Those present during my visit (those who helped in burning the carcass) included:

1. The Local Chief
2. A Kenya Police officer (Mara), Mr. Osewe Leonard
3. James Muasya (T.P.U) Police officer, Mara
4. KWS officers (Christine and
5. Moses Kuyioni – Game Warden, Mara
6. Robert Parmwati
7. The local youth

Incident Report By: Enoch Mobisa.

350 ST

When handling
in ball or wire

MARCA RAFINA ZAINA

HATARI
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Approved for
Army Corps
of Engineers

ASIA PACIFIC





WILDLIFE DIRECT

FOR IMMEDIATE RELEASE

13 May 2010

Kenya's lions on the brink of extinction: three more lions poisoned in Masai Mara

Conservationists have warned that Kenya's lion population is in danger of becoming extinct within a few years if nothing is done to stem a wave of poisonings that have already left at least eight of the charismatic predators dead in recent weeks.

In the latest incident, the carcasses of two lionesses and a young male were found late last month near Lemek, apparently killed in retaliation for attacking domestic cattle. In their investigation, the Kenya Wildlife Service (KWS) arrested a local cattle herder who admitted he had used a pesticide to poison the lions along with his neighbours.

The suspect showed investigators a container with the remains of the poison he had used to lace a cow carcass that the lions ultimately ate. The container had traces of a pink powder that the authorities suspect is a form of carbofuran - a deadly pesticide commonly used in the horticultural industry. KWS has sent samples of both the lion carcasses and the pink substance for toxicological tests to confirm what it was that killed the predators.



KWS took the suspect to the police but despite the evidence and his admission of guilt, he was released shortly after. According to anonymous sources, a local politician intervened on his behalf.

This incident brings to 8 the number of confirmed lions poisonings in recent weeks across southern Kenya; the other five occurring near the Amboseli National Park.

In their National Conservation and Management strategy for Lions and Hyenas, the Kenya Wildlife Service estimates that only 1,970 lions remain across the country, and said "poisoning is perhaps the greatest threat to predators and scavenging birds".

KWS confirms that 2010 has started off badly for lions - in addition to 8 confirmed poisonings, more than 10 other lions have been killed in other circumstances; A lion was shot in or near Buffalo Springs Reserve, Samburu District, by local police, while others have been speared near Amboseli National Park

The situation is now so serious that the conservationist and chairman of WildlifeDirect Dr Richard Leakey has again called for the government to take action.

"The future of tourism in Kenya is at risk if dangerous pesticides like Carbofuran (sold locally as Furadan) remain on the market. Time and again, we've seen these substances used to slaughter our national heritage and destroy one of our greatest economic assets. Yet the authorities continually fail to follow up cases of abuse and prosecute the culprits. The Kenyan government must show that it is serious and take swift action to ban deadly pesticides like Furadan and enforce the law.

"If we fail to put a stop to poisonings, our lions could go extinct in a matter of years; a catastrophic loss for anyone who cares about our national heritage, but also a devastating blow to the tourism industry that currently brings in hundreds of millions of dollars to our economy. "

Carbofuran is the active ingredient in pesticides most widely used to kill wildlife such as lions and leopards. It is also used to kill fish and birds for human consumption. Carbofuran is a neurotoxin that is deadly to fish, birds, cats and even humans. Kenyan conservationists are calling on the Ministry of Agriculture to ban the pesticide due to its environmental impacts. It is not permitted for use in the European Union where authorization for its use was withdrawn in 2007. Nor can it be used in the USA where it is produced due to a recent decision by the Environmental Protection Agency (EPA) that revoked all tolerance for carbofuran residues on food. This means that carbofuran residues must not be found on locally produced and imported food items. The decision was implemented on the 31st December 2009. These decisions could affect Kenyan food exports if the product remains in use on export crops. In addition, Canada's Pest Management Regulatory Agency recently conducted the risk and value assessments for carbofuran and its end-uses on food and feed crops and also recommends a ban of the product. Conservationists in USA have conducted an online petition and gathered more than 80,000 signatures urging the Kenyan Government to do the same.

After incidents of lion poisoning in Kenya became public in 2008, the manufacturers of Furadan, FMC withdrew Furadan from Kenyan shelves. However, the product is still not officially banned and can be found in some agro-vet stores. The active ingredient, carbofuran, is still available in other over-the-counter pesticides.

WildlifeDirect is a conservation charity registered in USA and Kenya, and based in Nairobi. We enable conservationists at the front lines to tell their stories and raise awareness about their work through over 80 blogs from the field on the website platform <http://wildlifedirect.org>. The Chairman of WildlifeDirect is Dr. Richard Leakey and the Executive Director is Dr. Paula Kahumbu. Visit <http://wildlifedirect.org> for more information

Furadan: WildlifeDirect is campaigning for the de-registration or total ban on the active ingredient of Furadan, carbofuran in Kenya due to the threats it poses to users, consumers and wildlife. This pesticide threatens the survival of lions, vultures, fish species and many other mammals and birds in Kenya. Furadan is produced in USA by FMC and is sold locally by Juanco SPS as an agricultural insecticide. For more information on our campaign against wildlife poisoning visit <http://stopwildlifepoisoning.wildlifedirect.org>

KWS is the government body responsible for wildlife conservation in Kenya. For more information visit <http://www.kws.org>

For other photographs or more information please contact Paula Kahumbu paula@wildlifedirect.org, or call 0722685106, or 020 2602463

5

(CBS) This story was first published on March 29, 2009. It was updated on July 25, 2009.

We all grew up learning that the lion is the king of the jungle. And now that we're not little any more, we know just how vulnerable they are. In fact, when exposed to man's devices, lions are extremely fragile.

The latest weapon being used against them is poison. As **60 Minutes** first reported last March, African herders whose livestock and livelihood are threatened by lions are killing them in the most effective and economical way they can.

And overwhelmingly, that is by using a cheap American chemical called Furadan. It is marketed as a pesticide, to be used for protecting crops. But it's bought by many to kill animals. And that's one reason why, conservationists say, Africa's lions are in trouble.

Correspondent Bob Simon took a journey through the bush in Kenya to find out what's going on. We learned that 20 years ago, there were some 200,000 lions in Africa. Today, there are 30,000 and the numbers are going down all the time.

Lions are being poisoned at a staggering rate in Kenya, and there's little chance cubs outside the wildlife reserves there will make it to adulthood.

Dr. Laurence Frank, of the University of California Berkeley, told Simon he believes that poison, combined with other threats, will make the lion in Africa extinct.

Frank has been following lions for the last 30 years, looking for ways to keep them alive. While **60 Minutes** was there, Alayne Cotterill, his colleague, needed to put a new collar on a lioness named Mara. She darted her and put her to sleep.

Cotterill and Frank had less than an hour to do their work before Mara would wake up. A sleeping lion is a deceptively gentle creature. Her coat, which looks exquisitely smooth, is actually quite rough to the touch.

Seeing Mara's claws retracting into soft, padded paws, you understand why she is such an efficient killer. But actually, she may be more afraid of us than we are of her.

"They're very unlikely to attack us," Cotterill explained. "There's been so many years of conflict with people in this area, it's almost hardwired into their systems to be terrified of people."

And with good reason: over the millennia, people have speared, shot and trapped lions. Today, the primary culprit appears to be poison.

"We know of 30-plus poisonings just in this area in the last five or six years. We have data on another 35 or 40 poisonings in our other study area, elsewhere in Kenya. But that's gotta be just the tiny tip of the iceberg," Dr. Frank told Simon.

Mara is part of a pride which lives on Claus Mortensen's ranch. Five years ago he found out just how devastating poison can be when he discovered that another of his prides had gone missing.

"After a few days, vultures were seen circling on our northern boundary there. And we went out and we found first one lion, then another, and then another," Mortensen remembered.

Seven lions in all had perished. The lions had been vomiting and there were no bullet wounds.

Mortensen said he was sure the lions had been poisoned and suspects that Furadan was responsible. It's one of the most toxic pesticides sold in Kenya, widely available and hard to detect because it dissipates quickly in poisoned animals. Lab tests, he says, ruled out any other poison.

So why would anyone want to poison these glorious creatures? The first thing you need to know is that 70 percent of the country's wildlife is found outside the protected game reserves, on Kenya's vast plains, where wild animals and cattle mingle. Lions are there too, and that's where the trouble begins. The lions attack and eat the cattle.

The area is inhabited by the Maasai people, who always had a way of dealing with that. The young men went out hunting lions with spears; it was a rite of passage. Antony Kasanga was one of them.

Asked what it means for a young Maasai man to kill a lion, Kasanga told Simon, "It makes you famous. You get the whole community to know you, because you killed a lion....If you had one girlfriend, you get 20 more."

It's more than just having 20 girlfriends: killing lions protects cattle, the very foundation of the Maasai's existence.

When a cow is killed by a lion, Kasanga said it's a disaster.

And Kasanga's job now is to avert that disaster and save the lion at the same time. He is a leading member of the Lion Guardians, a group of reformed Maasai warriors who keep track of collared lions and warn herders when the lions get too close to their cattle.

Last year, they were too late in reaching an old herder whose cow had been killed. The herder laced the carcass with poison, knowing the lions would return to finish their meal.

That night, Sengale and Birdie, two collared lions the Guardians knew well, feasted on it. If the carcass was poisoned with Furadan, they wouldn't have suspected it because Furadan has no taste and no smell. It didn't take long before the lions were found dead; Birdie was pregnant with five cubs.

Cows are a cash crop in Kenya. They put food on the table, and they send kids to school. Mengistu Sekeret and his friends all lost cows to lions. That turned them into lion killers.

Asked how one kills a lion, Sekeret told Simon, "In very silent way."

"What is the silent way?" Simon asked.

"Actually, we use the poison," Sekeret said, explaining that it is very effective.

One poisoned lion captured on camera could barely walk. Its nervous system was shutting down, so it was put down by vets from the Kenyan Wildlife Service who conducted an autopsy.

The official government chemist's analysis found Furadan in the lion's stomach. A subsequent report by the agency that regulates pesticides in Kenya did not mention that finding and claimed that Furadan was not connected.

When **60 Minutes** asked Mengistu Sekeret and his friends about Furadan, they didn't recognize the name, but knew exactly what it looked like.

He told Simon they call it "the blue stuff" and that that is actually the common name.

Simon showed them a bottle of Furadan to make sure we were talking about the same thing.

"Oh wow, it's the one," one of the men replied, after seeing the purplish-blue chemical.

Sekeret and his friends wouldn't have any trouble finding Furadan: it can be bought in towns and villages all over Kenya in stores called "Agro-Vets," which sell agricultural products, including pesticides.

But when Simon tried buying Furadan with **60 Minutes** cameras rolling, the shopkeepers told him they didn't have it in stock, so we decided to go undercover with a hidden camera.

When Simon walked into a shop - filmed with the hidden camera - he had no problem buying a bottle of Furadan for 120 shillings, or about \$2.

There was actually plenty of Furadan on the shelves and we were surprised that the storekeeper didn't ask what we wanted it for. Asked if many people buy Furadan, the shopkeeper told Simon, "So many people buy Furadan."

But when asked what they use it for, the shopkeeper simply laughed.

It seemed clear from stores **60 Minutes** visited that shopkeepers knew Furadan was not only used on crops. In fact, some stores which stocked Furadan were in areas where there wasn't a crop for miles.

In its granular form, Furadan is banned in Europe and the United Kingdom; it is severely restricted in the United States. Just a tiny amount from a \$2 bottle is enough to kill an entire pride of lions.

Furadan, even when used as directed, is estimated to have wiped out millions of birds in the United States and poses unacceptable risks to human health. That's why the Environmental Protection Agency is in the process of banning it.

But in Africa, Furadan is perfectly legal as a pesticide. However, when the granules are sprinkled on carcasses, any animal that feeds on them will die. And not just lions - hyenas, leopards, jackals, vultures and other birds die in droves.

"It's inexcusable to use Furadan for killing animals. It wasn't designed for the purpose. It's grossly irresponsible to use it in that way," said Dr. Richard Leakey, the doyen of conservationists in Africa, who has spent years fighting for the conservation of Kenya's wildlife.

"But you can understand why cattle farmers do use it," Simon remarked.

"I can understand why people rob banks. I mean, there are a lot of things I can understand," Leakey replied. "It's irresponsible to put on the market something that is so utterly dangerous to wildlife in a country where wildlife is so critical for our economic future."

Wildlife is in fact crucial for Kenya's economic future. Hundreds of thousands of tourists bring hundreds of millions of dollars to the country. But most Kenyans see very little of that, so there is little incentive to value the wildlife.

"The amount of tourism that's here is not sufficient to offset the cost of these people living with wildlife," said Tom Hill, an American philanthropist who wanted to make wildlife worth something to the people.

Hill and Richard Bonham, a Kenyan naturalist, recognized that time was running out.

"It just became very clear unless we stepped in and made some sort of intervention, we were gonna lose the lion," Bonham said.

So they began meeting Maasai to ask what it would take to stop killing lions. "The answer as they gave it to us is: if you would pay us back for our lost livestock once it's been killed by predators and we can replace it, then we would quit killing them," Hill said.

"That's what we're doing," Hill said. "They don't hate lions. They hate the economics of lions."

So Hill and Bonham set up a fund to compensate the Maasai for their livestock losses. Teams of monitors crisscross the countryside to inspect dead cattle and reimburse the owners if they don't poison the lions.

The program has achieved some success, but covers only a small area. Throughout the rest of Kenya the poisoning goes on.

Asked how one stops farmers from doing it, Leakey told Simon, "You stop farmers by using unregulated chemicals by not having the chemical on the market. You ban the product."

But the Kenyan government hasn't banned the product. The company that makes it, FMC, declined **60 Minutes'** request for an interview but said in a written statement that Furadan is important to the sustainability of agriculture in Kenya. They said that the labels clearly illustrate its proper use and that they condemn the illegal use of their products to kill predatory wildlife.

But does it have to be a choice between cubs and corporations? There are other ways to protect cattle without using lethal chemicals. But for lion cubs to grow up to be the splendid creatures they can be, Furadan cannot be part of their future.

After our story aired, FMC announced it would recall Furadan from stores in Kenya and stop all sales in the neighboring countries of Uganda and Tanzania. But a random survey last month found that while Furadan was no longer on the shelves in Kenya, it was still available in Uganda and Tanzania, where lions are also disappearing.

[FMC Letterhead]

David Brook

December 13, 2010

FISMA & OMB Memorandum M-07-16

Re: Shareholder Proposal Concerning Improving FMC's Product Stewardship Program and Corporate Responsibility Principles ("the Proposal")

Dear Mr. Brook:

Thank you for meeting with us concerning the Proposal you have submitted for inclusion in FMC's 2011 Proxy Statement, and discussing FMC's efforts to prevent intentional misuse of its products to harm wildlife. As a result of our dialogue, we have determined that we have mutual interest in finding ways, where feasible, to improve the current practices used to investigate and report potential intentional misuse events in developing countries. In particular, both parties agree there is benefit to be derived from having a more formalized, objective system, whereby such incidents may be investigated by an independent party, with the results both verified in reputable labs using appropriate protocols and reported accurately to interested parties.

You indicated that achieving such improvement would go a long way towards creating a more comprehensive solution to the intentional-misuse-of-FMC's products problem that concerns you. Additionally, we agreed that, by necessity, such a solution would involve a number of participants in addition to FMC, including but not limited to, governmental bodies and possibly NGOs to promulgate and enforce better stewardship standards in the countries at issue.

This will hereby serve to confirm FMC's commitment to work to try to achieve an improved system for identifying and reporting the cause and effect of any misuse incidents that come to our notice. We understand that you are willing to withdraw your Proposal in consideration of such a commitment, in the belief that the path we have outlined is a more effective way for you to make progress towards achieving your ultimate objective of finding a comprehensive solution to the problem of intentional misuse of any FMC products to harm wildlife or human health. We also understand that you are free to resubmit your proposal for the 2012 proxy season should you not be satisfied with the progress of FMC's efforts.

Please be assured that we take the foregoing commitment seriously and that we will work in good faith towards achieving its objectives. To facilitate our commitment, we invite you to meet with the Agricultural Products Group's Sustainability Council at its next meeting, and to participate, at FMC's expense, in an upcoming trip to Africa to assess the efforts we have

undertaken to ensure that FMC's carbofuran pesticide (Furadan brand), is no longer being sold in the countries of East and Southern Africa.

If you agree with the foregoing, please confirm and we ask that you withdraw the Proposal by close of business on December 22, 2010.

Sincerely,

FMC Corporation

By:

[FMC Letterhead]

Proposed additions shown in color with underline

~~Proposed deletions shown with strikethrough~~

December 17, 2010

David Brook

FISMA & OMB Memorandum M-07-16

ACTIVE OF DRAFT
POSSIBLE AGREEMENT
WITH FMC TO WITHDRAW MY
PROPOSAL

Re: Shareholder Proposal Concerning Improving FMC's Product Stewardship Program and Corporate Responsibility Principles ("the Proposal")

Dear Mr. Brook:

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You indicated that achieving such improvement would go a long way towards creating a more comprehensive solution to the ~~intentional misuse of~~ FMC's products problem that concerns you. Additionally, we agreed that, by necessity, such a solution would involve a number of participants in addition to FMC, including but not limited to, governmental bodies and possibly Non-Governmental Organizations ("NGOs") to promulgate and enforce better stewardship standards in the countries at issue. Those countries include, at this time, all countries in Africa where there has been distribution of FMC products in the last five years.

In order to more comprehensively address these issues, FMC is interested in exploring, with your interest and involvement, a number of options in order to identify an improved process for its stewardship program. These options involve the potential misuse of FMC's Furadan (carbofuran), and Marshal (carbosulfan) but this improved process would apply to all products marketed for pesticide, herbicide or any other product which has the potential to harm humans and wildlife. Specifically, FMC hereby agrees to research and then begin to implement the following defined stewardship program improvements in Africa beginning on or before March 31, 2011:

1) Actions to improve the factual identification of potential product misuse incidents through:

- a) FMC agrees to act to establish a more comprehensive investigative process and a more formal program to document intentional or unintentional misuse poisonings

of animals and people; this can be accomplished through a number of steps including:

- b) Better documenting of the gathering of incident information and reporting by supporting the use of licensed veterinarians, NGOs, game wardens and governmental officers trained to investigate misuse incidents and to perform standard necropsies with tissue sampling in order to determine cause of death. Establishing proper chain of custody process and paperwork for the gathering and secured transfer of samples from the field to the laboratory.
- c) Acting to establish designated professional laboratories with uniform testing protocols for the identification of chemical compounds found in samples and the manufacturers of these compounds, if possible through impurity and process "fingerprinting" analysis. FMC agrees to provide those laboratories with laboratory analysis chemical peak identifiers specific to its products, if applicable.
- d) Supporting the utilization of the same licensed veterinarians to prepare standardized post mortem pathology reports using their field observations and the laboratory reports.
- e) Contemporaneously acting to report these incidents to police and local authorities in order to request the lodging of criminal charges for poisoning incidents where appropriate.
- f) Acting to designate a local authorized contact person to coordinate the actions of FMC with these designated points of contact.
- g) Establishing a mailing and/or emailing list for the laboratory chemical identification results and necropsy reports to be uniformly sent to designated approved recipients as well as the posting of all data and reports to a secure File Transfer Protocol ("FTP") site for access by approved NGOs, governmental agencies and other designated parties.

2) Actions to establish an internal policy for product withdrawal, buyback and auditing program for effectiveness when there is identified product misuse:

- a) FMC agrees to establish a written product withdrawal protocol by March 31, 2011, in order to have an established protocol in place, should an FMC product be identified as being misused for intentional poisonings of wildlife, birds, fish or humans. FMC agrees that it will take steps to immediately halt sales of that chemical within a specified distribution area or country radius of the incident and it will make a good faith effort to buy back that compound should such an effort reduce or eliminate stocks of that compound; and to establish internal guidance on such product withdrawal actions.

- b) FMC agrees that it will examine opportunities to expand product packaging identification systems, such as expanded batching codes, electronic tracers or other packaging tracking systems for backtracking distribution points and sources in order to better track sources for any product and packaging identified as misused for a poisoning.
- c) FMC agrees that it will coordinate with all of its distributors and others to accurately maintain inventory and sales records of all FMC product inventory and in order to confirm their understanding and compliance with product withdrawals and/or buybacks and product return and/or destruction.

3) Actions to build consensus and trust:

- a) Within three (3) months of execution of this letter commitment, FMC agrees that it will sponsor a minimum of three open stakeholder meetings over the next year in Kenya and/or other African countries to solicit local involvement and expand its dialogue on the issue of product misuse. Invited attendees would include interested representatives from: NGO's, Agricultural interests, environmental organizations, governmental representatives and agriculture/chemical manufacturers and distributors. While the meetings will be sponsored by FMC, an involved conservation group, such as for example, Panthera Corporation or World Wildlife Fund or equivalent organization, would be asked to (if interested) act as moderator/facilitator for each meeting. Meeting minutes would be prepared and recorded to be posted to the FTP site.
- b) FMC will work with and identify viable suggestions from the stakeholder meetings, including, not limited to: ways to educate people about the dangers of pesticide misuse, restricting access to certain pesticides, licensing applicators, changing formulation of pesticides with bittering agents and/or pungent or acrid, odors, funding programs to prevent loss of livestock and wildlife and promoting enhanced criminal penalties for intentional misuse/poisoning of wildlife, waterfowl or fish.
- c) FMC will work with NGO's and governmental officials in an attempt to establish a poisoning incident toll-free hotline. FMC and other related chemical distributors and manufacturers in the region will also explore supporting and funding the establishment of a financial reward program for information leading to the arrest and conviction of anyone responsible for any such misuse poisonings. Use of this hotline and reward program would be promoted through radio, print and other forms of mass communications.

4) Preparation of FMC Product Stewardship Report:

- a) FMC agrees to prepare a "Product Stewardship Report," to its shareholders by October 2011, with updates and lessons learned from these enhanced program initiatives. The report will be prepared through the gathering of information from changes made and incident reports with assistance of the FMC Agricultural

Products Groups Sustainability Council and input from at least one FMC unfunded African-based NGO or other involved independent conservation group.

- b) FMC agrees to have the report peer reviewed prior to release by an independent third party, such as an academic institution with no ties to FMC, such as a United States based veterinary school with international experience or a law school with international environmental law experience. Changes would be made to respond to suggestions by such a third party independent institution. FMC agrees to involve you in the choice of such institution and the African-Based NGO.

5) Development of Creation of Agriculture-Business Consortium Support:

- a) FMC agrees to communicate with the other chemical companies and distributors which support the agricultural industry in Africa with chemical herbicide and pesticide products to encourage the establishment of a shared funding source for the preceding agreed upon programs discussed in this letter agreement. Funding support allocation would be determined by the parties based on a market share or simply equal division of costs. Formalization of such an agreement to support these preceding programs would be targeted for execution by July 2011 or sooner, if possible.
- b) Those new parties involved with this agreement would also be invited to participate in the stakeholder meetings.

6) Development of Corporate Responsibility Principles:

- a) FMC agrees to examine expanding its corporate responsibility principles to establish a policy which encourages uniformly limiting human exposure to its pesticides based upon United States Standards.
- b) FMC will work to draft such a policy by June 2011.

This will hereby serve to confirm FMC's commitment to work to try to achieve an improved system for identifying and reporting the cause and effect of any misuse incidents that come to our notice. FMC agrees that it will establish and maintain an open dialogue with you as these endeavors move forward and it welcomes your input for which it will make very effort to incorporate your ideas and comments. In order to facilitate this dialogue, FMC agrees to involve you in its non-propriety communications as it develops these programs and in its formulation of this expanded stewardship program.

FMC also agrees that should any poisoning incidents occur in other countries on other continents, that it will act to establish a similar program as outlined above as applied to that part of the world.

We understand that you are willing to withdraw your Proposal in consideration of such a commitment, in the belief that the path we have outlined is a more effective way for you to make progress towards achieving your ultimate objective of finding a comprehensive solution to the problem of intentional misuse of any FMC products to harm wildlife or human health. FMC will strive to have each of the aforementioned tasks implemented, or to be in the process of implementation, not later than September 15, 2011, unless otherwise noted, so that you ~~We also understand that you are~~ would be free to submit or resubmit your a proposal for the 2012 proxy season should you not be satisfied with the progress of FMC's efforts.

Please be assured that we take the foregoing commitment seriously and that we will work in good faith towards achieving its objectives. To facilitate our commitment, we invite you to meet with the Agricultural Products Group's Sustainability Council at its next meeting, and to participate, at FMC's expense, in an upcoming trip to Africa to assess the efforts we have undertaken to ensure that FMC's carbofuran pesticide (Furadan brand), is no longer being sold in the countries of East and Southern Africa.

If you agree with the foregoing, please confirm and we ask that you withdraw the Proposal by close of business on December 22, 2010.

Sincerely,

(Signed by a Corporate Officer)
FMC Corporation

By:
:

I have read and agree with the preceeding information as proposed by FMC Corporation.

By: David Brook:

12/17/2010 11:16 AM

7

USE OF FURADAN TO ELIMINATE LIONS AND OTHER CARNIVORES IN KENYA

Laurence Frank, PhD.
Director, Living with Lions
Museum of Vertebrate Zoology
University of California
Berkeley, CA 94720

23 Jan. 2011

Credentials:

BA in Biology, Reed College, 1970
MSc. in Ecology, University of Aberdeen, 1974
PhD in Zoology, UC Berkeley, 1983
40 years of research on biology and conservation of predators in Kenya
79 scientific papers and 10 popular articles on biology and conservation of African predators

Statement:

I have been active in predator research in Kenya since 1971 and predator conservation since 1997, with emphasis on lions and spotted hyenas. The greatest conservation threat to these and other large predators is retaliatory killing by people in response to depredation on cattle, sheep, goats and camels. Poisoning with Furadan is the most common way for people to get rid of large carnivores, as most species return to finish a large kill the next night. Livestock owners poison the remains of the carcass, killing every carnivore, vulture or eagle that subsequently feeds on it. The most recent lion poisoning case of which I am aware took place on Jan. 19, 2011.

Lions and other predators are heading for extinction; by the best estimate, fewer than 30,000 lions remain throughout Africa. Our conservation group *Living with Lions* has records of at least 52 lions poisoned in our 3000 square mile Laikipia study area since 2002, and a minimum of 68 in the 2000 square mile Amboseli region since 2001. The Kenya Wildlife Service has many poisoning records from the Masai Mara region. In most other parts of Kenya, dead carnivores are unlikely to be reported to conservation authorities, so these records represent just a fraction of the actual number of lions poisoned in Kenya. Few data are available from other countries, but anecdotal evidence suggests that poisoning is very common in much of Africa. There have been several reports in the Uganda press of lions being poisoned with Furadan in Queen Elizabeth National Park, and Furadan is reported to be widely used to poison vultures in southern Africa, for use in magic.

In the 20th century, both strychnine and toxaphene (an organochlorine used for 'dipping' cattle to prevent tick-borne diseases) were widely available and used for killing predators. When strychnine was better controlled and toxaphene was replaced by acaricides with low toxicity to mammals, people discovered that Furadan was highly effective for killing predators, very cheap, and universally available in Kenya: one could go into any 'agrovet' shop (there are many in every small town in agricultural areas), ask for something to kill predators or feral dogs, and be sold a jar of Furadan granules for 120-150 Kenya shillings (\$1.50- 2.00). Virtually all pastoralists were aware of this, and large numbers of lions, spotted and striped hyenas, leopards and jackals were killed. Incidental mortality of vultures and scavenging eagles was enormous; as a result, some species of vultures have virtually disappeared from Kenya, others have become rare.

In 2003, I attended a meeting in Nairobi with FMC corporate representatives David Jupp and Florence Troubac, where they were informed that Furadan was being used to poison predators and also waterfowl (for human consumption), but FMC took no action until CBS *60 Minutes* publicized the issue in 2009. The following day, FMC withdrew it from the Kenya market and instituted a buy-back program, with the result that it is now difficult to buy in Kenya. Old stocks remain hidden, however, and it is readily available in neighboring countries.

The most recent incidents were reported by scouts from the African Wildlife Foundation and followed up by a scout from the Masailand Preservation Trust and one from our *Lion Guardians* group. On January 2, 2011, just on the Tanzania side of the Tanzania-Kenya border, a livestock owner sprinkled Furadan on the carcass of a cow killed by lions. A female lion, four spotted hyenas and a vulture were poisoned. On January 19, the same man poisoned a male lion who fed on another cow; its female companions apparently survived. The accompanying photos show Furadan granules sprinkled on the lion after it was partially skinned (skins, teeth and claws are illegally sold to tourists), apparently in an effort to kill more hyenas. The lions almost certainly came from Amboseli National Park on the Kenya side of the border. I have bought Furadan in Kenya to photograph it, and the granules visible on this lion appear identical.

In a similar incident a year ago, a pride of five Amboseli lions was poisoned on the Kenya side of the border, and the perpetrator freely admitted buying Furadan in Tanzania. The Kenya Government Chemist's analysis of lion liver and stomach samples showing carbofuran in all samples is attached. Thus, although Furadan is now hard to buy in Kenya, it is freely available in Tanzania, where it has also been documented by Richard Bonham as being used to poison crocodiles in the Selous game Reserve.

I also include photos taken in 2006 outside Tsavo National Park in Kenya, where two male lions were poisoned using Furadan, reported by my colleagues Seamus MacLennan, Leela Hazzah and Amy Howard. The photos show the dead lions, the cow carcass that was used as bait, and Furadan granules and masses of dead flies on the cow.

In typical cases, however, the dead lions, hyenas, or vultures are only found and reported days after death. They are rotten and scavenged, and little evidence is left behind. It is

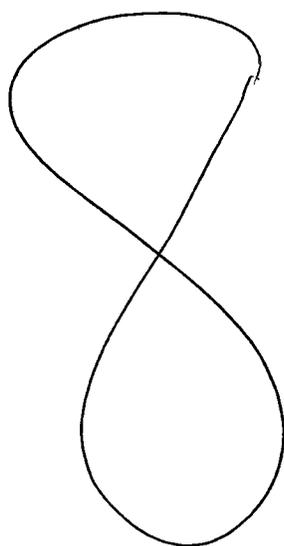
rare for someone to arrive on the scene while the carcasses are still fresh, and evidence in the form of granules or piles of dead flies on the bait are still visible. Because rangers are not trained in toxicology, stomach content samples are rarely taken. Further, the one laboratory in Kenya capable of analyzing for carbofuran residues now refuses to do it – the assumption among conservation groups is that they have been paid off.

Although few lab analyses have been done, the people doing the poisoning readily describe using Furadan, and all agrovets are familiar with this use for it. As strychnine and organophosphate acaricides are no longer available, there is no other readily available poison. In spite of FMC's denial, there is overwhelming evidence that Furadan has been used to decimate predators and scavengers in Kenya, and continues to be used in 2011 to kill wildlife in Kenya and elsewhere in Africa.

This statement is truthful to the best of my knowledge.

A handwritten signature in black ink, appearing to read "Laurence Frank". The signature is fluid and cursive, with the first name "Laurence" written in a larger, more prominent script than the last name "Frank".

Laurence Frank, PhD.
Director, *Living with Lions*
Research Scientist, University of California, Berkeley and
Panthera



My name is Martin Odino,

January 23, 2011

I am making this statement since I live in Kenya and based upon what I have seen, I believe that Furadan is continuing to be misused for wildlife poisonings as recently as January 3, 2011.

I am an affiliate of the National Museums of Kenya, Ornithology Section. I have an educational background in Zoology (Bachelor of Science in Zoology, 2005). Since 2007, I have worked under the Bird Committee of Nature Kenya (BirdLife International's Kenyan partner), BirdLife International African Partnership Secretariat in Kenya and Wildlife Direct (African Conservation Fund under the Richard Leakey & Associates) during which time I have ran consultancies on pesticide poisoning of wildlife and conducted surveys and research on bird and other wildlife poisoning. Broadly I am an ecologist though I have specialized on birds and therefore most of my research, particularly on poisoning is illustrated by studies on birds.

I have been involved with the issue of the misuse of pesticides in Kenya and specifically Carbofuran sold under the brand name Furadan 5G in Kenya, which is manufactured by FMC Corporation. I would like to give a brief most recent overview of what I have seen as to the current status with the misuse of Furadan and the stated withdrawal of Furadan from Kenya:

During April 2009, we had a meeting with two of FMC's top personnel at Wildlife Direct's offices in Nairobi Kenya and the proceedings of what was discussed can be accessed on-line at <http://www.furadanfacts.com/LinkClick.aspx?link=Content%2FDocs%2FWildlifeDirect%2520FMC%2520meeting%2520minutes%252015th%2520April%25202009.pdf>

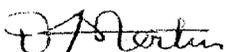
After the 60 Minutes broadcast, FMC announced their withdrawal of Furadan for their expressed concern for Kenya's wildlife, particularly lions and a buyback programme was put in place with the local distributors, JUANCO, being charged with the responsibility.

I have been conducting field work in the Western Kenyan marshes. On January 3-5, 2011, I was at the site where I have been working (Bunyala Rice Irrigation Scheme) since February 2009 and to say the least Furadan 5G is still being used by poachers to poison birds, especially African Openbills, *Anastomous lameligerus*. More horrifying and as you may have already read on our stop wildlife poisoning blog, <http://stopwildlifepoisoning.wildlifedirect.org/>, JUANCO the traditional distributor of FMC reinstated information on some confusing formulation of Furadan, yet information about Furadan had been off their website for about a year. It is ironic since the same JUANCO were the ones solely involved with the buy back. I thought they were helping to heal the wound, only to stab it raw and open again, by apparently selling it or some formulation of Furadan.

FMC withdrew Furadan during 2009, but this pesticide somehow surfaces among the poachers as recent as now (January 23, 2011), secretly supplied to them by unscrupulous distributors (who judging from the communication on Juanco's website must be JUANCO; check <http://juancogroup.com/?id=4&spg=30>) through the agrovets that must still be running this business in top secrecy.

I certify that the foregoing statements made by me are true.

Sincerely,



Martin Odino

Via Federal Express

December 29, 2010

Office of the Chief Counsel
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington D.C. 20549

Re: FMC Corporation
Shareholder Proposal of David Brook
Securities Exchange Act of 1934 – Rule 14a-8

Ladies and Gentlemen:

This letter is to inform the staff of the Division of Corporate Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) of the intention of FMC Corporation (the “Company”) to exclude from its proxy statement and form of proxy for its 2011 Annual Meeting of Shareholders (collectively, the “2011 Proxy Materials”) a shareholder proposal (the “Proposal”) and statements in support thereof (the “Supporting Statement”) received from Mr. David Brook (the “Proponent”). In accordance with Rule 14a-8 promulgated under the Securities Exchange Act of 1934 (the “Exchange Act”), the Company respectfully requests confirmation that the Staff will not recommend enforcement action if the Company excludes the Proposal from its 2011 Proxy Materials. The letter setting forth the Proposal and the relevant correspondence is attached hereto as Appendix 1.

Pursuant to Rule 14a-8(j), the Company has:

- filed this letter with the Commission prior to 80 calendar days before the Company intends to file its definitive 2011 Proxy Materials with the Commission (on or about March 21, 2011); and
- concurrently sent a copy of this letter to the Proponent.

Pursuant to Rule 14a-8(j), the undersigned hereby submits this letter and its attachments to the Commission, together with six additional copies. The undersigned has concurrently sent a copy of this letter and its attachments to the Proponent.

THE PROPOSAL

The Proposal requests that the Company establish a product stewardship program for Furadan® insecticide and other FMC pesticides that have been suspected to have been misused by third parties to harm wildlife or humans, particularly in Africa. Specifically, the Proposal sets forth the following resolution:

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OFFICE OF CHIEF COUNSEL
DIVISION OF CORPORATION FINANCE
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“RESOLVED, the Shareholders request the Board establish a legitimate product stewardship program by:

- Implementing immediate moratoriums on sales and withdrawals from the market of Furadan, and any other FMC pesticide, where there is documented misuse of products harming wildlife or humans, until FMC effectively corrects such misuse;
- Preparing and publishing at reasonable cost, excluding propriety information, a product stewardship report by October 2011, and annually thereafter, addressing all documented product misuses worldwide since 2005 and proposing changes to prevent further misuse including: working with foreign governments in training and educational programs, licensing applicators, restricting access, incorporating bittering agents and funding programs to prevent loss of livestock and wildlife;
- Establishing an independent scientific advisory panel to prepare these reports; and
- Incorporating in the FMC Corporate Responsibility Principles a human equality declaration stating that FMC will treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits.”

BASIS FOR EXCLUSION

As is evident from the Proposal and its Supporting Statement, this Proposal arises principally from concerns regarding alleged misuse of an FMC pesticide product – Furadan™ insecticide – directed at lions in Africa by cattle herders who are illegally seeking to protect their herds from lions through intentional misuse of this crop protection product. The Company has been following good stewardship practices regarding Furadan in Africa and elsewhere in the world for many years, even before this issue was highlighted in a March 2009 segment on CBS’ *Sixty Minutes* television program. Since the segment aired, the Company has engaged in extensive efforts to strengthen its stewardship programs and, contrary to the Proposal, already has a robust stewardship program. Starting from largely misleading assertions in the Supporting Statement, the Proposal seeks to micro-manage the business of the Company’s largest division, in ways that are substantially covered by existing Company processes.

Accordingly, the Company hereby respectfully requests the Staff to concur in its view that the Proposal may be excluded from the Company’s 2011 Proxy Materials pursuant to (1) Rule 14a-8(i)(10) because the Proposal relates to a matter that the Company has substantially implemented, (2) Rule 14a-8(i)(3) because the Proposal is materially false and misleading and (3) Rule 14a-8(7) because the Proposal deals with a matter relating to the ordinary business operations of the Company.

ANALYSIS

A. The Proposal May Be Excluded under Rule 14a-8(i)(10) Because the Proposal Has Been Substantially Implemented.

Under Rule 14a-8(i)(10), a proposal may be omitted if it has already been “substantially implemented.” The Staff has taken the position that “a determination that the Company has substantially implemented the proposal depends upon whether its particular policies, practices and procedures compare favorably with the guidelines of the proposal.” *Texaco Inc.* (avail. Mar. 28, 1991); *see also* Exchange Act Release No. 34-20091 (Aug. 16, 1983) (the “1983 Release”) (adopting interpretive change to “permit the omission of proposals that have been ‘substantially implemented by the issuer’”). A proposal need not have been implemented in full or precisely as presented for it to be omitted as moot under Rule 14a-8(i)(10) – all that is required is that the company has in place policies and procedures that address the proposal’s essential objectives satisfactorily. *See* 1983 Release; *see also Caterpillar Inc.* (avail. Mar. 11, 2008); *Wal-Mart Stores, Inc.* (avail. Mar. 10, 2008); *PG&E Corp.* (avail. Mar. 6, 2008); *The Dow Chemical Co.* (avail. Mar. 5, 2008); *Johnson & Johnson* (avail. Feb. 22, 2008) (each allowing exclusion under Rule 14a-8(i)(10) of a shareholder proposal requesting that the company prepare a global warming report where the company already had published a report that contained information relating to its environmental initiatives).

The Company believes that it may exclude the Proposal because, as discussed below, the Company has already substantially implemented the objectives sought by the Proponent.

1. Element 1 of the Proposal: *“Implementing immediate moratoriums on sales and withdrawals from the market of Furadan, and any other FMC pesticide, where there is documented misuse of products harming wildlife or humans, until FMC effectively corrects such misuse”*

Furadan® is a broad spectrum insecticide that is a crop protection product used by farmers around the world for improved crop yield and productivity. FMC sells Furadan and other pesticide products (including Marshal® Insecticide) to help farmers meet the demands of an ever-increasing human population on the world's food supply. Proper use of these products allows farmers to continue to farm efficiently and maintain favorable crop yields. Since its commercial launch in 1967, Furadan has enjoyed a long history as a safe and effective product for sustaining agriculture and has become one of the most widely-used pest control insecticides in the world. It is most commonly used in protecting crops such as rice and corn. Because of its versatility and effectiveness, Furadan is used in more than 40 countries by both large commercial farmers and small plot growers.

Prior to ceasing all sales into East Africa countries in 2008 and 2009, FMC sold the granular formulation of Furadan in Kenya for growers of corn, potatoes, vegetables, bananas and horticulture crops to use to control pests that are very destructive to crops – for example, nematodes, aphids, grubs, weevils, and stalk borers. In the Spring of 2008, the Company learned

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of an incident involving the possible poisoning of lions in the Maasai Mara region of Kenya, which allegedly involved the use of Furadan as the causal agent. In response, and out of an abundance of caution, the Company immediately stopped the distribution of Furadan into Kenya. The Kenya Pest Control Products Board (“PCPB”) – the Kenyan pesticide regulatory agency which is the Kenyan equivalent of the U.S. Environmental Protection Agency – and the Company conducted independent investigations into these alleged incidents, and both concluded that there was no connection between carbofuran (the active ingredient in Furadan) and the deaths of the animals. See Exhibits A and B attached hereto, which are the PCPB and Company investigative reports, respectively.

Nevertheless, the Company has not resumed sales of Furadan into Kenya following reports of the incidents in 2008, in spite of the absence of any evidence that the Company’s products were used in these criminal acts by third parties. In April 2009 the Company instructed its distributor in East Africa to cease all sales of Furadan into Tanzania and Uganda, which are neighboring countries to Kenya, as a proactive and precautionary measure in response to concerns by conservation groups that Furadan could be used for illegal baiting in those countries or, alternatively, brought into Kenya. In addition, the Company ceased selling Furadan in South Africa in early 2010. The Company has fully withdrawn from the sale and distribution of Furadan in East Africa and South Africa, has implemented a moratorium on any further sale or distribution of Furadan by FMC in these regions, and has no intention of re-introducing Furadan in these regions in the future. The Company is not aware of any other country where there is any ongoing reported poisoning of wildlife alleged to involve the use of pesticides currently produced and marketed by FMC¹. Accordingly, FMC respectfully submits that it has already implemented this aspect of the Proposal.

In addition to these moratoriums, the Company has taken additional preemptive action that exceeds the scope of the Proposal by establishing buy-back programs for Furadan in these regions. Beginning in the Spring of 2009, the Company implemented a Furadan buy-back program from distribution centers and retailers in Kenya, and beginning in the Summer of 2009, the Company implemented a Furadan buy-back program from distribution centers and retailers in Uganda and Tanzania. Moreover, that same year, the Company sent its own personnel and a specially-retained consultant to Kenya and surrounding countries, traveling over 25,000 kilometers to search for Furadan in local “Agrovet” retail shops (where many farmers shop for their agricultural supplies), in order to encourage them to participate in our buy-back program. Pursuant to these buy-back programs, the Company exported from Africa all Furadan that it repurchased from Africa in February 2010. These buy-back programs in each of Kenya,

¹ It is worth noting that there are many generic pesticides in Kenya and other East Africa nations, some of which look similar to FMC’s Furadan product. Given the high brand recognition of “Furadan” and its many years on the local market, it is not surprising that some persons are swift to call any pesticide granule found in a baiting situation as “Furadan” even when the product has no connection whatsoever to FMC-produced Furadan carbofuran product.

Uganda, and Tanzania remain open today for any Furadan product that might still be found in these countries.

2. Element 2 of the Proposal: *“Establish a legitimate product stewardship program by...preparing and publishing at reasonable cost, excluding proprietary information, a product stewardship report by October 2011, and annually thereafter, addressing all documented product misuses worldwide since 2005 and proposing changes to prevent further misuse including: working with foreign governments in training and educational programs, licensing applicators, restricting access, incorporating bittering agents and funding programs to prevent loss of livestock and wildlife”*

The Company has a longstanding product stewardship program that is endorsed by executive management and integrated into all management processes involving the pesticide business. This program is effective and is continually being improved. Even though the Company’s stewardship efforts date back at least to the launch of Furadan in the late 1960s, the Company recognizes that stewardship is an ongoing and never-ceasing obligation, and that the message and the means of fulfilling its stewardship objective must be constantly evolving. A recent change in the program includes the creation of a Global Product Stewardship Manager position to oversee international efforts. This Manager provides outreach and is in regular communication with foreign governmental and NGO entities on issues related to alleged Furadan misuse.

Accordingly, in June 2009, the Company established an internal product stewardship network (the “Stewardship Network”) to assist the Company and the U.S. Environmental Protection Agency (the “USEPA”) in issuing reports and recommendations, in addressing global issues and in implementing various programs designed to respond to both documented and alleged misuses of Furadan and other pesticides manufactured by the Company. The Stewardship Network, which built on existing informal communications processes, promotes regular conversation among regional FMC product stewardship personnel to discuss local incidents of product misuse and to consider and design proactive measures to prevent any such misuse. The Stewardship Network facilitates the Company’s longstanding annual product stewardship dialogue process with the Company’s Chief Executive Officer and executive management, which addresses: (i) the Company’s progress toward the goals set during the prior year, (ii) any instances of alleged product misuse and the Company’s responding action plan, (iii) the product stewardship programs in each of the Company’s business units, (iv) areas of improvement and (v) the future goals for the coming year.

The Stewardship Network also facilitates the Company’s direct reporting to the USEPA of adverse effects from the Company’s pesticide products worldwide that come to the Company’s attention from the field, publications, and other sources and which are reportable to USEPA under US pesticide law. These reports are used by the USEPA to identify trends and to implement responsive action plans. In conjunction with these comprehensive reports, the Company has a crisis management plan to escalate the communication of serious adverse event reporting to its executive officers. Upon the Company’s receipt of information relating to any pesticide incidents that pose a serious and immediate threat to protecting human health, safety or

the environment, the Company immediately assembles a team of personnel having operational supervision over key functional areas to address the issue. If the event is significant, such incidents are swiftly escalated to the Company's executive committee and the Company's corporate health and safety organization.

The Company's stewardship program includes the dissemination of reports detailing the Company's stewardship goals, initiatives and achievements. These reports are used to inform and educate employees of the seriousness with which the Company treats stewardship principles, as well as to counsel users of the Company's products as to the importance of the proper and safe use of these products. Two such reports – one relating to the Company's U.S. market (where the Company no longer distributes Furadan) and the other pertaining to the Company's South America market – are attached hereto as Exhibits C and D.

Additional evidence of the Company's commitment to stewardship is the openness with which the Company treats Furadan safety issues. The Company has sponsored a website dedicated to a discussion of the alleged involvement of Furadan in illegal activities in certain African countries, including a description of the Company's response as well as a host of additional relevant information.²

Indeed, a commitment to stewardship is a core principle of the Company. One of the five key elements in the Company's "VISION 2015" growth strategy, recently unveiled by the Chief Executive Officer to the Company's employees, is that the Company "be safe, ethical and responsible stewards." This tone-at-the-top message is reiterated particularly in the Agricultural Products Group organization ("APG") through means such as top level communications from the Group's President, regular communications from the Group's Global Stewardship Manager, and training by Group legal counsel.

Another part of this element of the Proposal requests that the Board establish a "legitimate" product stewardship program by "working with foreign governments." As demonstrated below, the Company has already substantially implemented this aspect of the Proposal. The Company's Stewardship Network spends considerable time and effort working with conservation groups and the Company's distributors, *in addition to foreign governments*, to prevent further misuses of the Company's products. Some of the Company's recent efforts include the following:

- In order to facilitate the detection of Furadan as the cause of any suspected wildlife poisoning, FMC has (i) outstanding offers to fund laboratory analyses by, (ii) outstanding offers to provide product information to, (iii) outstanding requests to receive information from, and (iv) sent teams to meet with, each of the following entities and organizations: U.S. embassy officials and local regulatory authorities in Kenya, Uganda and South Africa; National Geographic; the Kenya Wildlife Service; Wildlife Direct Inc., a charitable

² The website address is www.furadanfacts.com.

December 29, 2010

organization registered in both Kenya and the United States that is dedicated to saving endangered species; Lion Guardians, a conservation program dedicated to preserving and protecting lions from, among other threats, the poisoning by pesticides in Kenya; Masaailand Preservation Trust, an organization which works with local African communities to resolve human-wildlife conflict; the Chemical Crime Forum, which is operated by the Endangered Wildlife Trust; and the following distributors of the Company: Juanco Group, Philagro South Africa (Pty) Ltd. and Arysta LifeScience South Africa.

- FMC takes a leadership role in representing the chemical manufacturing industry in the Rotterdam Convention, which is a legally-binding international treaty, and in the course of such representation (i) receives notifications of regulatory actions taken by countries relating to problematic and hazardous pesticide formulations and (ii) corresponds with the Rotterdam Convention's 31 designated experts on the Convention's Chemical Review Committee;
- FMC has provided significant financial support to Panthera in its big cat conservation efforts, particularly in Africa with Panthera's Lion Guardian program, which helps prevent the loss of wildlife and livestock in areas where the herder-wildlife conflict is particularly acute;
- FMC has worked through its trade organization, CropLife International, as a member of the stewardship team that provides product stewardship training programs for farmers around the world on the responsible use of pesticidal products; and
- FMC has expanded the scope of the Company's stewardship program into Asia by holding a Furadan workshop in Thailand with regulators and poison control center officials.

These are but a few examples of the recent actions taken by the Company to embellish its stewardship program. They rest on a firm foundation of annual training by FMC and its distributors which is undertaken particularly in developing nations and particularly with respect to sensitive products such as Furadan, where farmers, retailers, local regulators, pesticide applicators, and other interested persons learn how to properly use and apply products so that adverse impacts to human health and the environment can be avoided. FMC has invested in these efforts every year, in countries as diverse as Kenya, Brazil, Mexico, Indonesia and Thailand, and thousands of persons have received such training over the many years of these efforts. See Exhibits E, F and G for examples of training materials used in the Company's stewardship program.

Finally, FMC considers and implements programs and research to mitigate potential incidents, including research to see if a bittering agent can be added that will effectively deter wildlife or keep them from ingesting the granular formulation of Furadan that is popular with farmers. The current Furadan usage instructions, which involve tilling the insecticide under the surface of the soil, have been very successful in minimizing exposure to birds. FMC believes

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in a continually evolving approach to product stewardship, as the Company continues to seek new ways to improve and expand the scope and effectiveness of its stewardship efforts.

Accordingly, the Company already has in place robust stewardship programs and funding initiatives that accomplish substantially all of the material aspects of this element of the Proposal, the only exception being the publication of an annual product misuse report available to the public. However, even with respect to this one exception, the Company has in place other mechanisms to inform the Stewardship Network and senior management of these issues, and to interact with the public regarding same. With respect to alleged Furadan misuse in Africa in particular, the Company has a public website which describes the situation and the Company's stewardship efforts. These collective efforts show that FMC is open to, and engaging all interested persons in, its stewardship programs. In light of all these ongoing actions, FMC respectfully submits that this part of the Proposal has also been substantially implemented.

3. Element 3 of the Proposal: *“Establishing an independent scientific advisory panel to prepare these reports”*

In June 2010, consistent with its overall focus on stewardship, the Company established an independent “Sustainability Council” with the goal of providing FMC's Agricultural Products Group with an independent and diverse range of external expertise, perspectives, and guidance related to APG's global stewardship program and sustainability practices. It is comprised of scientists, an environmental lawyer, a global leader in implementing corporate responsibility and ethics programs, and conservationists. The members of the Sustainability Council come from the following organizations: Panthera (the world's leading big cat preservation NGO); Mainstream Green Solutions (a consulting firm for climate change, natural resource conservation and other environmental issues); the Academy of Natural Sciences (the oldest natural science research institution and museum in the Americas); the Partnership to Cut Poverty and Hunger in Africa (an NGO focused on improving conditions of Africans); Emerging Agriculture LLC (a consulting firm that advises on crop sustainability policies); and Hong Kong University's Center for Corporate Governance and Financial Policy.

The objectives of the Sustainability Council are to:

- inform APG of emerging agricultural, environmental, conservation and/or social issues, trends and opportunities related to APG's global business;
- advise APG on enhancing its global stewardship program and sustainability policies;
- recommend metrics for assessing APG's global stewardship and sustainability practices;
- provide input aimed at positioning APG as a leader in sustainable practices and products; and

- avail APG and senior management with critical thinking, candid discussions and advice for action on conflicts.

The full Sustainability Council has had one two-day meeting in 2010, and several subgroups have met, including several members who attended the two-day World Food Prize conference in Iowa – an event which focuses on improving agriculture particularly in developing nations. In addition, many one-on-one conversations have occurred. The next full meeting will be convened within six months. The Council’s participation at this year’s World Food Prize was particularly relevant to FMC’s stewardship efforts in Africa: the event featured more than 1,000 researchers, governmental policymakers, and other experts from 65 countries and NGOs, with a special emphasis on Africa, highlighted by a keynote address from former U.N. Secretary General Kofi Annan, who now chairs the Alliance for a Green Revolution in Africa.

The Company utilizes the advice and recommendations received from the Sustainability Council to refine the Company’s stewardship activities and to devote additional attention and funding to the initiatives that would best achieve the Company’s stewardship objectives. The Company respectfully submits that this evidences substantial implementation of this element of the Proposal.

4. Element 4 of the Proposal: *“Incorporating in the FMC Corporate Responsibility Principles a human equality declaration stating that FMC will treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits.”*

The Company conducts its business in a consistent manner worldwide that protects public and occupational health, the environment and employee safety. Specifically, the Company complies with the Code of Conduct of the Food and Agricultural Organization of the United Nations³ (“FAO Code of Conduct”), the American Chemistry Council’s Responsible Care Guidelines,⁴ and the Company’s Code of Ethics and Business Conduct⁵ (“Code of Ethics”), which in the aggregate, substantially incorporate the Company’s commitment to the Proposal’s “human equality declaration.”

The Company adheres to all standards set forth in the FAO Code of Conduct by:
(i) assisting countries that have not yet established the requisite regulatory controls on the quality and suitability of pesticide products to promote the judicious and efficient use of such products and address the potential risks associated with the use of these products; (ii) promoting practices

³ The FAO Code of Conduct can be accessed at the following URL:
<http://www.fao.org/docrep/005/y4544e/y4544e00.htm>.

⁴ The ACC’s Responsible Care Guideline can be accessed at the following URL:
http://www.americanchemistry.com/s_responsiblecare/sec.asp?CID=1298&DID=4841

⁵ The FMC Code of Ethics and Business Conduct can be accessed at the following URL:
http://media.corporate-ir.net/media_files/irol/11/117919/code_ethics_ENG.pdf.

that reduce risks in the handling of pesticides, including minimizing adverse effects on humans and the environment and preventing accidental poisoning resulting from improper handling; and (iii) ensuring that pesticides are used effectively and efficiently for the improvement of agricultural production and of human, animal and plant health. Among other things, the Company provides certain of its foreign distributors with protective equipment and approved spray application equipment for the distributors to give away for free to customers, so as to encourage and enable the safe use of the Company's products. The Company also provides training in the native languages of various end markets for its products, in order to protect the health of farmers using the Company's products.⁶

As an active member company of the American Chemistry Council ("ACC"), the Company is committed to ensuring that the ACC's principles of "Responsible Care" are implemented worldwide throughout the Company's business.⁷ Responsible Care is a chemical industry initiative designed to continually improve the actions taken by the Company to protect its employees, customers, the public and the environment. The Company has committed to complying with the Responsible Care program and does so by implementing responsible development, manufacture, transportation, use and disposal procedures of its products. This includes training of employees in the Responsible Care principles, emphasis on the importance of the Responsible Care principles in the Company's Code of Ethics,⁸ and a regular independent audit of the Company's practices under the auspices of the ACC to assure compliance with the Responsible Care standards.

Under its Code of Ethics, the Company is committed to conducting its global business with honesty and integrity and complying with all applicable laws of all countries where the Company operates. The Code of Ethics exemplifies the Company's dedication to these business standards and summarizes the legal and ethical principles that the Company follows in implementing its business operations worldwide. The Code of Ethics stresses the importance of protecting the environment as well as human health and safety, beyond achieving mere compliance with applicable laws. Although laws and standards vary from country to country and culture to culture, the Company's common goal and continuing commitment is to maintain equally high standards wherever it operates. The Company's commitment to the Code of Ethics starts at the top of the Company's corporate governance structure, as FMC's directors, officers and employees are responsible for becoming familiar with and abiding by the Code of Ethics. This includes the Company, its subsidiaries, affiliates, joint ventures and all other entities, that, in each case, are directly or indirectly controlled or managed by the Company; the employees

⁶ See Exhibits E, F and G for examples of written, photographic and pictorial training materials (portions of which have been translated into English for readability by U.S. headquarters personnel).

⁷ The FMC Responsible Care website can be accessed at the following URL:
<http://www.fmc.com/AboutFMC/ResponsibleCare/ResponsibleCareProgram.aspx>

⁸ See Section 7 on page 6 of the FMC Code of Ethics and Business Conduct, referenced in footnote 5, *supra*.

and directors of these entities in their work on behalf of the Company; and consultants and other independent contractors in their work on behalf of the Company. Moreover, the Company facilitates a means to enforce the Code of Ethics by providing a globally accessible, anonymous and confidential “Ethics Response Line” that operates twenty-four hours per day, seven days per week. Failure to carry out the responsibilities set forth in the Code of Ethics can lead to disciplinary action, including discharge.

All these commitments apply with particular emphasis to the Company’s research, development, marketing and sales of its pesticides, including Furadan. The Company recognizes that these products, while having great benefit to agricultural production, can have negative effects if used improperly. Therefore, the Company takes great care in studying the potential toxicological effects of its products, and, before marketing in any country in the world, ensures that the use of the pesticide product will not cause adverse effects to workers or persons who eventually consume foods produced by crops treated by the Company’s pesticides. With regard to Furadan, over forty years of use by many thousands of farmers around the world confirms that the product is safe when used correctly – whether the farmer is based in Iowa or in Kenya. FMC is committed to the protection of all such farmers wherever they may be, and reinforces this effort through research, proper labeling, training and other outreach. Similarly, toxicological data – and 40 years of experience – confirm that permitted carbofuran residues on foodstuffs produced around the world will not result in adverse effects to humans. The Company takes equally seriously the protection of such consumers both in the United States and in the developing world.

* * *

In summary, all four elements of the Proposal have already been substantially implemented by the Company. While the Company recognizes that varying interpretations of the Proposal could lead to slight discrepancies between the requirements of the Proposal and the Company’s aforementioned efforts, the Staff consistently takes the position that a company need not comply with every detail of a proposal or implement every aspect of a proposal in order to make a determination that the proposal has been substantially implemented and to exclude it under Rule 14a-8(i)(10). See *Bank of America Corp.* (avail. Jan. 4, 2008); *AMR Corporation* (avail. Apr. 17, 2000); *Masco Corp.* (avail. Mar. 29, 1999); *Erie Indemnity Company* (avail. Mar. 15, 1999); *AutoNation Inc.* (avail. Mar. 5, 2003); *AutoNation Inc.* (avail. Feb. 10, 2004); and *Symantec Corporation* (avail. June 3, 2010). As is demonstrated by the foregoing, the Company works daily to implement the essential objectives of the Proposal. The Company has adopted its current stewardship program after careful consideration, with input from the Sustainability Council, and with due regard to the actions that the Company, as a business organization with responsibilities to its shareholders and stakeholders, may properly take to help combat the illegal and intentional misuse of the Company’s products.

As a consequence, the Company does not anticipate that it would implement a product stewardship program that is materially different from the stewardship program already guiding the Company’s own extensive actions, even if the Proposal were to be adopted.

Accordingly and for the reasons described above, the Company believes that it has substantially implemented the essential objectives of the Proposal and that the Proposal may be properly excluded pursuant to Rule 14a-8(i)(10).

B. The Proposal May Be Excluded under Rule 14a-8(i)(3) Because the Proposal and the Supporting Statement are Materially False and Misleading.

Rule 14a-8(i)(3) permits the exclusion of a proposal from a company's proxy statement when the proposal or supporting statement is contrary to any of the Commission's proxy rules, including Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. In recent years, the Commission has clarified the grounds for exclusion under Rule 14a-8(i)(3) and noted that proposals may be excluded where the company demonstrates objectively that a factual statement is materially false or misleading. *See* Staff Legal Bulletin No. 14B (Sept. 14, 2004) ("SLB No. 14B").

As explained below, the Proponent's Proposal and Supporting Statement weaves a series of misleading and false statements as the premise to his inflammatory and erroneous assertions that "FMC has failed to responsibly control the misuse of Furadan, thus jeopardizing FMC's reputation and profitability" and is "creating a nightmarish result." These statements, however, cannot withstand close scrutiny and are additional grounds for excluding the Proposal in its entirety.

Proponent's Proposal – false and misleading

"RESOLVED, the Shareholders request the Board establish a legitimate product stewardship program by... [i]ncorporating in the FMC Corporate Responsibility Principles a human equality declaration stating that FMC will treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits."

The Staff has permitted the exclusion of certain portions of stockholder proposals and supporting statements from proxy materials when such proposals and supporting statements contained false or misleading statements or omitted material facts necessary to make statements made therein not false or misleading. *See Farmer Bros. Co.* (avail. Nov. 28, 2003); *Monsanto Co.* (avail. Nov. 26, 2003); *Sysco Corp.* (avail. Aug. 12, 2003); *Siebel Sys., Inc.* (avail. Apr. 15, 2003). Specifically, the Staff stated in SLB No. 14B that companies may rely "on Rule 14a-8(i)(3) to exclude or modify a statement... [(a)] where statements directly or indirectly impugn character, integrity, or personal reputation, or directly or indirectly make charges concerning improper, illegal, or immoral conduct or association, without factual foundation; [or (b)] the company demonstrates objectively that a factual statement is materially false or misleading..." SLB No. 14B.

Here, the Proposal requests that the Company incorporate into its Corporate Responsibility Principles a "human equality declaration" stating that the Company will "treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits" (the "Declaration"). The requested Declaration implies that the Company currently engages in

business practices that discriminate against “third world people” in putting their safety at risk by exposure to foods that may contain carbofuran residues. This underlying premise is false and materially misleading and thus this Proposal should be excluded.

While it is true that the USEPA has revoked carbofuran tolerances in the United States, the Company believes such action was not scientifically valid and not in accordance with the procedures outlined in the Federal Food Drug and Cosmetic Act.⁹ For this reason, the Company has been seeking administrative and judicial redress against USEPA, and will now be filing a petition for certiorari with the U.S. Supreme Court. FMC is not alone in these efforts – US farmers believe strongly that Furadan is safe and efficacious and so the Company has been joined in its efforts to overturn USEPA’s decision by the National Corn Growers Association, National Potato Council and the National Sunflower Association. These groups represent the three major crops on which Furadan has been used in the United States.

The Company has been challenging USEPA not for the continued sales of US Furadan which are admittedly modest, but rather, because the Company believes firmly that the product is safe. Indeed, with regard to the particular point noted in this Proposal element – U.S. residue limits – USEPA agrees with the Company and has gone on record that carbofuran residues on domestic crops are safe.¹⁰ The USEPA based its decision on computer models showing theoretical residues in certain ground and surface water scenarios – not in food.

The Company carries this same safety commitment to its sale and marketing of Furadan and other FMC pesticides in other countries. As noted above, the Company generates residue data on crops before it begins marketing its pesticide products in any country in the world. Based on those analyses, and the toxicological data in hand regarding the active ingredient, FMC scientists and researchers can determine the appropriate level of product residue that may remain on a harvested crop and which could potentially remain on a consumable food. Governmental entities and supra-national bodies such as the World Health Organization then confirm or establish different safe residue limits.

The pesticide safety system is highly regulated at many levels all around the world. The Company complies with these regulations in addition to following its own internal high standards. The sale and marketing of Furadan in particular is confirmed by its more than 40-year history, where safe residue limits in all countries have protected persons (whether they be in Africa, Asia, South America, or the United States) who eat foods treated with carbofuran,

⁹ The U.S. Circuit Court of Appeals for the D.C. Circuit held that the USEPA’s revocation of the carbofuran residue limits was “arbitrary and capricious” and mandated that such tolerances be reinstated. *See National Corn Growers Association, et al. v. Environmental Protection Agency et al.*, 613 F.3d 266 (D.C. Cir. 2010).

¹⁰ In connection with its revocation of carbofuran residue limits for all sales of carbofuran in the U.S., the EPA stated: “The estimated acute dietary exposure from carbofuran residues in food alone (i.e., assuming no additional carbofuran exposure from drinking water), are below EPA’s level of concern for the U.S. Population and all population subgroups.” 74 Fed. Reg. 23,077 (May 15, 2009).

from adverse effects. Given that this record establishes that the Company does not discriminate between U.S. people and “third world people,” the Proposal is false and materially misleading and thus should be excluded under Rule 14a-8(i)(3).

Proponent’s Supporting Statements – false and/or materially misleading

The Proponent has also made the following statements in support of the Proposal which the Company considers to be materially false and misleading, in violation of the Commission’s proxy rules, for the reasons set forth below:

1. Proponent’s Statement: *“Furadan is being used to intentionally kill large mammals such as lions in Africa.”*

The Company respectfully submits that this statement is unsubstantiated and, accordingly, materially misleading. The Company is not aware of any substantiated cases of large mammals being intentionally killed with Furadan. The Company met with the Kenya Wildlife Service (“KWS”) in both 2008 and 2009 to review alleged incidents of illegal poisoning of lions with Furadan. Although KWS advanced **unsubstantiated** claims linking a small minority of the lion deaths from 2000-2008 to Furadan misuse by pastoralists, and notwithstanding formal requests by FMC for reports from KWS to review the relevant data and any analytical methods used, KWS has not provided any evidence to support its assertions.¹¹ As explained earlier in this letter, the Kenya Pest Control Products Board and the Company conducted independent investigations into alleged incidents of lion poisoning, and both concluded that there was no connection between carbofuran (the active ingredient in Furadan) and the deaths of the animals. Furthermore, since those incidents were highlighted in the media, no substantiated report of Furadan poisonings has been submitted to the Kenya Pest Control Product Board, which would be required if in fact there were any linkage.

2. Proponent’s Statement: *“Millions of migratory birds in South and North America have been unintentionally poisoned by Furadan.”*

The Company respectfully submits that this assertion is materially false and misleading. The purported evidence on which the Proponent relies is pure conjecture. As a more plausible estimate, on February 5, 2008, the USEPA presented statistics, attached hereto as Exhibit H, indicating that less than 11,000 migratory birds have been affected by Furadan in the last 38 years. In addition, the American Bird Conservancy database, attached hereto as Exhibit I,

¹¹ With regard to one 2008 incident, KWS produced a report asserting that carbofuran baiting caused the death of two lions. However, that report relied on the analysis by a chemist who used an unreliable method of testing. See attached report of Dr. Edward Kikta, a fellow of the American Institute of Chemists and former chairman of the American Society for Testing Materials committee on Chromatography, attached hereto as Exhibit J. Therefore, the KWS report, attached hereto as Exhibit K, purportedly linking carbofuran in this one incident is suspect. Furthermore, even if the poison used was carbofuran, which the Company denies, it could easily have been a generic form of carbofuran and not FMC’s Furadan. See footnote 1, *supra*.

indicates that an estimated 40,000-50,000 birds have been affected by Furadan in the 32-year period from 1972 to 2003. As any shareholder would recognize, there is a world of difference between an estimated 40,000-50,000 and “millions.” Further, and as comparison points of reference, in the United States, high-rise buildings cause approximately 300,000,000 bird deaths each year and transmission and distribution lines cause approximately 150,000,000 bird deaths each year.¹² Finally, with respect to South America, the Company is not aware of any reports of bird poisonings attributable to Furadan.

3. Proponent’s Statement: *“USEPA banned all carbofuran residues in domestic foods, effectively prohibiting its use in America on December 31, 2009.”*

The Company respectfully submits that this assertion is materially misleading. The USEPA did revoke all domestic carbofuran tolerances but based its decision on computer models showing theoretical residues in ground and surface water – not in food. Indeed, USEPA has confirmed that carbofuran residues in all US-labeled food crops are safe.¹³

4. Proponent’s Statement: *“The European Union banned residues in foods in 2007.”*

The Company respectfully submits that this assertion is materially false and misleading. The European Union did not ban carbofuran residues in foods. What the European Union did was omit carbofuran from a new list of approved active ingredients, resulting in carbofuran being subject to specified residue limits under European Union regulation. These default limits permit the continued importation into the European Union of treated commodities with residues at de minimis levels which carbofuran has for many crops.¹⁴

5. Proponent’s Statement: *“While Furadan use is restricted in the United States, the Company has allowed its unrestricted international sale in corner stores in many third world countries.”*

The Company respectfully submits that this assertion is materially misleading. Furadan is heavily regulated in worldwide markets. The Company sells only to *licensed* distributors worldwide and authorizes the sale and distribution of Furadan only to *licensed* retail shops that sell agricultural products. Further, the Company has voluntarily ceased supplying any resellers in Kenya, Uganda, Tanzania and South Africa, as more fully described in Section A, above. Finally, the document to which the Proponent refers to substantiate this claim, attached

¹² See the American Bird Conservancy report, attached hereto as Exhibit I, at the tab captioned “Other Killers.”

¹³ See footnote 9, *supra*.

¹⁴ See European Union MRL (maximum residue limits), attached hereto as Exhibit L, showing permissible levels of carbofuran residues in hundreds of different types of foods, as currently in effect.

hereto as Exhibit M, refers only to now-halted sales in Kenya, not to sales in “many third world countries” as alleged by the Proponent.

6. Proponent’s Statement: *“it is possible residues of [Furadan] were in your morning cup of coffee, since residues are allowed in certain imported foods.”*

The Company respectfully submits that this assertion is materially false and misleading. Neither carbofuran nor its metabolites are found in the processed commodities of either roasted or instant coffee. Accordingly, “your morning cup of coffee” would not contain residues of Furadan. Furthermore, USEPA’s regulations on imported coffee beans permit safe levels of carbofuran residue. The U.S. Circuit Court of Appeals for the D.C. Circuit held that the USEPA’s prior revocation of the carbofuran residue limits (including coffee) was “arbitrary and capricious,” and mandated that such tolerances be reinstated. See National Corn Growers Association, et al. v. Environmental Protection Agency et al., 613 F.3d 266 (D.C. Cir. 2010).

7. Proponent’s Statement: *“The irresponsible and unregulated use of Furadan through a lack of product stewardship by FMC in Africa, Asia and South America is creating a nightmarish result...”*

The Company respectfully submits that this assertion is materially false. Furadan, like every other pesticide, is regulated by governments in every country around the world and cannot be sold without submission of relevant data and issuance of a product registration. In addition to governmental regulation in all countries in Africa, Asia and South America, FMC sells Furadan in a responsible manner, using only licensed distributors who train farmers on the safe and effective use of the product. The overwhelming majority of farmers who purchase Furadan have been using this product responsibly and safely for over 40 years because it substantially increases crop yields in an efficient and affordable manner. This responsible use of Furadan has helped farmers succeed in putting food on the table of millions of people living in Africa, Asia and South America. Moreover, the Company (either directly or through its distributors or a trade association) has implemented product stewardship programs in Africa, Asia and South America. As described above, when FMC became concerned regarding potential Furadan misuse in East Africa, it instituted moratoriums on sales by FMC of Furadan in Kenya, Uganda, Tanzania and South Africa with no intention of reintroducing the product in these countries, and further, has established buy-back programs for any remaining Furadan product found in Kenya, Uganda, and Tanzania.

8. Proponent’s Statement: *“prompting CBS Sixty Minutes to document the intentional misuse of this product to exterminate lions in Kenya.”*

The Company respectfully submits that this assertion is materially misleading. The documentation cited by CBS Sixty Minutes did not include any actual evidence that Furadan was used to exterminate lions in Kenya. A close reading of the program transcript or a careful listening to the program will confirm that CBS Sixty Minutes nowhere stated conclusively that Furadan was the cause of any lion deaths.

9. Proponent's Statement: *"There are new reports that Furadan and Marshal (carbosulfan) are being intentionally misused to exterminate wildlife in other African countries, including Uganda, Tanzania and South Africa and to poison fresh water fish and waterfowl sold for human consumption."*

The Company respectfully submits that this assertion is unsubstantiated and, accordingly, materially misleading. The Company has not received any substantiated reports that either Furadan or Marshal have been intentionally misused to exterminate wildlife in any African countries or to poison freshwater fish and waterfowl for human consumption. The reports to which the Proponent refers¹⁵ either do not refer to FMC products or refer to them in a misleading and unsubstantiated, speculative manner.

10. Proponent's Statement: *"While FMC acted to stop sales in Kenya, it has not stopped the problem from spreading to other countries."*

The Company respectfully submits that this assertion is materially false. The Company has ceased all distribution and sales of Furadan to Uganda, Tanzania and South Africa, and has taken extensive measures to address these issues, as discussed more fully in Section A, above.

11. Proponent's Statement: *"FMC has failed to responsibly control the misuse of Furadan, thus jeopardizing FMC's reputation and profitability."*

The Company respectfully submits that this assertion is materially false. As discussed above, the Company has ceased all sales and distribution of Furadan in East Africa and South Africa in response to alleged misuse, and the Company's response was expeditious. The Company has invested further in the implementation of robust stewardship programs to address the responsible use of Furadan. Finally, if anything, FMC's reputation as a responsible product steward has been increasing: over the last several years, the Company's Agricultural Products Group business units in Mexico and Brazil have won recognition for industry-leading stewardship programs.¹⁶

¹⁵ See, Evidence for Revoking Registration of Carbofuran in Kenya, May 17, 2010, as to reported incidents of misuse in Kenya, at <http://www.scribd.com/doc/34411935/Wildlife-Direct-Carbofuran-Report-for-Task-Force-17-5-10>, and Measuring the Conservation Threat to Birds in Kenya from Deliberate Pesticide Poisoning, Martin Odino, July 30, 2010, at <http://stopwildlifepoisoning.wildlifedirect.org/>.

¹⁶ APG's Brazil division was named as the "top company in Grower Education for the safe use of pesticides" by a judging commission from the Brazilian government in 2005. The commission acknowledged FMC's product stewardship program that focused on Responsible Care and 7 Habits of Safe Use for crop protection products. In 2009 and 2010, APG's Mexico division received the distinction of being declared a Socially Responsible Company. The distinction is granted upon a determination that a company's culture is based on principles of honesty, transparency and service, where the company bases its vision and commitment in policies, programs, decision-making and actions designed so as to positively impact employees, the environment and the communities in which the company operates, beyond its basic obligations.

12. Proponent's Statement: *"FMC should also amend its Corporate Responsibility Policies, since it affords Americans greater protections from exposure than third world people, who are allowed unlimited exposure to Furadan."*

The Company respectfully submits that this assertion is materially false. While it is not clear precisely to whom the Proponent is referring by his reference to "third world people," FMC can confirm that purchasers of Furadan in any of its worldwide markets, including the continents referred to elsewhere in the Proposal – Africa, South America and Asia – are not exposed to *unlimited* amounts of Furadan. Furadan is distributed only in marketable quantities to licensed resellers, and the usage instructions on the product label clearly indicate proper application protocols in the local language. Accordingly, crops that are subject to Furadan application feature acceptable residue limits and are in compliance not only with all applicable laws and regulations, but also with the Company's commitment to protect human health, in addition to the health of wildlife and the protection of the environment. As discussed above, the Company operates its business in global compliance with the FAO Code of Conduct, the American Chemistry Council's Responsible Care Guidelines and the Company's Code of Ethics, which in the aggregate facilitate the operation of the Company's global business in a consistent manner that protects public and occupational health, the environment and employee safety. Furthermore, the document to which the Proponent referred FMC to substantiate this claim, attached hereto as Exhibit N, refers to a generic brand of carbofuran sold in a three-way dustable formulation powder that FMC does not make or market – it is another company's product.

Summary

Due to the preponderance of materially false and misleading statements contained in the Proposal, the Company believes attempting to correct and edit the Proposal would be fruitless, and therefore the Proposal should be completely excluded. The Company respectfully submits that the Proposal may be excluded by virtue of Rule 14a-8(i)(3) and requests that the Staff not allow the defects in the Proposal to be corrected by amendment.

In the alternative, if the Staff is unable to concur with the Company's conclusion that the Proposal should be excluded in its entirety because of the numerous false and misleading statements contained therein, the Company respectfully requests that the Staff recommend the exclusion of the statements specifically discussed above. In the event the Staff permits the Proponent to make the substantial revisions necessary to bring the Proposal within the requirements of the proxy rules, the Company respectfully requests explicit confirmation from the Staff that such revisions are first confirmed as accurate and subject to complete exclusion by the Company if they cause the Proposal to exceed the 500 word limitation set forth in Rule 14a-8(d) of the Exchange Act.

C. The Proposal May Be Excluded under Rule 14a-8(i)(7) Because the Proposal Deals with Matters Relating to the Company's Ordinary Business Operations.

The Proposal may be properly excluded from the Proxy Materials under Rule 14a-8(i)(7) because it encompasses matters relating to the Company's ordinary business operations.

Under Rule 14a-8(i)(7), a company is permitted to exclude a shareholder proposal if it “deals with a matter relating to the conduct of [its] ordinary business operations.” The first central consideration upon which the policy of this rule rests is that “[c]ertain tasks are so fundamental to management’s ability to run a company on a day-to-day basis that they could not, as a practical matter, be subject to direct shareholder oversight.” See Exchange Act Release No. 34-40018 (May 21, 1998). The second central consideration underlying the exclusion for matters related to the Company’s ordinary business operations is “the degree to which the proposal seeks to ‘micro-manage’ the company by probing too deeply into matters of a complex nature which shareholders, as a group, would not be in a position to make an informed judgment.”

The SEC has taken the position that decisions regarding the sale, content or presentation of a particular product, whether considered controversial or not, are part of a company’s ordinary business operations and thus may be excluded under Rule 14a-8(i)(7), see *The Coca Cola Co.* (avail. Jan. 22, 2007) (proposal requesting, in part, that the company adopt specific requirements relating to the labeling of its caffeinated beverages); *Marriott International, Inc.* (avail. Feb. 13, 2004) (proposal prohibiting the sale of sexually explicit material at Marriott owned and managed properties); *Walmart Stores, Inc.* (avail. Mar. 9, 2001) (proposal requesting that the retailer stop selling handguns and their accompanying ammunition was excludable). For example, in *Walgreen Co.* (avail. Oct. 13, 2006), a shareholder sought to include a proposal that the company’s board of directors publish a report characterizing “the extent to which Walgreens’ private label cosmetics and personal care product lines contain suspected carcinogens, mutagens, reproductive toxicants, and chemicals that affect the endocrine system, accumulate in the body or persist in the environment.” Despite the social policy issues raised by the shareholder’s proposal, the Staff concurred in the Company’s argument that the proposal could be excluded under Rule 14a-8(i)(7).

The Company is aware of the Staff’s position concerning the inclusion of stockholder proposals that have ethical or social significance. The Staff has found that some of the issues that raise a “significant social policy issue” include: (i) animal testing, see *3M Co.* (avail. Feb. 22); *Wyeth* (avail. Feb 4, 2004), and (ii) food safety and the inhumane killing of animals, see *Wendy’s Int’l, Inc.* (avail. Feb. 8, 2005); *Hormel Foods Corp.* (avail. Nov., 10, 2005). Despite this position, the Staff has determined in several instances that proposals raising the issue of alleged cruel and inhumane treatment of animals in connection with the sale of products are excludable under 14a-8(i)(7) as dealing with matters of ordinary business operations. In *Lowe’s Companies, Inc.* (avail. Mar. 18, 2010), the shareholder sought to include a proposal that encouraged the company to label all glue traps sold in its stores with a warning stating the danger that these traps pose to companion animals, wildlife and human health. The company argued, in part, that because the proposal dealt with matters relating to the company’s selection and labeling of products, the proposal was excludable under Rule 14a-8(i)(7). The Staff concurred that the Company could exclude the proposal under Rule 14a-8(i)(7). See also *The Home Depot, Inc.* (avail. Mar. 12, 2010) (concurring that proposal encouraging company to label glue traps as dangerous to animal welfare was excludable under 14a-8(i)(7)). Similarly, in *PetSmart, Inc.* (avail. April 14, 2006), the Staff concurred in the company’s view that a proposal prohibiting the sale of large birds in its stores was excludable under 14a-8(i)(7) as relating to

ordinary business operations (i.e., the sale of a particular good) despite the proponent's argument that the proposal raised significant social policy concerns.

Furthermore, the Staff has excluded shareholder proposals that have requested highly detailed and specific reports, even when the subject may be a socially significant issue. *See e.g. Ford Motor Company* (avail. Mar. 2, 2004) (allowing exclusion of proposal recommending that the board annually publish a report that would include detailed information on temperatures, atmospheric gases, sun effects, carbon dioxide production, carbon absorption and costs and benefits at various degrees of heating or cooling). Here, the Proposal requests a report, by October 2011, that addresses "all documented product misuses worldwide since 2005 and proposing changes to prevent further misuse including: working with foreign governments in training and educational programs, licensing applicators, restricting access, incorporating bittering agents and funding programs to prevent loss of livestock and wildlife" (emphasis added). The *annual* report mandated by the Proposal, if followed to the letter, would require the Company to engage a staff of scientists and various other experts, in addition to the Sustainability Council mentioned above, *and local governments* that may be unreceptive or unresponsive to the Company's efforts, to undertake a large-scale research project at great expense. This substantial burden on the Company would result in a report that, at best, would essentially be a compilation of unfortunate incidents categorizing the illegal misuse of the Company's products and that would not be in furtherance of any investor-related determination. FMC maintains that it has already substantially implemented this aspect of the Proposal, as amply demonstrated throughout this letter.

The mere fact that the Proposal is tied to a social issue is not enough to surmount the important policy considerations of Rule 14a-8(i)(7), as aptly demonstrated by *Walgreen Co.*, *Lowes Companies, Inc.*, *The Home Depot, Inc.* and *PetSmart, Inc.*, because the Proposal deals with complex tasks that are fundamental to management's ability to run the Company on a day-to-day basis and seeks to "micro-manage" the Company by probing too deeply into business decisions and relationships upon which shareholders are not equipped to render decisions. *See e.g., Pfizer* (avail. Jan. 28, 2005) (proposal prohibiting the Company from making donations contributing to animal testing was excludable). Decisions relating to a company's selection of products form the basis of the daily and ordinary business operations of every company, not just FMC, and these decisions are inherently based on complex business considerations that are outside the knowledge and expertise of the stockholders, and accordingly, should not be subject to direct shareholder oversight. The Proposal seeks to control the Company's selection of its products – to allow the stockholders to dictate what the Company may sell would substitute their opinion for the judgment of the directors. This judgment is precisely the type which Rule 14a-8(i)(7) is intended to address.

CONCLUSION

Based on the foregoing analysis, the Company believes that it may omit the Proposal from its 2011 Proxy Materials in reliance on either or all of paragraphs (i)(10), (i)(3) and (i)(7) of Rule 14a-8, and the Company respectfully requests that the Staff not recommend any enforcement action if the Company omits the Proposal from such proxy materials.

U.S. Securities and Exchange Commission
Page 21
December 29, 2010

To facilitate transmission of the Staff's response to our request, my facsimile number is (215) 299-6728. If the Company can provide you with any additional information or answer any questions you may have regarding this subject, please do not hesitate to call me at (215) 299-6990. Thank you for your consideration of this request.

Respectfully

A handwritten signature in black ink that reads "Andrea Utecht" followed by a stylized monogram "RAA".

Andrea Utecht
Vice President, General Counsel and Secretary
FMC Corporation

cc: Mr. David Brook (w/encl.)

APPENDIX 1

**Shareholder Proposal
and
Supporting Statement
of
David Brook**

November 16, 2010

NOV 17 REC'D

David Brook

*** FISMA & OMB Memorandum M-07-16 ***

Sent Via Fed Ex Next Day Delivery: Tracking Number:

*** FISMA & OMB Memorandum M-07-16 ***

November 16, 2010

Ms. Andrea E. Utecht
Vice President, General Counsel and Secretary
FMC Corporation
1735 Market Street
Philadelphia, Pennsylvania 19103

Re: Shareholder Proposal:
Improving FMC'S Product Stewardship Program and Corporate Responsibility Principles

Dear Ms. Utecht:

I am writing to you as the Corporate Secretary, as required in the FMC Corporation ("FMC") Proxy Statement dated March 19, 2010, Page 16, as the FMC Officer requiring notification of my intention to submit a shareholder proposal for the 2011 FMC Annual Meeting. Enclosed is a timely shareholder proposal intended to improve the FMC Product Stewardship Program and enhance the Corporate Responsibility Policies of FMC Corporation. FMC has stated the due date for such a proposal is not later than November 19, 2010.

The proposal addresses the continuing issues relating to the pesticide Furadan (carbofuran), Marshal and others. I am sure that you can appreciate the rather unacceptable situation which has been generated about the manner in which FMC's Furadan continues to be misused around the world for poisoning all sorts of wildlife, fish and waterfowl.

Based upon the lack of zealousness in which FMC has reacted to this continuing problem, I am proposing more direct Board involvement to better examine these issues and to do two things: first examine the documented misuses of Furadan, and other misused pesticides, with the preparation of a report on these incidents and then institute better stewardship practices to prevent future occurrences and second, that FMC amend its Corporate Responsibilities Policies to address human equality issues so that FMC begins to treat third world people no differently than Americans (and Europeans) as it relates to pesticide product and pesticide residue exposure.

The issue of different standards of exposure for different people of national origin is very challenging and while I am sure that FMC has not and would not violate any laws, the fact remains that Americans and Europeans are currently protected from any residues of carbofuran in foods, (except Americans are still exposed to tolerances in imported sugar, bananas, rice and coffee) and third world people are not. This is an issue of Corporate Social Responsibility and how FMC defines its Corporate Responsibilities so that it can as it has stated in its own words better implement its "commitment to ensuring that we operate our business ethically, safely,

November 16, 2010

securely and in a sustainable manner.¹”

It is my understanding that FMC is also a signatory to the Food and Agriculture Organization of the United Nation’s International Code of Conduct on the Distribution and Use of Pesticides (“Code”), revised version, reprinted 2006. This Code sets standards of conduct for pesticide management and provides goals for governments and corporations to establish more careful pesticide management in countries where there are limited or no governmental controls. As stated, compliance with this Code is voluntary. Based upon the principles of this Code and a review of FMC materials, there do not appear to be identified visible steps taken directly by FMC to properly internally institutionalize the provisions of this Code. An audit by FMC of its compliance with this Code may be one step to improve upon its performance. I suggest that for now, modifying FMC’s Corporate Responsibilities Policies as provided in my proposal will immediately assist the Corporation in its efforts to better comply with the FMC adopted International Code of Conduct on the Distribution and Use of Pesticides guidelines.

While I am sure that FMC complies with international laws, this issue is not about laws as much as it is about FMC taking a defined corporate stance on protecting all humans equally from the use, misuse and environmental consequences of potent pesticides. While international product liability actions may not presently create a significant legal risk to FMC, this issue may change, as more and more countries begin to adopt United States and European type controls. My proposal begins to guide FMC in a direction which will ultimately protect the Corporation from these potential future legal issues and the potential damage to corporate profitability should these actions begin to proliferate.

Furadan, as a cholinesterase inhibitor, is a dangerous pesticide and it was previously a restricted use pesticide in the United States. Why should FMC as a United States Corporation, which acknowledges that it cannot allow Americans and Europeans to be exposed to any residue of Furadan continue to allow people in certain third world countries to freely buy it without any restrictions on the who can access it, use it, misuse it or expose humans to unacceptable product concentrations? I hope you will agree that FMC has a Corporate Responsibility to treat all people equally and this proposal requests the Board to act to establish a new direction in the form of an amended Corporate Responsibility Policy as to how FMC should act to treat all people equally, when it comes to pesticide safety, exposure and environmental impacts, regardless of the person’s nationality using the United States as its base of applicability.

I am sure that you realize that both of these issues are not easily resolved, so this proposal attempts to set in place a mechanism whereby FMC will begin to make changes to correct each of these problems. Unfortunately a limit of 500 words in my shareholder proposal does not allow for a full analysis and presentation of these issues. Therefore, I am more than happy to further elaborate upon these details with you and/or other Officers of FMC as to why this proposal has merit and why I ask Management to support the incorporation of this proposal into the 2011 FMC proxy statement.

¹ Quotation taken from FMC’s Responsibility in Action, Welcome to FMC, webpage, <http://www.fmc.com/Default.aspx?alias=www.fmc.com/corporateresponsibility>.

November 16, 2010

I have provided a title to this Proposal, "IMPROVING FMC's PRODUCT STEWARDSHIP PROGRAM AND CORPORATE RESPONSIBILITY PRINCIPLES," which I ask be used in the proxy statement. While I do not consider this title as part of the 500 word limit, the total words of the proposal, including this title is less than 500 words, which conforms to the SEC word limit requirements.

I also will shortly be providing you with a footnoted version of the proposal, so that you may confirm that all of the statements and information which I have provided in the proposal are proper and factually documented by reports, investigations and prosecutions. I do not consider this information as required in any way by the SEC submittal requirements, but I will present it as a courtesy in order to facilitate your review and hopeful support of this proposal.

PROCEDURAL COMPLIANCE WITH SEC REQUIREMENTS AND FMC BYLAWS:

In order to expedite your procedural review of this proposal and its conformance with the FMC Bylaws and Securities and Exchange Commission Procedural Requirements, I provide the following information to validate my right to present this proposal under 17 CFR 240.14(a)(8):

1. I have continuously held FMC Corporation securities for over a year with a value which has never dropped below \$2000. I purchased 75 shares of FMC Corporation stock on or about July 29, 2009. The number of shares is currently approximately 75.65.

2. My address is: *** FISMA & OMB Memorandum M-07-16 *** . In light of personal safety concerns, I request that my address NOT be disclosed in the proxy statement and that FMC require written requests should anyone seek to obtain my address. I also ask that I be notified of any such requests.

3. I fully intend to continue to hold these securities through the date of the next annual meeting and beyond.

4. I am enclosing a form prepared by the "record" holder of my securities, Fidelity Investments, which confirms that at the time I am submitting this proposal that I have held these securities for at least a year and the number of the current shares that I hold to be 75².

5. In conformance with the FMC Bylaws, Section 5, I intend to present my proposal to the shareholders at the annual meeting. Please consider this letter as notice that I request appropriate notification from FMC as to the actual 60 and 90 day window in which the corporation requests my timely notification of a formal request, should you require such.

SUBSTANTIVE COMPLIANCE WITH SEC REQUIREMENTS:

6. This proposal is intended to make recommendations on the manner in which the

² Fidelity has not included the fractional shares I hold as part of my dividend reinvestments.

IMPROVING FMC's PRODUCT STEWARDSHIP PROGRAM AND CORPORATE RESPONSIBILITY PRINCIPLES

FMC's Furadan insecticide is killing more than just insects. Furadan (carbofuran) is being used to intentionally kill large mammals such as lions in Africa. Millions of migratory birds in South and North America have been unintentionally poisoned by Furadan. Even America's national symbol of freedom, the bald eagle, has been poisoned by Furadan. USEPA banned all carbofuran residues in domestic foods, effectively prohibiting its use in America on December 31, 2009. The European Union banned residues in foods in 2007.

While Furadan use is restricted in the United States, FMC has allowed its unrestricted international sale in corner stores in many third world countries. Anyone can buy it for a few U.S. dollars. Furadan is not just creating harm in far away countries, in the U.S., carbofuran has been found in the umbilical cord blood of women in Manhattan and it is possible residues of it were in your morning cup of coffee, since residues are allowed in certain imported foods.

The irresponsible and unregulated use of Furadan through a lack of product stewardship by FMC in Africa, Asia and South America is creating a nightmarish result prompting CBS Sixty Minutes to document the intentional misuse of this product to exterminate lions in Kenya. (<http://www.cbsnews.com/stories/2009/03/26/60minutes/main4894945.shtml>) There are new reports that Furadan and Marshal (carbosulfan) are being intentionally misused to exterminate wildlife in other African countries, including Uganda, Tanzania and South Africa and to poison fresh water fish and waterfowl sold for human consumption.

While FMC acted to stop sales in Kenya, it has not stopped the problem from spreading to other countries. FMC has failed to responsibly control the misuse of Furadan, thus jeopardizing FMC's reputation and profitability. As shareholders, the next embarrassing news story or potential litigation over FMC's failure to practice honest product stewardship may harm our investments.

FMC should also amend its Corporate Responsibility Policies, since it affords Americans greater protections from exposure than third world people, who are allowed unlimited exposure to Furadan.

RESOLVED, the Shareholders request the Board establish a legitimate product stewardship program by:

- Implementing immediate moratoriums on sales and withdrawals from the market of Furadan, and any other FMC pesticide, where there is documented misuse of products harming wildlife or humans, until FMC effectively corrects such misuse;
- Preparing and publishing, at reasonable cost, excluding propriety information, a product stewardship report by October 2011, and annually thereafter, addressing all documented product misuses worldwide since 2005 and proposing changes to prevent further misuse including: working with foreign governments in training and educational programs, licensing applicators, restricting access, incorporating bittering agents and funding programs to prevent loss of livestock and wildlife;
- Establishing an independent scientific advisory panel to prepare these reports; and

- Incorporating in the FMC Corporate Responsibility Principles a human equality declaration stating that FMC will treat third world people no differently than Americans as it relates to U.S. pesticide exposure limits.

I, therefore, urge Shareholders to vote **FOR** this proposal.

The following is not part of the proposal.

Submitted on: November 16, 2010

By: David Brook

*** FISMA & OMB Memorandum M-07-16 ***

Owner of 75 + shares, since on or about July 29, 2009.

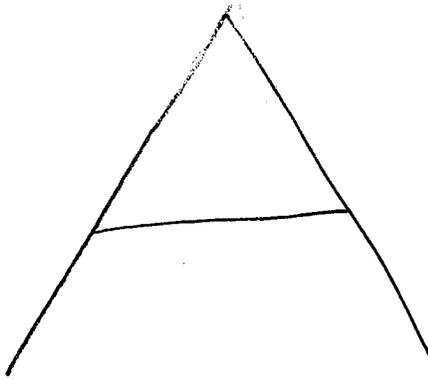
FMC CORPORATION

REQUEST FOR NO-ACTION LETTER

DECEMBER 28, 2010

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- K. Kenya Wildlife Service Report Concerning Maasai Mara Game Reserve
- L. European Union Maximum Residue Limits for Carbofuran in food
- M. See, Carbofuran and its Toxic Metabolites Provide Forensic Evidence for Furadan Exposure in Vultures (*Gyps africanus*) in Kenya, Peter O. Otieno, et al., Bull Environ Contam Toxicol, Published online: April 7, 2010, <http://www.peregrinefund.org/pdfs/ResearchLibrary/2010Carbofuran.pdf>
- N. “Investigation of deaths in an area of groundnut plantations in Casamance, South of Senegal after exposure to Carbofuran, Thiram and Benomyl,” Maria, Ugenia Nia Gomes Do Espirito, et al *Journal of Exposure Analysis and Environmental Epidemiology* (2002) 12, 381-38810.1038/sj.jea.7500239 10.1038/sj.jea.7500239, <http://www.nature.com/jes/journal/v12/n5/full/7500239a.html>.



D

PEST CONTROL PRODUCTS BOARD

Internal Memo

To: MD/SECRETARY**Ref:** PCPB/32N/75**From:** F.N. MUCHIRI**Date:** June 16, 2008**Subject:** SUSPECTED USE OF FURADAN (CARBOFURAN) IN
POISONING OF LIONS IN MAASAI MARA GAME
RESERVE

ANALYTICAL RESULTS

Nine samples of the soil and plant tissues were forwarded to KEPHIS and Government chemist on 13th May 2008 for extraction and analysis to determine whether there was carbofuran. The results of analysis are as indicated below:

KEPHIS RESULTS

Sample Code	Sites	Results	Concentration (ug/mg)
A08/08	2A	Not detected	<LOD
A09/08	2B	Not detected	<LOD
A10/08	2C	Not detected	<LOD
A11/08	2D	Not detected	<LOD
A12/08	2E	Not detected	<LOD
A13/08	1A	Not detected	<LOD
A14/08	1B	Not detected	<LOD
A15/08	1C	Not detected	<LOD
A16/08	1D	Not detected	<LOD

1A- (hole) from which the study sample was drawn located next to the staff quarters of the Mara Conservancy.

1B- Scooped soil from site 1A.

1C- Site approximately 2 metres from site 1A and on bare soil under the trees.

1D- Site approximately 10 metres from site 1A with grass vegetation.

2

- 2A-Site located within the sukuma wiki shamba from which the researcher had drawn a study sample. No vegetation cover except the sukuma wiki plants
- 2B-Soil from the edges (scooped) of site 2A.
- 2C-Site approximately 1 and a half feets from sites 2A and 2B.
- 2D-Site at the edge of sukuma wiki shamba on the bank of river Mara next to which there is grass vegetation.
- 2E-Sukuma plants with solly roots uprooted from next to site 2A and 2B.

LOD= Limit of Detection

NOTE: No carbofuran was detected from all the samples that were analyzed at KEPHIS.

GOVERNMENT CHEMIST RESULTS

Sample 2D - Site at the edge of sukuma shamba on the bank of river Mara next to which there was grass vegetation) tested positive for carbamate.

Sample 2E - Sukuma plants with soll roots uprooted from next to site 2A & 2B no vegetation cover i.e. sites located within the sukuma wiki shamba from which the researcher had drawn a study sample also tested positive for carbamate.

DISCUSSIONS:

No carbofuran was detected in all the samples analyzed at KEPHIS as all were below the limit of detection. This does not mean that they all tested negative as this was a quantitative analysis. However two samples (All from sukuma wiki shamba) had carbamate according to the qualitative results from the Government chemist.

The presence of carbamate in the sukuma wiki shamba seems to agree with the researcher who claims to have conducted a study following the death of the fions. However it is not clear which carbamate as there are many pesticides with a carbamate group in their structure.

N/B: - Carbamate (furedan) is registered for use in kales at nursery level.

All the sites located within the fenced area had no carbamate contrary to the results contained in the study report. This included the site which had been referred as having carbofuran in the report.

(3)

CONCLUSION:

Contrary to other areas where there is human wildlife conflict, it is not possible to comprehend why anyone would intentionally poison wildlife in the Maasai Mara game reserve (Mara area) which is approximately 100km inside the park. Given that the two samples that tested positive were located within a sukuma wiki shamba indicates that the product had not been misused as this is authorized for use in the shamba according to the label instructions.

However, the amount of chemical was below level of detection (LOD) quantitatively. This means that the amounts were too small and the hippopotamuses would require to consume tonnes and tonnes of the sukuma wiki in order to get the right dosage to cause death.

Normally lions do not feed on dead animals. This can only happen in case of very old or sick lions that are unable to hunt for themselves.

From the report, no samples of the dead hippopotamuses were analyzed to determine the killer agent. It is not therefore correct to connect the death of lions to the carbofuran detected in the sukuma wiki shamba.

The report claims carbofuran was detected within the site where Serena Hotel is located and is linked to the fogging which is routinely done to control mosquitoes. Furadan is normally formulated in granular form and can therefore not be fogged. The report also indicates that lions were noted sickly on 2/4/08 while the fogging was done on 8/4/08. These animals were sick before the fogging was done and it is not correct to link the fogging with the sickness.

From the outcome of these investigations, it is concluded that more studies should have been done before concluding that furadan (carbofuran) was the cause of death of the lions. In order to avoid doubt, it is recommended that in case such an incidence is reported the study be conducted in an open scientific manner involving key stakeholders (i.e. PCPB, KWS and Conservancy).

Thank you.

F.N. Muchiri.



PEST CONTROL PRODUCTS BOARD
P.O. BOX 13794-00800, NAIROBI, WAIYAKI WAY

Tel: 254-020 4446115/4450242 Fax: 254-020 4449072

E-MAIL: pcnboard@todays.co.ke

WEBSITE ADDRESS: www.pcpb.or.ke

SUSPECTED USE OF FURADAN (CARBOFURAN) IN POISONING WILDLIFE IN KENYA.

Carbofurans belong to the chemical group of carbamates whose mode of action is systemic with predominantly contact and stomach action. Furadan is registered in Kenya for use as an insecticide/nematicide for use on ---, bananas, dry beans, pyrethrum, vegetables, pineapples, maize and coffee by manual application. Registration of any pest control product in Kenya involves a rigorous process of submission of a full dossier, evaluation of information so submitted to ascertain safety of the product to users, animals and the environment, efficacy testing under local conditions and consideration of any other issues as prescribed under the Pest Control products Act cap 346. Products are only registered for uses they have been tested for in Kenya

It is important to note that all pesticides are toxic and can cause negative effects to users and the environment if they are not used according to label instructions. It is an offence under the Pest Control Products Act Cap 346 to use a product for a use other than the registered one. The toxicity of a pesticide depends on various factors including the formulation type. Various classes of pest control products are allowed for use in this country including those in WHO Class I that are highly toxic but are restricted for use. Carbofuran belongs to the relatively less toxic class of WHO class II and is only available to the general public in form of granular formulation whose hazards are less compared to liquid formulations.

A few cases of suspected misuse of carbofuran in poisoning wildlife have been reported in Kenya in the recent past. For example in 2004/2005, some incidences of suspected poisoning of lions in Laikipia area were reported to the Pest Control Products Board for investigations. On investigation, strychnine and not carbofuran was identified as the killer agent.

Another incident was reported in 2006 in Tsavo West and upon investigations, issues of human wildlife conflict featured. Analytical results of the stomach content of the dead lions revealed presence of a carbamate and an organochlorine. No Carbofuran was detected.

A more recent case of suspected poisoning of lions and hippopotamuses was reported in the Mara Triangle in May 2008. Contrary to a theory that was being advanced by an NGO, the Mara Conservancy group, there was no connection found between the dead animals and the suspected chemical. All the samples analyzed were negative for carbofuran and there is no likelihood of human/wildlife conflict in the Mara Triangle since it is deep within the Maasai Mara National Reserve.

General observations

There seems to be a spirited campaign from conservationists aimed at pushing for banning of Furadan in Kenya. The process of listing a chemical under Annex III of the Rotterdam convention is very clear. Sheer mis-use by itself does not qualify as a reason for the listing. There must be sufficient information on the toxic effects under conditions of normal use (Not intentional mis-use). It is punishable under the Pest Control Products Act for anyone to use a product contrary to the directions on the label.

It is not possible for even birds to come into contact with the Furadan granules if used properly. Similarly accidental poisoning as a result of feeding on plants is also minimal.

GLADYS N. MAINA



Managing Director/Secretary

B

SUMMARY

FMC Investigation of Recent Allegations of Carbofuran Wildlife Poisoning In the Maasai Mara Reserve in Kenya

In early April 2008, the Mara Conservancy, a conservation group, reported that carbofuran, specifically the Furadan brand of carbofuran made by FMC Corporation, was involved in the deaths of several lions in the Maasai Mara Reserve of Kenya in the area of the Mara Serena Lodge. According to the report, carbofuran was not the direct cause of the lion deaths, but did incapacitate them as a result of secondary poisoning by feeding on hippos which allegedly died from carbofuran toxicity.

The Kenya Pest Control Products Board (PCPB), the government agency that licenses pesticides, conducted an investigation in early May 2008 and concluded that there was no evidence to link carbofuran to the hippo and lion deaths. Subsequently, FMC Corporation conducted its own investigation of the incident and also concluded that the incident was highly unlikely to have involved carbofuran based on several lines of evidence.

The following lines of evidence lead one to conclude that the connection between carbofuran and the incident is implausible.

Physical Evidence of Furadan Presence

As part of any investigation, FMC first determines if there was any physical evidence pointing to the involvement of Furadan in an incident. In the case of the Maasai Mara incident, the Mara Conservancy report does not cite any direct physical evidence that Furadan was used in the area and subsequent investigations by the PCPB and FMC failed to turn up any evidence as well. There were no Furadan containers and no observations of blue granules in or on the animals involved, or around the Serena Lodge and staff garden. There was no record of Furadan ever having been used at Serena Lodge and the closest possible AgroVet shop appears to be 40 km away. In addition, there were no reports of blue staining of any organs and tissues of hippos or lions.

Symptomatology

According to the Mara Conservancy report, the first symptoms of intoxication in lions occurred three days after feeding on the hippos. Symptoms manifested as polyneuropathy or delayed neurotoxicity, a condition involving die-back of long neuronal axons and impairment of an animal's ability to walk.

Animal models show that carbamates cause acute toxicity with fast onset of symptoms, but do not cause delayed neurotoxicity. Carbofuran did not cause delayed neurotoxicity in a well-conducted GLP study required for registration. Unlike organophosphate pesticides, carbamates are not known to cause this effect. The collective information in humans indicates that exposure to relatively high doses of some carbamates may result in toxicity in humans that continues to exhibit after the initial severe acute toxic symptoms have been treated. In some cases, this longer-term toxicity has been reported as delayed neurotoxicity, but the diagnoses were based on non-invasive measurements and not direct

nerve biopsy, except only in one case. In all the reported cases of longer-term toxicity, however, severe acute toxicity preceded the later effects, and one report states that the longer-term symptoms result from the severe initial acute toxic effects.

No symptoms of acute toxicity were reported for any of the affected lions during the first days after consuming hippo meat. This is unusual because Furadan intoxication is associated with a quick onset of symptoms, just as with other carbamates. Symptoms of acute toxicity would have been observed if lions were eating poisoned hippos. Furthermore, Furadan intoxication is well-known to be reversible with a half-life of about 3-4 hours. Any inhibition by carbofuran following exposure in hippo meat would have completely reversed within about a day. Therefore, the weight of evidence from symptomatology does not support carbofuran intoxication of the lions.

Probability of Hippos Dying as a Direct Result from Ingesting Carbofuran Contaminated Plants.

It had been alleged that the hippos died as a direct result from ingesting carbofuran contaminated plants. Carbofuran has an extensive database of health and environmental tests that include information on persistence and mobility in soil, residue uptake in plants and transfer of residues from plants to animals. Using this information, FMC scientists calculated that if a small female hippo weighing 1300 kg had consumed vegetation containing the maximum estimated carbofuran residues in the vegetation, she would have had to consume 4000 kg of vegetation or 100 times her maximum daily food intake to reach an LD50 dose. This makes it improbable that the hippo died from ingestion of carbofuran residues in vegetation.

Probability of Secondary Poisoning of Lions

The Mara report stated that two different lion prides were observed feeding on two separate dead hippos. The Serena pride fed on hippo 1 closest to the Serena garden. The Kijana pride fed on hippo 2 about 3 km upstream. As pointed out previously neither hippo showed evidence of having been baited with Furadan granules, which left secondary poisoning as the only other alternative. Laboratory analysis of hippo 2 reported carbofuran present, but none of the lions in the Kijana pride that fed on hippo 2 showed any symptoms of poisoning. Only the Serena pride showed symptoms and this hippo was not checked for the presence of carbofuran. Although it was improbable that the hippos died from ingestion of carbofuran, we calculated how much hippo meat a lion would need to consume in order to reach a lethal dose from a hippo allegedly poisoned by carbofuran. FMC scientists calculated that a small female lion of 87 kg feeding on a hippo with the theoretical maximum concentration of carbofuran in its tissue would need to exceed its normal daily food consumption by 700 times to reach a lethal dose of carbofuran.

The evidence makes it unlikely that carbofuran was involved in the incident.

Laboratory Analysis

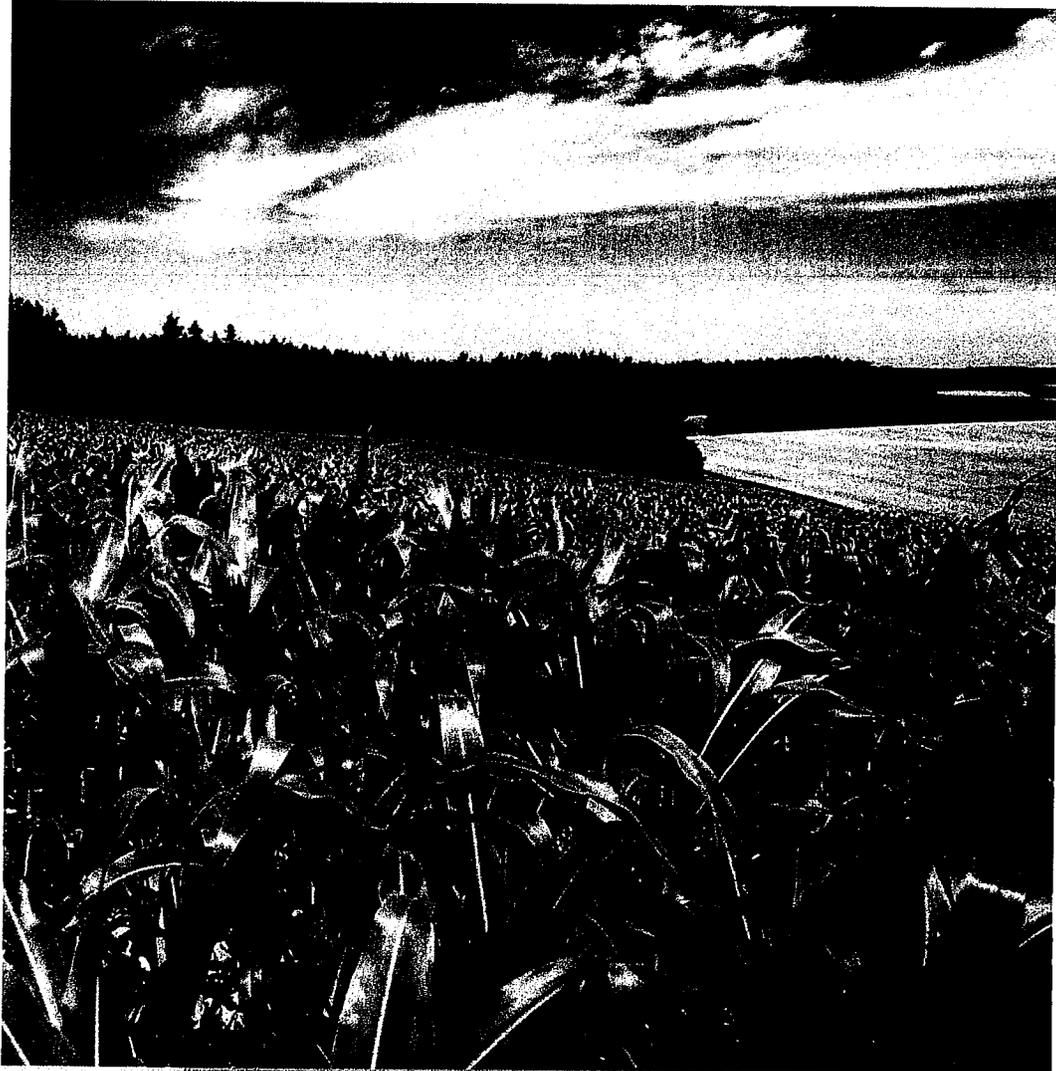
The allegation of carbofuran involvement in the incident was supported by an analysis of samples conducted by the Government Chemist Department for the Mara Conservancy using thin-layer

chromatography (TLC). The Government Chemist found trace levels of carbofuran in soil and plant samples and reported trace levels of carbofuran in the stomach contents of one lion and in the stomach contents of the one hippo analyzed. The second lion did not have detectable levels of carbofuran. No carbofuran residue was found in the river water.

The KEPHIS lab used high pressure liquid chromatography (HPLC) to analyze soil and vegetation samples as part of the PCPB investigation, but failed to find any carbofuran residues. FMC did not re-analyze any of the samples, but instead interviewed chemists from both laboratories and evaluated the reliability of the two analytical methods used. We consulted with Dr. Edward Kikta, a fellow of the American Institute of Chemists, former chairman of the American Society for Testing Materials committee on chromatography and FMC research fellow in analytical chemistry (statement attached). In summary, the Government Chemist used thin-layer chromatography or TLC, a very simple useful qualitative tool for the screening of relatively controlled well understood or limited systems. It is not however, a quantitative method for pesticide analysis nor a reliable tool, on its own, for the definitive identification of a substance. The reliability of the method is even less certain when control matrix blanks are not included in the analysis as was the case in the Government Chemist Dept. analysis. The KEPHIS lab used High Pressure Liquid Chromatography or HPLC, a more sophisticated tool that can reliably identify and quantify pesticide residue levels.

Therefore, the analytical results supporting the carbofuran as the causative agent in the incident in the Maasai Mara are unreliable.

C



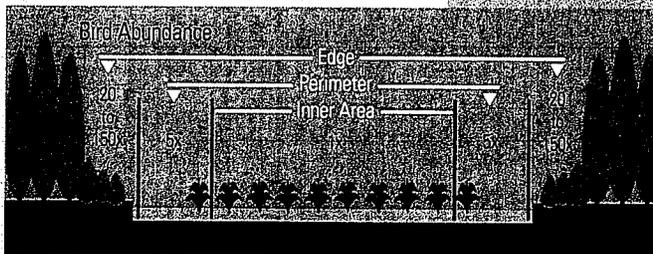
**ENVIRONMENTAL
STEWARDSHIP
GUIDELINES**

Neuradan 4f
insecticide/nematicide



RESPONSIBLE PESTICIDE USE REDUCES RISKS TO THE ENVIRONMENT

Frequently, farmland borders wildlife habitats which provide shelter and food for a variety of birds and other wildlife. Special attention is required when applying pesticides to maintain a balance between agricultural productivity and natural resources. Proper pesticide use allows farmers to continue farming efficiently and to continue using the products they need to maintain consistently favorable yields. Understanding and abiding by the product label is the most important step to product stewardship.



Data from Best, Whitmore & Booth, American Midland Naturalist. Average number of birds based on census data from three farms each in Iowa and Illinois.

PROTECTING BIRDS AND WILDLIFE

Studies show that more birds are found at the perimeter and edge of the field than in the inner field area. These studies from prairie and woodland habitats in Iowa and Illinois found five times as many birds at the field perimeter and 20 times more birds at the edge in a prairie habitat and 150 times more birds at the edge in a woodland habitat.

Following are a few important tips to protect birds and wildlife from the effects of pesticide exposure:

- **Avoid spraying or chemical drift outside of the treatment area.**
- **When maintaining or cleaning sprayers or applying pesticides, avoid chemical puddling. If puddling occurs, decontaminate the rinsate with lime and chlorine, rake it and bury it.**
- **Do not apply pesticides immediately before or during irrigation on fields near waterfowl nesting areas or in fields where waterfowl are known to repeatedly feed.**
- **Be sensitive to edge habitats. Turn off the sprayer rig when turning on end rows and spray end rows after the field is sprayed.**
- **For foliar treatment of Furadan® 4F insecticide/nematicide to fields where a prior mature crop failure or seed head shattering has resulted in excessive surface residues of crop seed, till the field to bury the seed prior to making application.**

PROTECTING AQUATIC ORGANISMS

Drift and runoff from treated areas may be hazardous to

fish. There are a number of simple steps to take to prevent runoff from entering streams, lakes, rivers and ponds:

- **Do not** apply Furadan® 4F insecticide/nematicide directly to water.
- **Fill, calibrate, and rinse** chemical application equipment a safe distance from water supplies.
- **Leave no-spray buffer strips** around surface water supplies, wells or irrigation ditches.
- **Maintain grass waterways and grass or forage strips** in fields as buffers to help retard the runoff of soil and agricultural chemicals into water supplies.
- **Use contour farming or no-till farming** on erodible lands to help keep runoff out of nearby bodies of water.

PROTECTING BEES

Honeybees are a vital part of our agricultural system because of the role they play in pollinating crops. Many plants produce nectar and/or pollen which are attractive to foraging bees. Pools and puddles of water, especially in dry periods, also attract bees. Bees may be attracted to a crop that is in bloom, or they may be attracted into treated fields by the presence of blooming weeds even though the crop itself is not in bloom.

Furadan 4F is highly toxic to bees when exposed to direct treatment or residues on crops. Many potential bee poisoning problems can be prevented by better communication and cooperation among the grower, pesticide applicator, and the beekeeper. To improve communication



and protect bees from the effects of pesticide exposure, consider:

- *Bees forage up to three miles or more from their hive under some conditions, and they begin foraging early in the day. Accordingly, if the beekeeper is to move or confine his bees, he must do so the night before any treatment. Notifying the beekeeper at least the evening before the insecticide is to be applied can help to avoid problems.*
- *Since many decisions to use an insecticide are made only a few hours before the application is made, growers and applicators should be aware of the locations of hives within three miles of their crops. Local county Extension personnel may be of assistance in providing access to the names of beekeepers in your area, or the contact number for a State Apiary Inspector, or equivalent official.*

If insecticides are to be used, the following steps can help reduce potential harm to bees:

- **Do not** apply pesticides or allow them to drift to blooming crops or weeds if bees are in the treatment area.
- *Apply insecticides in the late evening, night or early morning when fewer bees will be foraging.*
- **Do not** spray when winds favor drifting.

Additional protective information may be obtained from your Cooperative Agricultural Extension Service.

Furadan.4f
insecticide/nematicide

REDUCING SPRAY DRIFT

It is the applicator's responsibility to manage spray drift. Maintaining your equipment and choosing the proper application timing will help minimize drift and avoid adverse effects to nearby fields or wildlife. To reduce spray drift:

- Use high flow rate nozzles to apply the highest spray volume.
- Use the lower spray pressures recommended for the nozzle.
- Use a nozzle type that is designed for the intended application.
- Set the boom height at the lowest labeled height (if specified) that provides uniform coverage. With ground applications, the boom height should remain level with the crop and have minimal bounce.
- Apply when drift potential is lowest – wind speeds between 2-10 mph.
- When applying in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.
- Replace inappropriate or worn nozzles.
- Do not apply during temperature inversions.
- Avoid spraying when wind direction is toward sensitive and/or known habitats of endangered/threatened species.

ANTI-BAITING MEASURES

Illegal use of pesticides for predator baiting is not only unlawful, it poses a risk to other non-target species, including birds and livestock, and it poses a threat to the continued availability of products. To continue providing the American farmer the best products possible, please help to combat the use of pesticides for baiting.

Signs of pesticide misuse for baiting include:

- Attempts by non-certified applicators to purchase federally registered restricted use pesticides.
- Unusual purchase amounts or purchases of pesticides at unusual times of the year.

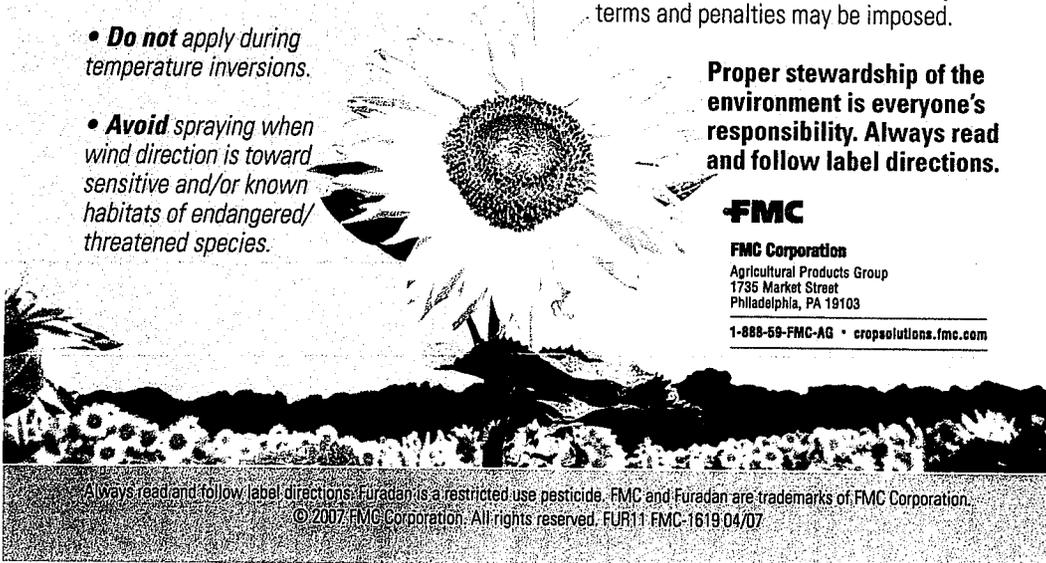
The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) alone carries criminal penalties of up to one year in jail with a maximum fine of \$50,000. Recent convictions have upheld the maximum penalty. Plus, violators could also face losing certain rights, such as their right to grazing on public lands. If protected or threatened species are exposed to pesticides due to baiting, additional jail terms and penalties may be imposed.

Proper stewardship of the environment is everyone's responsibility. Always read and follow label directions.

FMC

FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103

1-888-59-FMC-AG • cropolutions.fmc.com



Always read and follow label directions. Furalan is a restricted use pesticide. FMC and Furalan are trademarks of FMC Corporation.

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CONCLUSIONS

- Taken together data from incident reports and the available field studies do demonstrate that when carbofuran is used as currently registered, adverse effects in wildlife can and do occur under field conditions. Including:
 - Mortality
 - Sublethal effects
 - Incapacitation
 - Reproductive effects

51

United States Environmental Protection Agency

D



FMC

**Cultivating
responsibility and
awareness**

Environmental
Reporting

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FMC



2006 was a year full of achievements for the FMC team. We attained encouraging results in business and helped build a better world in the rural areas with our "Working with Responsibility" Program, thanks to well-defined strategies and a team of motivated and committed professionals.

We developed initiatives that involved all representatives of the production chain and relied on valuable assistance from specialists, professors, clients, distributors and, especially, our own employees. Children, women, farmers, agribusiness technicians and managers, agronomy students, clients, distributors and journalists received guidance and training on the importance of the "7 Habits of Responsible Care". These initiatives demonstrate the team spirit and attitude that made FMC a benchmark for the development of

Working with a commitment to innovation

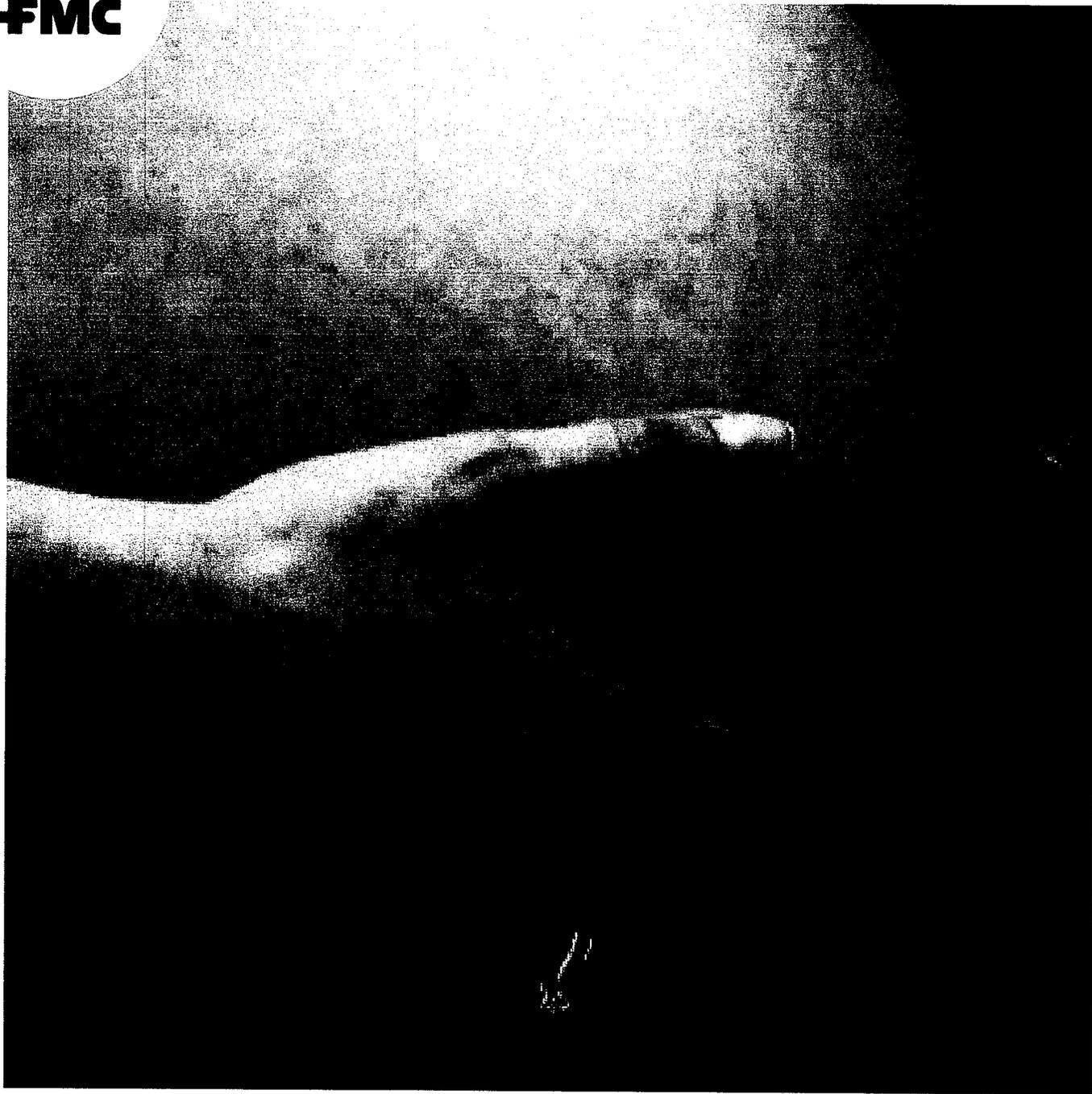
pioneering and innovative programs aimed at the safety and welfare of Brazilian rural families.

We believe that with this attitude each one of us can make a difference with initiatives that truly contribute to making the world a better place. It is the union of all everyone's efforts, abilities, commitment and desire for improvement and achievement of goals that makes FMC, the people that work with us, as well as all those we can reach with our initiatives, achieve a prominent position as responsible professionals and citizens, and contribute to the sustainability of Brazilian agribusiness. We are proud of our employees' commitment to occupational health, environmental responsibility and food safety. But, above all, we are proud of our contribution to a better world.

Antonio Carlos Zem
Latin America General Manager



FMC



Our work is guided by the constant search for improvement in business and in the "cultivation" of products with the goal of attaining sustainable development. In this scenario, the people that make FMC Agricultural Products a solid and transparent company play a prominent role. They are like heroes of a story that every day brings new solutions, always supported by an ethical attitude when carrying out all activities at various levels, such as marketing practices, respect for the client, corporate citizenship or in dealings with employees, communities and the public in general.

In this manner, FMC strengthens its commitment to social environmental responsibility with initiatives that touch on everything from the production process to relations with various publics: employees, clients, shareholders or the community.

In order to guide these initiatives, FMC created in 2003 the social and environmental responsible care program entitled Working with Responsibility, which has been increasingly successful with new initiatives being added every year. As the program is further enhanced, more and more sectors of society are becoming involved through partnerships and the projects that involve universities, technical colleges, social committees, opinion leaders, among others. Since the program was created, it has reached 148,300 persons through educational training and activities, spreading the message of good agricultural practices through the "7 Habits of Responsible Care" that summarize the correct and safe use of chemical

products in a clear and objective manner. In addition to Working with Responsibility, FMC is also a pioneer in the development of other innovative programs for reaching its publics, strengthening partnerships and involving its employees. These programs make the company a relationship



specialist, setting it apart and inspiring admiration from its employees, suppliers, clients and the communities where it operates.

Prominent among the client relationship channels, Prima Class is a pioneering effort in the agribusiness industry and is currently the most complete program of agricultural incentives and benefits. A tool that creates a communication channel and

values preferred clients, allowing integration with the company's work teams to produce good results. FMC is very proud of this program. Other programs, such as Sinfonia Club, Top Class and Top Class Consult, are part of this same special client service philosophy.

This philosophy is also present in the commitment made to communities where the company operates through its support of social activities carried by the wives of Prima Class preferred clients. This project is known as Women of Fiber. It is a project that promotes citizenship by creating a social responsibility network to provide social, educational and health assistance through building, restoring, improving and buying equipment and materials for the benefit of children, senior citizens and people with special needs.

These initiatives demonstrate that the company's relationship with its publics goes beyond only business. All these projects are a reflection of the internal environment of the company, which has civic duty in its "DNA" and a strong desire to make the world a better place. The company's Volunteer Program relies on the participation of employees who make a difference by building and improving the quality of life of communities where FMC is present.

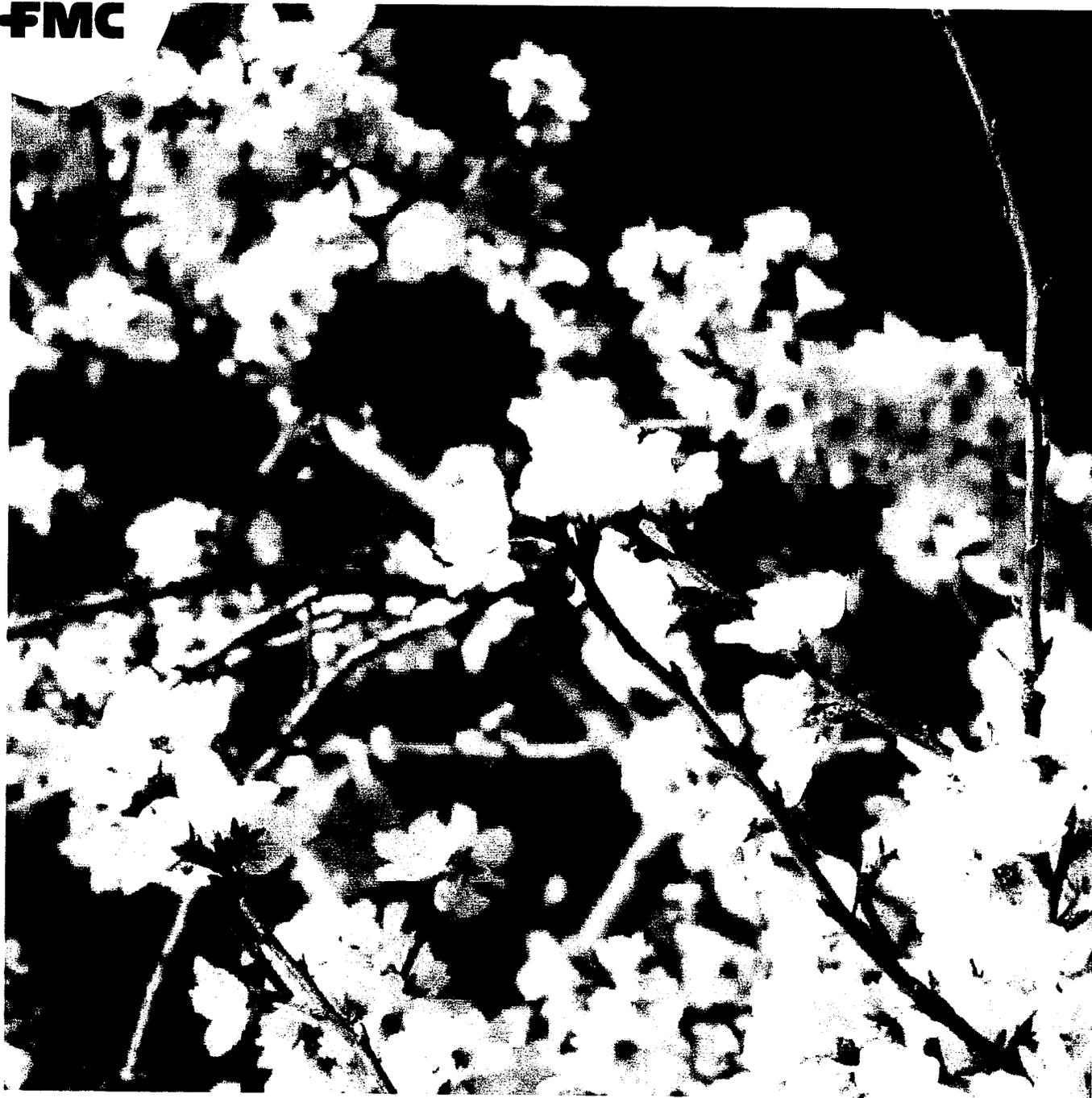
This report is evidence of our belief that commitment, involvement, responsibility and attitude are the fuel for cultivation of a better world.



**Working with
Responsibility**



FMC



California, USA, 1883. The almond orchards were being attacked by various pests that might destroy the entire crop. In 1883, retired inventor John Bean introduced a more efficient insecticide spray pump. The invention saved the crop and so began the history of FMC Agricultural Products.

This creative and innovative spirit has been the trademark of this multinational American company since those early days. FMC operates in many industries, such as medications, food, textiles, batteries, construction, glass, ceramics, plastics, as well as in the agricultural sector.

Since 1978, FMC produces and markets in Brazil herbicides, insecticides, nematicides and fungicides for crops such as irrigated and upland rice, cotton, sugar cane, corn, soy, tobacco and potato.

In addition to innovative and more efficient molecules, FMC also broke new ground in its relationship with clients, guided by a less commercial and more caring outlook.

It is a relationship that the company makes a point of nurturing not only prior to sales, but throughout the year, and for many years to come.

In addition to the plant in Uberaba, FMC has offices in Campinas (SP) and Cuiabá (MT) as well as seven distribution centers strategically located in Goiânia (GO), Cuiabá (MT), Igarapava (SP), Cachoeirinha (RS), Londrina (PR) and Luís Eduardo Magalhães (BA),

important agricultural production areas in Brazil.

FMC had a net income of R\$ 543 million in 2006 with investments in research, new technologies, safety and, above all, a motivated team willing to innovate and exceed goals. There are approximately 400 employees (permanent, outsourced and temporary), most of them working directly in the field in the main agricultural regions in Brazil in direct and close contact with farmers and distributors.

Research, technology, human talent, motivation and an excellent relationship with clients. This is FMC's recipe for continuous growth. Especially for growing responsibly and profoundly committed to the community and the environment. A conscious growth that promotes awareness.

Working with competitiveness

1900

1904)
Bean Spray Pump Company is incorporated.

1928)
Merger of Bean Company with Anderson-Barngrover. The Bean Manufacturing Company is created.

1929)
The name is changed to Food Machinery Corporation.

1943)
Acquisition of Niagara Sprayer & Chemical.

1948)
Food Machinery & Chemical Corporation

1950

1961)
FMC Corporation

The 50s)
Operations start with the local production of sprayers.

The 60s)
The first orange juicer is produced.

The 70s)

Plants are built: In Araraquara (SP), FoodTech is founded to produce citrus crop equipment. A chemical plant for manufacturing agrochemicals is built in Uberaba (MG). Start of distribution of BioPolymer Division products for the food industry.

2000

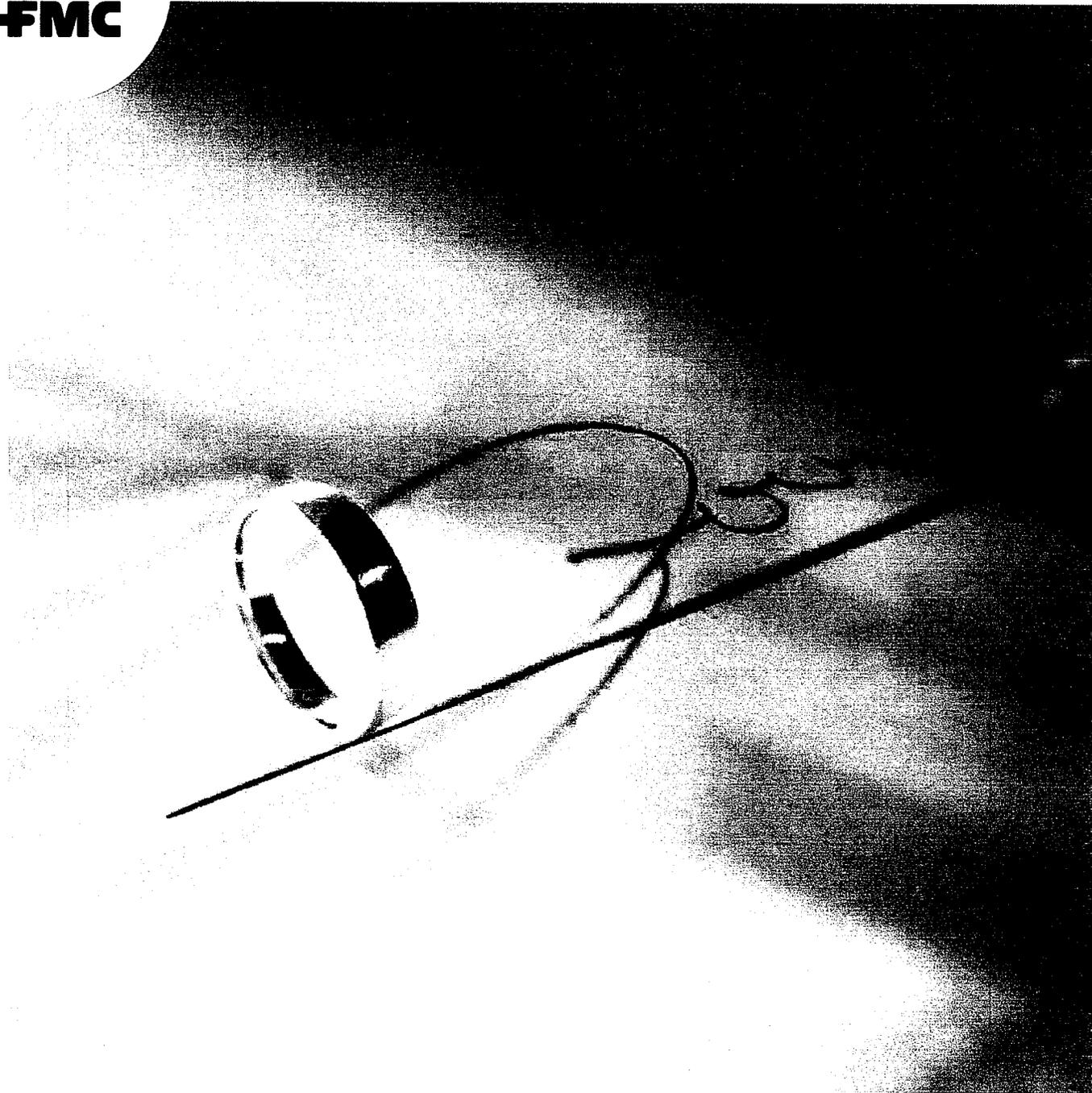
The 80s)

CBV – Energy Division is acquired and new partnerships are formed to increase Chemical Specialties business.

2001)

FMC business divisions (Chemicals and Machinery) are split into two different companies: FMC Chemicals and FMC Technologies.

FMC



FMC's performance is based on strong corporate principles that allow it to continue offering products that increase productivity in the field and consolidate its competitive position and strategic alliances.

Sustainability, increased profitability and return on investments for the company, shareholders and clients are not only financial figures, but also include values such as responsibility, relationship with different publics, occupational health, quality and safety of products and environmental protection.

Since it works with chemical products, FMC is fully aware of these responsibilities. The environment, health and safety of employees, family members

Working with values

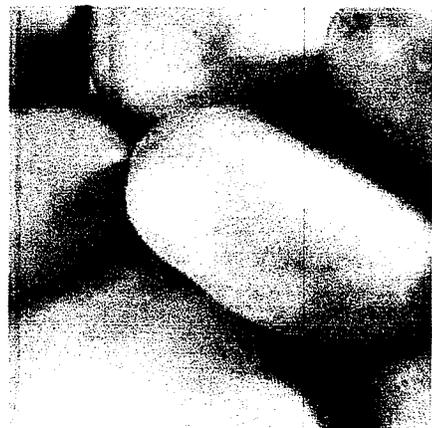
Mission

"TO GROW IN A PROFITABLE AND SUSTAINABLE MANNER WITH STRATEGIC FOCUS, THROUGH EXTRAORDINARY PEOPLE."

and society in general are included in the business management principles and are a part of its fundamental values.

At FMC, everyone is responsible for the development and continuous and measurable improvements related to these issues.

FMC



Chemical products have been used for more than 40 years because of their efficacy in controlling a great variety of pests, diseases and weeds that infest crops. Without these products, food production and quality would be seriously affected, causing prices for agricultural products to soar.

For this reason, the agricultural market is extremely competitive worldwide. In Brazil, the situation is not different: ten companies account for 85% of the market¹, which shows that the agrochemical business requires substantial financial investments. Only companies that have the ability to operate with responsibility and are committed to quality and can take on the inherent risks of this industry are able to participate in this market.

FMC excels in this scenario since it seeks to join research, technology, technical knowledge and professional competency in developing solutions that provide better crops, higher productivity and lower risks. FMC broke new ground by offering molecules with lower environmental impact, lower concentration of active ingredients per planted hectare and by reducing, and even eliminating, packaging.

FMC monitors and guides all the processes, from new product development to the correct use and disposal of containers, in order to ensure crop quality and protect farmers' health and the environment.

¹ - SINDAG - Sindicato Nacional da Indústria de Produtos para Defesa Agrícola (Brazilian Union of Agrochemical Producers)

Herbicides

AURORA
400 EC

BORAL
500 SE

DISCOVER

Gamit

Gamit
360 CS

SANSON

SINERGE

SOLARA
500

**Working
with solutions**

Insecticides

Arrivo
200 EC

Dimilin[®]

DiPel[®]

FENIX[™]

Furadan
350 FS

FURAZIN
3333

Fury
200 EC

Fury
200 EC

Marshal

Pounce
384 EC

TALSTAR
100 EC

Turbine
200 EC

Nematicides

Furadan
50 GR

Furadan
100 GR

Furadan
SC

Rugby
200 GR

Fungicides

Eminent
125

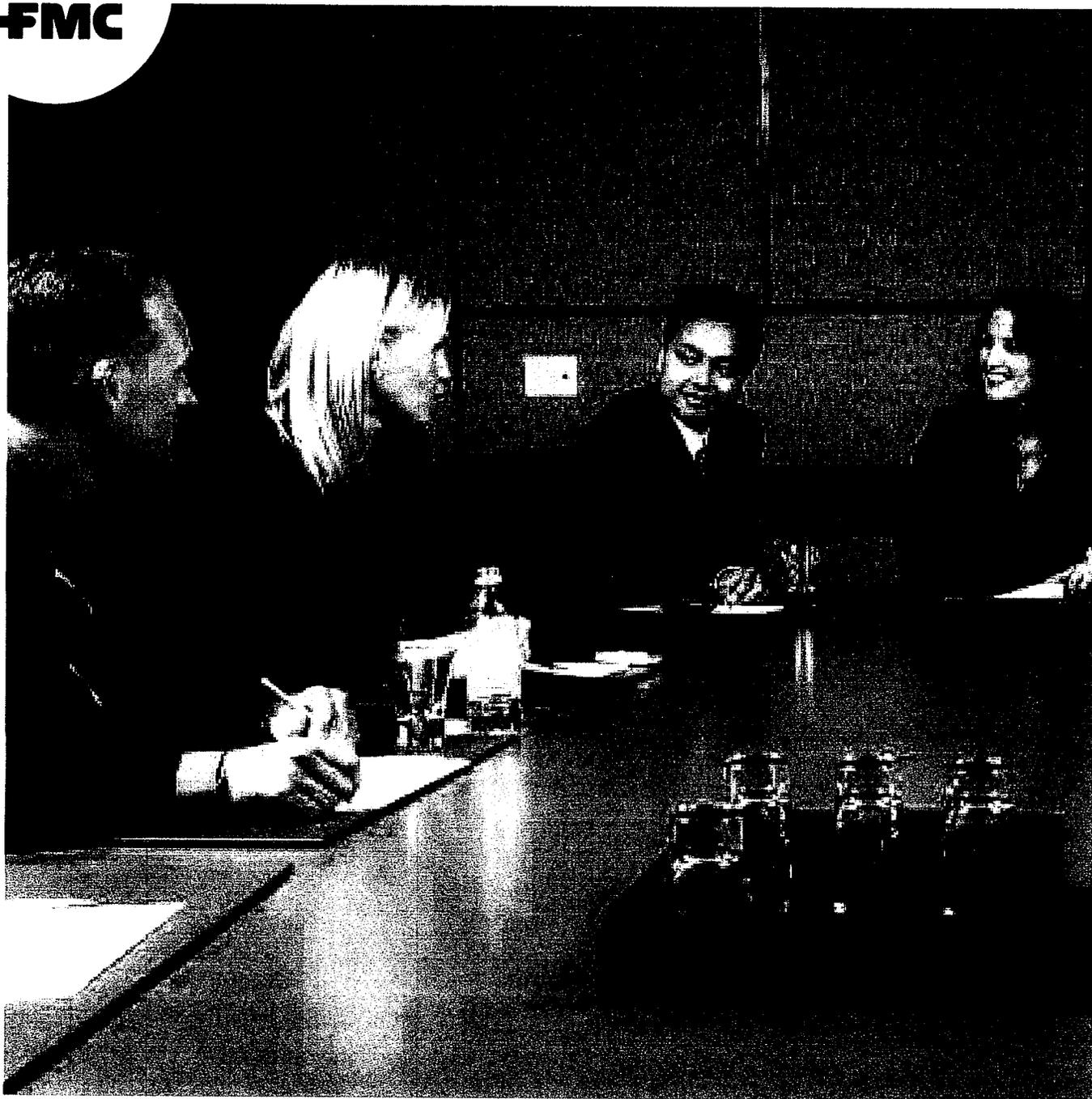
RANMAN

Vitavax-Thiram

Dimilin and Vitavax-Thiram are registered brands of Chemura Indústria Química Ltda. DiPel is a registered brand of Sumitomo Chemical do Brasil. Eminent is a registered brand of Ayata LifeScience. Ranman, Sanson and Turbine are registered brands of Ishihara Sangyo Kaisha Ltda.



FMC



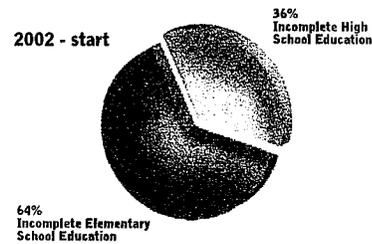
People are the main asset for consolidating business growth. FMC's Human Resources management is aimed 100% at the development and recognition of its main asset, employing assertive, sincere and continuous communication and following a policy of investing in the professional growth of every single employee.

One of the main FMC initiatives is the Management Development Program (PDG in Portuguese), carried out in partnership with the Dom Cabral Foundation, one of the best business schools in Brazil. The goal is to promote the development of new talents and increase the quality of FMC management by enhancing management skills related to the business, key processes and people.

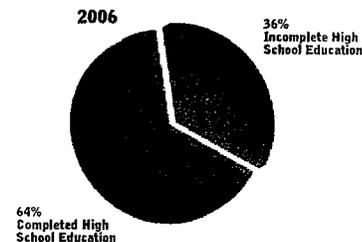
Another important program is "Young FMC Entrepreneur" targeted at interns. The program promotes the development of new talents and encourages new opportunities and professional development.

The improvement of employee education is another one of FMC priorities. For this reason, the Back to School Program was created to provide high school level education to plant workers in Uberaba (MG) in positions directly related to the production process in the Manufacturing area.

The results of this initiative have been very satisfactory and effective. When the program was introduced in 2002, 35% of the plant workers had not completed high school and 64% had not even finished elementary school. The scenario changed considerably once the initiative was implemented. In 2006, 100% of the workers had finished elementary school, 36% were studying at the high school level and 64% had completed it (graphs).



Working with People Management



These initiatives are part of a policy geared to the training, development and recognition of employees that encourages new ways of learning and improving through courses, seminars, talks and other ways of acquiring technical, administrative, managerial and behavioral knowledge.

Education and training must reflect on the quality of work. In order to measure this program's results, FMC relies on an incentive methodology to increasingly improve the organization's performance standards based on competency models. In addition to assessing business results, this tool measures the level of contribution from each employee to the business and promotes achievement recognition. As a result of this process, it is possible to consolidate development initiatives and guide career planning by encouraging personal and professional growth.

Rounding off this people investment process, the company offers a package of benefits aimed at ensuring employee quality of life, security and welfare.

Benefits:

- Health Insurance
- Life insurance
- Private pension plans
- Discounts at stores
- Transportation
- Food
- Reimbursement for medications
- Dental Assistance
- Medical Assistance

FMC



The best market practices are applied to FMC's business management – 6 Sigma, ISO 9000, "Cross Contamination" Program, Kaizen, continuous improvement methods, among others – are included in world class manufacturing process. These practices ensure competitive solutions for our clients, adding value to their business.

Additionally, the fulfillment of all legal requirements regarding the environment, employee health and safety ensure the transparency of operational management and the continuous supply of services. FMC won first place statewide and second place nationwide at the National Confederation of Industry in the category of production process quality and productivity.

Plant Quality Policy, Uberaba (MG)

FMC considers quality to be the strategic factor for increasing the reliability of its products and services in order to meet all client satisfaction requirements as well as those focused on people and the continuous improvement of processes, health, safety and environmental protection.

HSE – Health, Safety and Environment

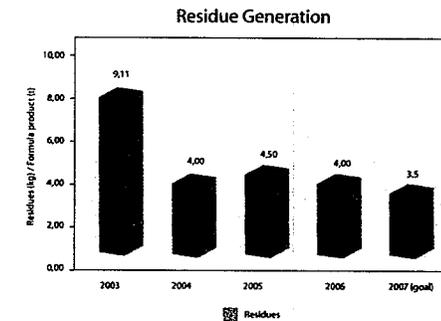
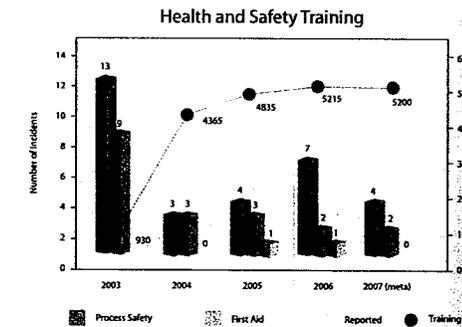
FMC is a signatory to Responsible Care program through the Brazilian Chemical Industry Association (Abiquim in Portuguese). This program was created by the Canadian Chemical Producers Association and was adopted by 50 countries. It is an efficient tool for environmental growth that includes safety of premises, processes and products, health conservation at the workplace, as well as environmental protection, not only on the part of FMC, but of the entire integrated production chain.



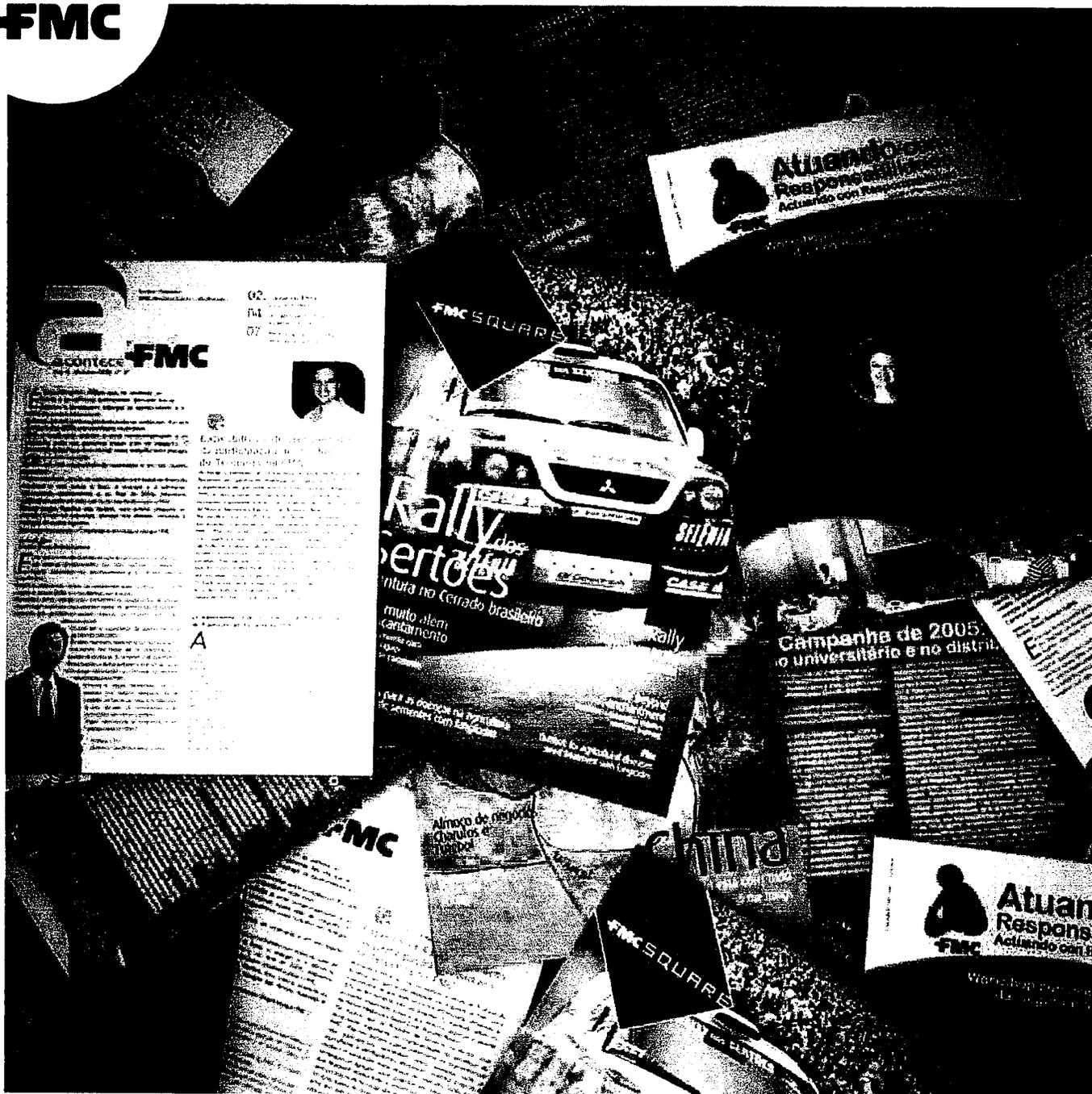
Health, Safety and Environment Policy

FMC Corporation is aware of its responsibility for protecting the environment as well as the health and safety of its employees and their families and society in general. The areas of Health, Safety and the Environment are fundamental values for the company and are included in the business management principles that aim to benefit employees, clients, neighbors and shareholders. All FMC employees are responsible for the continuous growth and measurable improvements related to these issues.

Optimizing the use of natural resources and implementing continuous improvements in residue control, recycling and disposal.



FMC



Conteúdo FMC

02. [Illegible]

04. [Illegible]

07. [Illegible]

A

Rally dos Abertos

1000 Horas

1000 Horas

Atuan Respons

Atuando com Responsabilidade

Campanha de 2005

no Universitário e no distrito

Almoço de negócios

Chevrolet e FMC

Atuan Respons

Atuando com Responsabilidade

FMC SQUARE

It is fundamental to build and establish an open dialogue with all publics related to the company. FMC Agricultural Products firmly believes in this concept and all its communication activities rely on the principle of transparency, which reflects on the company's institutional image.

FMC uses various tools for its in-house public, seeking to target and align its communication efforts within the company. The FMC Acontece quarterly newsletter aims to publicize information regarding the main company activities and achievements of employees and departments in Brazil and the LAN region, which includes Mexico, Central America and the Caribbean, as well as the Export Zone area composed of Argentina, Bolivia, Chile, Colombia, Peru and Venezuela. This newsletter is integrated to the projects conducted at the annual Business Convention and regular meetings as well as through other special activities and initiatives.

Another channel that reinforces information synergy at the Campinas (SP) office and at the Uberaba (MG) plant is a breakfast held twice a year where employees have direct contact with the company's general director. Employees can ask questions and have an informal chat that creates a closer relationship between corporate levels.

Working with transparency

Agricultural researchers, universities, government agencies and clients are also an important public for FMC. FMC Square was created for them.

It is a semi-annual bilingual magazine (Portuguese/English) that contains articles written by PhDs and agribusiness specialists. The magazine became a landmark in the market thanks to its special design and comprehensive content.

Working with Responsibility, the company's main social and environmental responsibility program is another specific communication channel. It is a bilingual newsletter with the same name as the program that reinforces the message and initiatives undertaken, reports on activities and results, spreading information to farmers, universities, employees and relationship agencies in Brazil and the Andean countries. Since 2003, 24,000 copies of the publication's eight issues were published.

In addition to the newsletter, the Working with Responsibility program was also publicized by the press and the media. There were 484 features (in the printed and electronic media – radio, Internet and TV) reaching 79.8 million people since 2003. This reflects the program's credibility with the press.

FMC

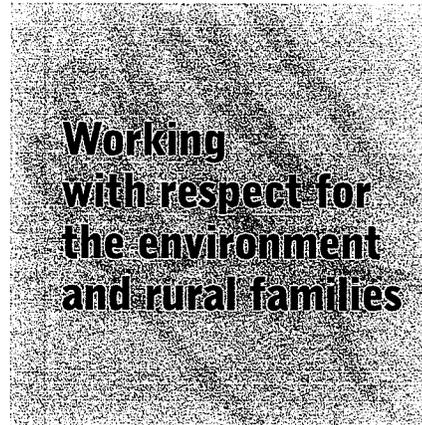


Working with Responsibility Program

A Program that is as comprehensive as the responsibility it takes on and as encouraging as the results it has been achieving.

The Working with Responsibility Program was introduced in 2003 as a result of FMC's concern with the use of chemical products in the field and their impact on the environment and human health. The program was created by the Working with Responsibility Committee and has received unlimited support from global management.

Working with Responsibility reflects FMC's values and environmental policy. FMC considers education to be the best way to protect the environment and safety of employees and communities. From the start, the company was aware that only training and guiding farmers was not enough. The company also needed to innovate in the way it raised awareness. The solution was to involve farmers in an environment where all parties are also aware of the importance of Working with Responsibility.



The first step was to simplify the message, transforming the working with responsibility procedures into "7 habits." When the challenge is seen this way, it becomes part of the daily routine and turns into a habit. It ceases to be a challenge.

The second step was to develop messages for each one of the publics with whom the farmer maintains professional or personal contact. And so began the dissemination and awareness campaigns of the "7 Habits of Responsible Care" for FMC field staff, agronomists, professors at schools of agriculture, specialized journalists, university students and also the spouses of farmers and their children, who can positively influence their parents.



"The great merit of our program was the perception that in order to transform Working with Responsibility into 7 daily habits, we needed to do more than just increase the awareness of farmers. We needed to involve them in an environment that encouraged change, so we needed to involve all those around them, in other words, their family and professional contacts."

Maria de Lourdes Fustaino

*Director of Registration and Product Stewardship
Head of the implementation of the
Working with Responsibility Program at FMC*

An Attitude Takes Root

FMC's first step in the implementation of the program was to create a Responsible Care Committee.

A fundamental tool was created during the first campaign, which achieved the objectives of the program: The FMC CD

Portfolio 1 that introduced the "7 Habits of Responsible Care" message, a summary of the seven safety steps to be followed by the farmer until they become a daily habit. This message summarized in a clear and objective manner everything that the farmer must do before, during and after using chemical products.

The first project under Working with Responsibility was aimed at Seed Treatment for upland rice, corn and cotton, focusing on enhancing the final product quality, reducing losses from pests immediately after seeding and protecting the farmer during the product application process.

(1) Responsible Care Committee

The program is developed by the Product Stewardship Committee whose contributing members are employees from different company departments who are directly involved in coordinating activities. RTCs (Commercial Technical Representatives in Portuguese) and regional managers provide support and are indirectly involved. The objective is to implement and disseminate techniques aimed at minimizing existing risks in the entire product process, starting with the research and development stage and including its manufacture, transportation, use and disposal.

The Committee strengthens its objectives by developing new initiatives with creative and innovative ideas, motivating and involving and increasing number of professionals in the field. The number of developed regional projects increases every year in terms of quantity and quality. The projects represent the company's commitment to farmers by seeking the lowest risk of contamination and raising the awareness of rural families.

(2) CD Portfolio

In 2003, CDs were created to educate and train farmers. They were distributed to employees, clients and university students. Starting in 2004, the CD Portfolio is updated annually with the changes in FMC products (doses, formulations), new registrations and new manuals. Its content, focused on best practices for responsible care in the field, includes a wealth of material on the main pests, legislation and agricultural products available today on the market, as well as the "7 Habits" message. Additionally, an online version was created, making it easier for more people to access and obtain updated information on the program.



CONTENT

- The 7 Habits of Responsible Care:
 - 1) Safe Transportation;
 - 2) Product purchased with a Prescription from an Agronomist;
 - 3) Storage;
 - 5) Spray Mix Preparation;
 - 5) Use of PPE;
 - 6) Disposal of Leftovers and Empty Containers;
 - 7) Application Technology
- Updates
 - 1) Integrated Pest Management
 - 2) Legislation



Growth comes with success

In 2004, the campaign started to focus on education. The program was divided into projects aimed at the public that interacts with farmers – rural school students, university students and employees – who can influence them and spread responsible care information in the field.

The 2005 campaign kept the focus on university students and children, but extended its reach to include women. This was one of the main changes that year. Successful projects introduced in the previous years were continued.

In 2006, the Working with Responsibility Program targeted initiatives related to Seed Treatment education, training and technical support, as well as reducing exposure during product application. Special mention also goes to projects involving FMC employees, journalists, women and academia that disseminated information on the "7 Habits of Responsible Care."

Since its creation, the official launchings of the annual campaigns of the Working with Responsibility Program have been made in Brasilia (DF) so that FMC's message and proposals reach authorities at the Ministries of

Agriculture, Environment, Anvisa, Embrapa and the heads of various universities in Brazil.

Another of the program's traits is the development of projects that use a specific language for each public that interacts with farmers, providing information through special initiatives targeted at these publics.

Between 2003 and 2006, this project reached 148,300 people through trainings and education to disseminate knowledge and awareness, spreading the message of the "7 Habits of Responsible Care."

17.958

PERSONS REACHED IN 2004

58.096

PERSONS REACHED IN 2005

72.246

PERSONS REACHED IN 2006

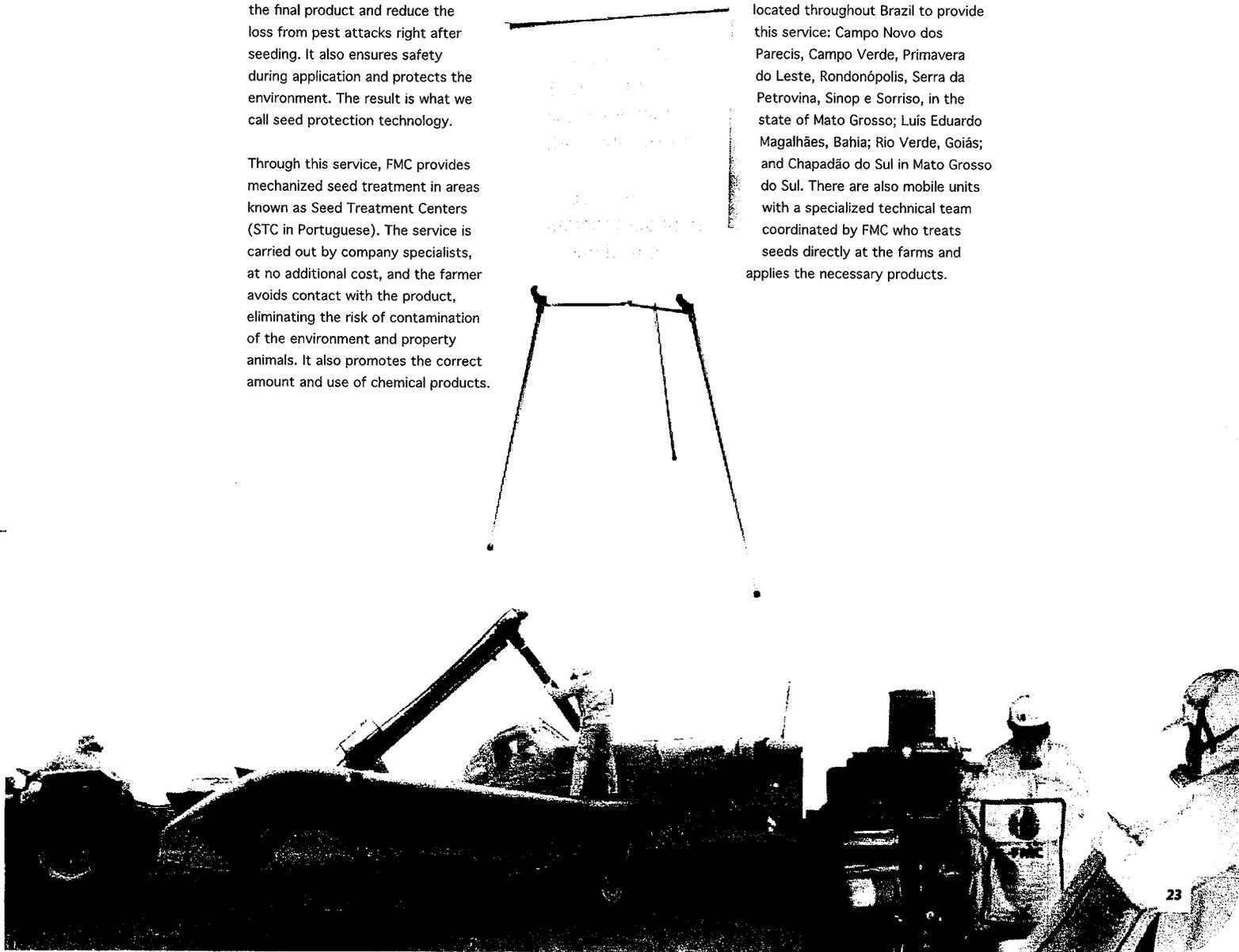
Seed Treatment

FMC is developing since 2003 a project aimed at Seed Treatment, which greatly contributes to productivity and protection of human health and the environment. Targeted at upland rice, corn and cotton crops, Seed Treatment seeks at the same time to enhance the quality of the final product and reduce the loss from pest attacks right after seeding. It also ensures safety during application and protects the environment. The result is what we call seed protection technology.

Through this service, FMC provides mechanized seed treatment in areas known as Seed Treatment Centers (STC in Portuguese). The service is carried out by company specialists, at no additional cost, and the farmer avoids contact with the product, eliminating the risk of contamination of the environment and property animals. It also promotes the correct amount and use of chemical products.

All treated seeds have their own treatment chart, which enhances control. Personal protection equipment (PPE) is used during application and, in the case of mobile units, the PPEs are distributed to all technicians, as well as those who apply the product in the field, ensuring the program's efficiency.

There are ten CTs strategically located throughout Brazil to provide this service: Campo Novo dos Parecís, Campo Verde, Primavera do Leste, Rondonópolis, Serra da Petrovina, Sinop e Sorriso, in the state of Mato Grosso; Luís Eduardo Magalhães, Bahia; Rio Verde, Goiás; and Chapadão do Sul in Mato Grosso do Sul. There are also mobile units with a specialized technical team coordinated by FMC who treats seeds directly at the farms and applies the necessary products.



Planting the 7

FMC knows that caring for seeds is a great investment in the future. To this end, it also developed the Planting the 7 project, a theater show created in 2004 that aims to "plant" the seven habits of safety and "sow" among children the importance of raising their parents' awareness.

In 2005 a new version of the play was created called Planting the 7 Traveling Show that performed in various Brazilian states. The show was also performed at important industry events such as Coopavel, Agrifam and Cotrijal in 2005, as well as partnering up with Grupo Dedini Agro for shows in 2006.

Children who watched the plays also received didactic material with various games that reinforce the principles of the 7 Habits of Responsible Care. Between 2004 and 2006, this project sponsored 189 performances in 26 towns, attracting the participation of 55,192 persons.

Eight theater workshops were also held for 248 teachers who received information on using theater as a pedagogic tool in 2004 and 2005.

After the performances, children took a test that showed high retention levels of the knowledge transmitted.



Using accessible language, the interactive play is based on fairy tales such as Snow White, Little Red Hiding Hood, Hansel and Gretel and Jack and the Beanstalk. It uses the popularity of these stories to approach the problems caused in food and human health by the incorrect use of chemical products.



Employee Responsibility



Conscious of the important role its employees play in the dissemination of the correct and safe use of its products, FMC created the Responsible Employee in-house award in 2004 to encourage its employees to develop projects together with the distribution and production channels. The prize is awarded to the best dissemination efforts of the "7 Habits" principles and the correct and safe use of its products. In 2004, four projects were entered and the winner was RTC (Commercial Technical Representative) Jerônimo Salazar who created a

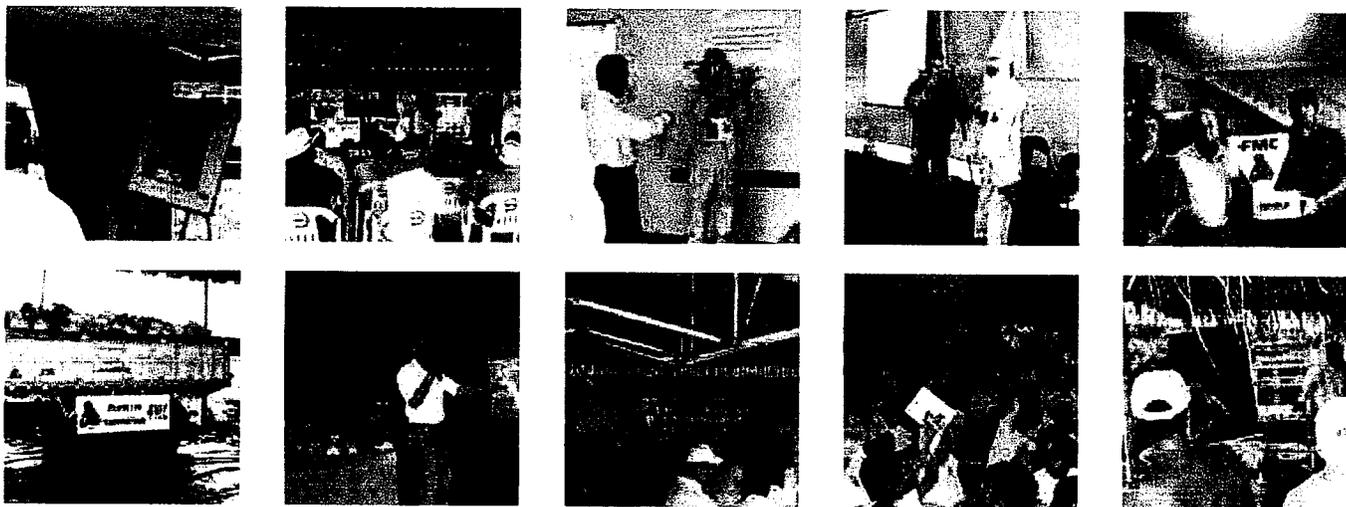
radio program called "FMC MINUTE" in 16 towns in the state of Santa Catarina that reached a large number of farmers.

Eight projects were entered in 2005 and the winner was "A Day at the Farm" developed by RTC Gustavo Canato. His project entails raising awareness in farms and public schools in towns in the state of Mato Grosso.

The growth of this initiative has led to the improvement in quality and amount of projects entered. In 2006, 17 projects were entered,

demonstrating that this award is truly motivating employees to perform their social duties by increasing awareness and changing behavior related to chemical product use and thus contribute to FMC's commitment to sustainability in agriculture.

The projects are evaluated by a commission composed of representatives from organizations, consultants and researchers connected to the agribusiness industry.



Special Attention to Dissemination

The program's logo and information on the "7 Habits" were printed on the containers, such as the cardboard boxes and product lids. Emergency labels were also developed - with useful telephone numbers in case of accidents with the product during its use

(contracted doctors) or transportation (companies specialized in chemical product accidents). At the Uberaba (MG) plant, a practical pocket manual was developed and distributed free of charge to farmers. With the slogan "Think Safety. You and Your Family Deserve It", the booklet provides tips on various topics related to safety, on accident prevention and

on how to enhance the quality of life at work and at home.

Thanks to its innovations, the Working with Responsibility Program received wide media coverage in all towns it visited, further spreading the 7 Habits.

ACTUANDO CON RESPONSABILIDAD



Another new point of the campaign was the extension of the program to other Latin American countries. Working with Responsibility was launched in Colombia, Peru and Chile, countries where FMC has business units. The program took its advice on safety to the field staff in these countries, always respectful of cultural and economic differences.

The training program reached more than 2,000 small and medium-sized farmers in 2005. In 2006, the program reached 9,612 persons.

PLANTANDO LOS 7



The Working with Responsibility Program received a Spanish language version of its play, which was performed under the title "Plantando Los 7" in Peru, Colombia and Ecuador. The performances were a hit from the point of view of participation by school students and children, rural community involvement and the results obtained. In all, there were 26 performances of the play in 16 towns which took the "7 Habits of Responsible Care" to 6,837 children in 143 rural schools.

EDUCATION FOR LIFE: UNIVERSITY STUDENTS



In 2004, FMC invested in the Education for Life: University Students project that trains students from agronomy colleges and rural technical schools, supplementing the curriculum with information on the "7 Habits of Responsible Care."

The program of seminars was presented to undergraduate and graduate students as well as faculty at 12 of the most important agronomy universities in Brazil. In all, 1,195 future professionals were trained at the seminars, as well as distribution and demonstrations of the CD Portfolio.



REFLECTIONS FOR LIFE: UNIVERSITY STUDENTS



Also targeted at university students, the 2005 campaign of the University Student Program changed its name to Reflections for Life, working with Maurício Lima, the twice Olympic champion of the Brazilian Volleyball Team. As the spokesman for this program, Maurício gave the talk "7 Habits to Boost Your Life" at important agronomy universities. The talk provides teachings that will help students in their professional and personal lives. Maurício is an admired sports personality and many students will take his teachings to heart in light of his brilliant career on the volleyball courts.

Approximately 2,000 students attended this program of talks in 2005 at agronomy universities in Ituverava (SP), Rondonópolis (MT), Jaboticabal (SP), Goiânia (GO), Brasília (DF), Londrina (PR) and Rio Verde (GO).

WOMEN: INNOVATING FOR THE FUTURE



Another pioneering project in Brazil was launched in 2005 as a partnership with FAFRAM - Dr. Francisco Maeda University of Ituverava: the program "Women: Innovating for the Future", designed exclusively for rural women: the wives, mothers and daughters of farmers.

The project is based on environmental education and social inclusion and provides a new life opportunity and perspective for the future for wives of workers who apply chemical products and live in rural settings.

In addition to FAFRAM, this initiative also relies on partnerships with city halls in the Ituverava region. Its activities include talks on women's rights and counseling on the transmission of various diseases; short courses in Culinary, Computers, Zoonosis, Gardening, Women's Rights, Home Vegetable Gardens and the 7 Habits of Responsible Care. A total of 150 women were reached by the program in 2005.

In 2006, five meetings were held with women of 15 towns in the Ituverava and Jales regions of the state of São Paulo, reaching 373 rural women. An assessment of the knowledge and learning of the participants is done at the start and end of the course.



EDUCATION FOR LIFE:



Under this program, FMC consultants gave training seminars for 186 students and faculty members of Technical Schools run by the Paula Souza Educational Center in 2005.

MASTER IN RESPONSIBLE CARE



The development of scientific projects and seminars was also promoted in 2006 by the Master of Responsible Care project as a way of spreading knowledge in the scientific field and disseminating the important of responsible care at universities.



WORKING WITH RESPONSIBILITY JOURNALISM AWARD



In 2006, the program also reached out to journalists in an initiative to encourage and recognize Brazilian press professionals who, by means of articles published in the media, promote, recognize and contribute to education and training projects on the correct and safe use of chemical products from the time of purchase to the disposal of empty containers, based on the principles of the 7 Habits.



CITIZEN UNIVERSITY - FIELD TRIPS FOR WORKING WITH RESPONSIBILITY



This project takes university students on field trips to the countryside and places them in direct contact with the "7 Habits of Responsible Care." The Citizen University project was created in 2006 as a partnership with the Rio Verde University (Fesurv) that organized the field trips for more than 1,000 students from four universities in Goiás: Fesurv; Federal University of Goiás/Jataí campus; Mineiros Integrated Colleges (FIMES); and Lutheran University of Brazil (Ulbra)/Itumbiara campus. Students in agronomy, veterinarian and animal science schools participated.

The universities hosted for a day an initiative that transformed each one of the 7 Habits into a stand, with the purpose of increasing awareness of the correct use of agrochemicals and generating knowledge multipliers. The students in the stands provided information and also participated in demonstrations with entities such as the fire brigade.

OTHER INITIATIVES

Special mention to the creation and distribution of 5,000 Emergency Manuals, the distribution of 3,650 PPE kits, participation in the Recicap project - Recycling of caps, and the printings of the "7 Habits of Working with Responsibility" message on 4,231,650 caps (aluminum) and logo on 725,868 boxes in 2005 and 2006.

EDUCATION AND TRAINING MATERIAL

Development of a training kit composed of flip charts and FMC CD Portfolio containing information on legislation and ethics at companies and a manual on IPM (Integrated Pest Management). Also distributed were CD portfolios for students and employees who sent their requests by e-mail or the 0800 number. In addition, the content was made available on the company web site.

Since the start of this project, a total number of 148,300 information multipliers were reached through trainings, field trips, performances of Planting the 7 and Plantando Los 7 in Peru, Ecuador and Colombia and talks given by teams of RTC and consultants.

FMC



Women of Fiber

Partners joining together with the common desire to make dreams come true by promoting changes in the community that can change the lives of not only the beneficiaries, but also of all those involved. Based on this ideal, a social responsibility network was formed to promote social work initiatives for organizations located in cotton producing regions. This network became the FMC project Women of Fiber whose goal is to sponsor community infrastructure improvement projects in the Cerrado region of Brazil, focusing on the areas of social work, education and health.

The women of fiber, for whom the project is named, head the initiatives. They are spouses of FMC Prima Class preferred clients, connected to the cotton industry in all Brazilian states that grow the crop. The project entailed the creation of seven committees in these states. The women form the committees, assess the institutions that need improvements, present the projects and, once approved, coordinate the entire implementation of the project, which could be a playroom, a dining hall, dormitories, leisure areas or any other specific need of the institution. In this manner, they bring hope and strength to the communities they live in.

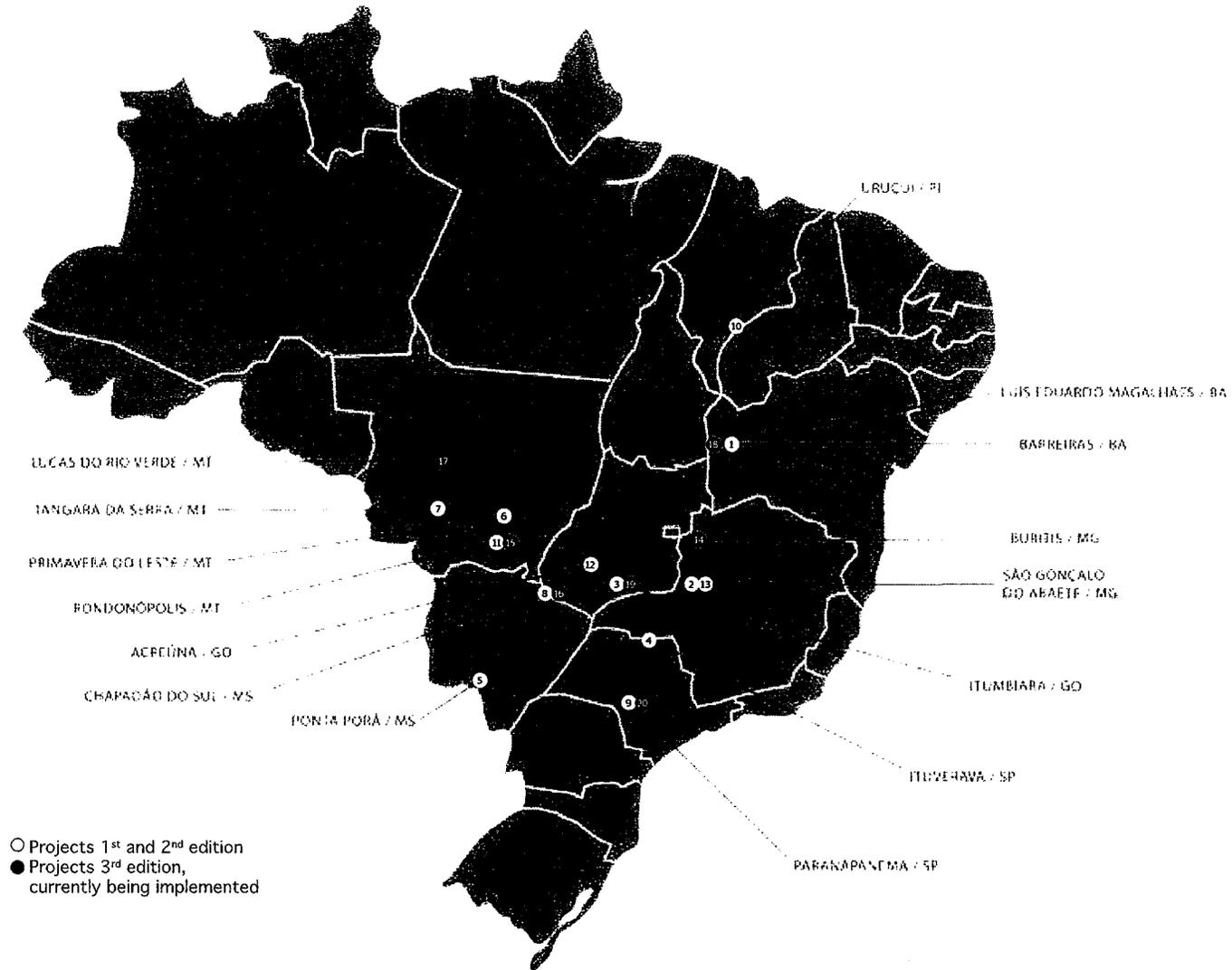
FMC provides financial resources to the institutions whose projects were selected, as well as the transfer of knowledge, management know-how and volunteer work groups through its regional field staff. FMC also provides support and consulting to the committees.

Introduced in 2004, the Women of Fiber committees presented 11 projects in its first year. Six projects were selected and implemented in 2005. In 2006, 19 projects were entered, of which 7 were approved. For 2007, seven projects were chosen out of 33. This project is one of the benefits of the Prima Classe relationship program, which offers support to social responsibility initiatives as an incentive to the cotton producer.

**Working in the
communities**



WOMEN OF FIBER PROJECT



○ Projects 1st and 2nd edition
 ● Projects 3rd edition, currently being implemented

1st edition

- 1- APAE BARREIRAS - Remodeling, construction and expansion for security and welfare
- 2- APAE SÃO GONÇALO DO ABAETÉ - Building of 3 classrooms
- 3- AMI - ASSISTANCE FOR MINORS IN ITUMBIARA - Building of 1 classroom, playroom and improvement of the park and green areas
- 4- IVVI - Remodeling of dining hall, bathrooms and kitchen
- 5- APAE PONTA PORÁ - Improvement and roof for sports court
- 6- APAE PRIMAVERA DO LESTE - Building of a children's park with adapted toys

2nd edition

- 7- APAE TANGARA DA SERRA - Creation of a playroom
- 8- NOVA ESPERANÇA THERAPEUTIC COMMUNITY - Improvement of facilities and purchase of kitchen and pantry equipment
- 9- SOCIAL CENTER ASSOCIATION SÃO JOSÉ DE PARANAPANEMA - Creation of a playroom
- 10- APAE URUÇUI - Building of a folk art room and store.
- 11- LAR CRISTÃO FOUNDATION - Purchase of equipment and furniture for dormitories
- 12- MARIA ÂNGELA DE AZEVEDO ASSUNÇÃO CHILDCARE CENTER - Creation of a playroom
- 13- CONSELHO PARTICULAR VICENTINO - Remodeling of changing rooms, bathrooms and dining hall

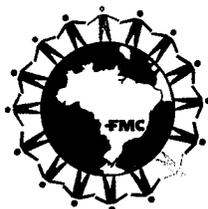
3rd edition

- 14- FREI PIO BARS ASSOCIATION - Creation of playroom
- 15- LAR CRISTÃO FOUNDATION - Extension of laundry room and purchase of equipment
- 16- APAE CHAPADÃO DO SUL - Pool: roof and purchase of heaters
- 17- APAE LUCAS DO RIO VERDE - Construction of cabinet-making shed
- 18- APAE LUÍS EDUARDO MAGALHÃES - Purchase of pedagogic and physical therapy material.
- 19- AMI - ASSISTANCE FOR MINORS OF ITUMBIARA - Remodeling nursery
- 20- HOLAMBRA II SENIOR CITIZENS - Building of headquarters

FMC Volunteers

FMC recognizes of the dynamism of its employees and communities where it operates. FMC develops initiatives that encourage social work that are carried out by employees of the company, spreading its principles and values as well as a helping develop personal attitudes that turn the world into a better place to live.

FMC VOLUNTEER PROGRAM



Volunteers...
Doing their Civic Duty
FMC

By uniting all employee initiatives, the FMC Volunteer Program not only boosted the volunteering spirit, but also began to make better use of the potential of employees and their families.

In 2006, employees from the Campinas (SP) office submitted three local institution projects to voting by an Evaluation Committee. The Abamac (Madre Cândida Care Assistance Association) was chosen and FMC will fund the building and organization of a playroom. The playroom will benefit the 90 children and teenagers between the ages of 7 and 14 that are cared for by Abamac. The approval took into consideration the total number of points for the legal framework of each project with items such as impact on the community, number of users served and overall scope.

In the same volunteer spirit, the employees in Uberaba (MG) created a work group that involves clients and suppliers in raising non-perishable food items for donations to needy families. The field staff, agronomists who live in various regions of Brazil, also participate in volunteering programs by donating their knowledge and time to underprivileged communities.

FMC Mission:

Be engaged in community aspects, aiming to encourage employees to exercise their civic duties.

Employee Mission:

Encourage people to help themselves by teaching them how to fish and not by handing out fish.
Identify opportunities and develop programs and initiatives to improve the community's quality of life.

FMC Volunteers:

The heart inspires
The brain thinks
The hands accomplish

FMC



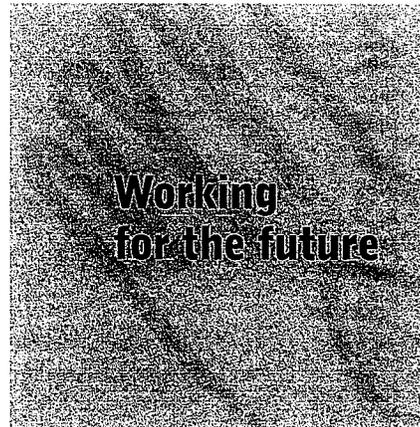
Focus on continuity for improving the life of rural communities. With this purpose, FMC firmly believes that initiatives such as the ones presented in this report contribute to the recognition of rural work and assist in the social inclusion of these citizens.

The success of Working with Responsibility and the growing positive results added another dimension to the program, which consolidated a structure that involves the participation of specialists, schools, universities and creates a solid chain of awareness and the multiplication of health prevention and environmental protection initiatives. Initiatives that were carried out point to the growth and development of new projects, consolidating more and more the close and caring relationship with rural producers.

All efforts are aligned with the personal and professional growth policy for people who make up FMC, such as its employees, clients, suppliers and community: a network of professionalism and community outreach.

Investment in people is a principle that ensures development of citizens and prominence in society in a way greater than mere business development.

FMC Agricultural Products continues working for the future and believing more and more that people are the motor that transforms the world into an increasingly better place to live.



“The Chaos Theory states that the simple flapping of a butterfly’s wings in Beijing may set off a storm on the other side of the world”

Everything is cause and consequence. May each one’s contribution to the Working with Responsibility Program be the flapping of wings that will cause a great awareness and commitment to responsible care and the sustainable use of our planet Earth.

FMC



- Best Companies to work for
For five consecutive years, from 2001 to 2005, FMC was elected by Exame magazine as one of the Best Companies to work for in Brazil.



- Working with Responsibility – Phytosanitary Merit Award
The program had its success confirmed by winning, for three consecutive years, the Phytosanitary Merit Award from ANDEF (National Plant Protection Association), the most important award in the segment.



2003 Campaign: first place in the “Innovation Category” for project developed for seed treatment in the Cerrado region of Brazil and the creation of the CD Portfolio, a simple and objective tool for training farmers and agricultural technicians.

2004 Campaign: first place in the “Industry Category” recognized as the company with the

best farmer education and training program, the Working with Responsibility Program. Also, the company came in third place in the “Innovation Category” with the Education for Life Program.

2005 Campaign: first place in the “Best Education and Training Program” category and second place in the “Employee of the Year” category.



- Working with Responsibility – ABMR&A
The 2004 campaign was also recognized by the most important awards in the industry: GOLD prize at the XIV ABMR&A Communications Exhibition for Rural Marketing and Agribusiness.

- Working with Responsibility – Rouanet Law
In 2005, the program was recognized for its cultural and educational importance and became an approved program under the Rouanet Law for support of cultural projects.

- Women of Fiber
The Women of Fiber project won the XIV ABMR&A Communications Exhibition of Rural Marketing and Agribusiness 2005 in the “Community Promotion Campaign” category, demonstrating the recognition of the project by the agricultural market.

- CNI Award
The Uberaba plant placed second nationwide for the CNI Award 2005 in the “Quality and Productivity” category.

- FEAC (Federation of Assistance Entities of Campinas)
In 2004, FMC was granted the title “Private Social Investor” from FEAC in light of its joining and contribution to the School Quality Program (PQE) in the period from May 1999 to December 2003.



- ABRINQ Foundation
The company was recognized in 2004 for its commitment to defending the rights of children and adolescents in Brazil. Title was bestowed by the ABRINQ Foundation.

Social and Environmental Balance Sheet

Net income (R\$) – FMC Agricultural Products

	2005	2006
	R\$ 597,264,765.00	R\$ 543,134,306.00

In-house social indicators

	2005 (in thousands of R\$)	2006 (in thousands of R\$)
Food	624,656.50	589,566.43
Mandatory social charges	4,579,588.08	4,763,529.19
Private pension	554,538.73	481,228.29
Workplace safety, health and medicine	559,234.00	426,896.00
Profit or gain sharing plans	3,053,764.00	3,008,778.00
Total	5,138,822.08	9,269,997.91

Staff Indicators

	2005	2006
Number of employees at end of fiscal year	180	189
Number of interns	14	13
Number of employees over 45 years of age	20 (**)	24 (**)
Number of women employees	50 (**)	55 (**)
Number of women in management positions	10 women out of 34 managers, equal to 29% (**)	10 women out of 37 managers, equal to 27% (**)

Relevant information related to corporate citizenship

	2005	2006
Total number of work-related accidents	0	0

Number of people reached by the Social Environmental Responsibility Program – FMC Working with Responsibility – from 2004 to 2006

Project	Number of people reached
Planting the 7	55,502
Responsible Employee	50,666
Plantando los 7 (Peru, Ecuador, Colombia)	6,837
Women Innovating for the Future	523
Responsible Distributor	80
Reflections for Life	2,000
Education for Life	1,381
Working with Responsibility	11,612
Master of Responsible Care	150
Responsible Journalist	300
Citizen University	624
Other projects (Environment Week, Clean Fields Day, Reading Rooms, Safe Application, etc.)	18,625
Total	148,300

Media features on the program between 2003 and 2006

Features	434
Audience	79.81 milhões

Seed Treatment from 2003 to 2006

Bags of treated seeds	3,681,709
Purchased seed treatment machines	522

(**) Only permanent employees and interns were considered.

Other information:

A) The company annually holds various training programs for its employees on ethical issues and good business conduct.

B) FMC does not use child labor or forced labor and is not involved with prostitution or sexual exploitation of children or adolescents.

C) This report is distributed to all FMC employees and partners (suppliers, visitors and the community).

D) The work carried out with the FMC Program Working with Responsibility is an important part of the company's strategy for increasing awareness of the rural worker in relation to the correct application of chemical products. It is an educational process that involves the entire family

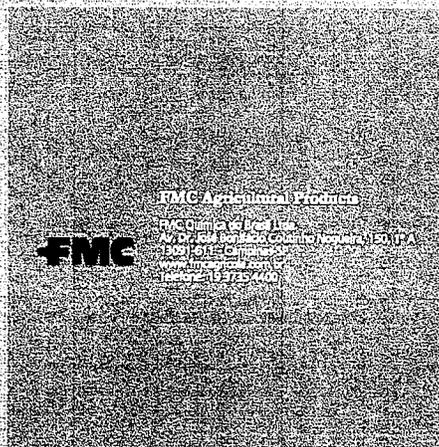


Balance Sheet

of the farmer with initiatives targeted at children and spouses that offer a new chance in life and future perspectives for this community.

E) This publication reports activities in the social responsibility area that were sponsored and carried out by FMC since the introduction of the Working with Responsibility Program in 2003 and up to the 2006 initiatives.

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WARNING

PROTECTION OF HUMAN AND ANIMAL HEALTH AND THE ENVIRONMENT

- Do not allow minors to work in the application.
- Maintain all children, domestic animals and unprotected individuals away from application areas.
- Use Personal Protection Equipment (PPEs).
- Do not eat, drink or smoke while handling the product.
- Do not unplug nozzles, orifices or valves with your mouth.
- For first aid and other information, see label, insert and prescription.
- Avoid contaminating the environment, preserve nature.
- Do not use leaking application equipment.

- Do not wash out equipment in lakes, springs, rivers and other bodies of water.
- Apply only the recommended doses.
- Empty containers must be rinsed out three times and the resulting spray mix must be added to the preparation to be sprayed (triple-rinse).
- Dispose correctly of containers and leftover product.
- Do not reuse empty containers.
- Environmental hazards and other information, see label, insert and prescription.

Storage Instructions
Keep product in its original container.

The storage area must be used only for toxic products. Do not store together with food, drinks or other materials.

Place warning sign with the following statement:
WARNING: POISON

Lock up area to prevent entrance of unauthorized persons, especially children. For container disposal, follow current legislation.

Read carefully the label, insert and agronomic prescription, or have it read to you if you are not able to read.

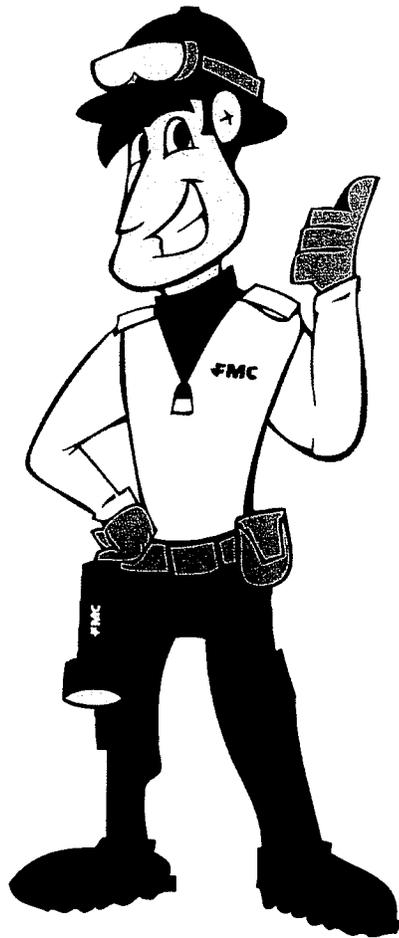
ALWAYS CONSULT AN AGRONOMIST. AGRICULTURAL USE PRODUCT. SALE UNDER PRESCRIPTION BY AGRONOMIST.



E

FMC Training in 7 Habits to Act Responsibly

Urbano Segura



Prudencio Segura

FMC



**EMPRESA
SOCIALMENTE
RESPONSABLE**

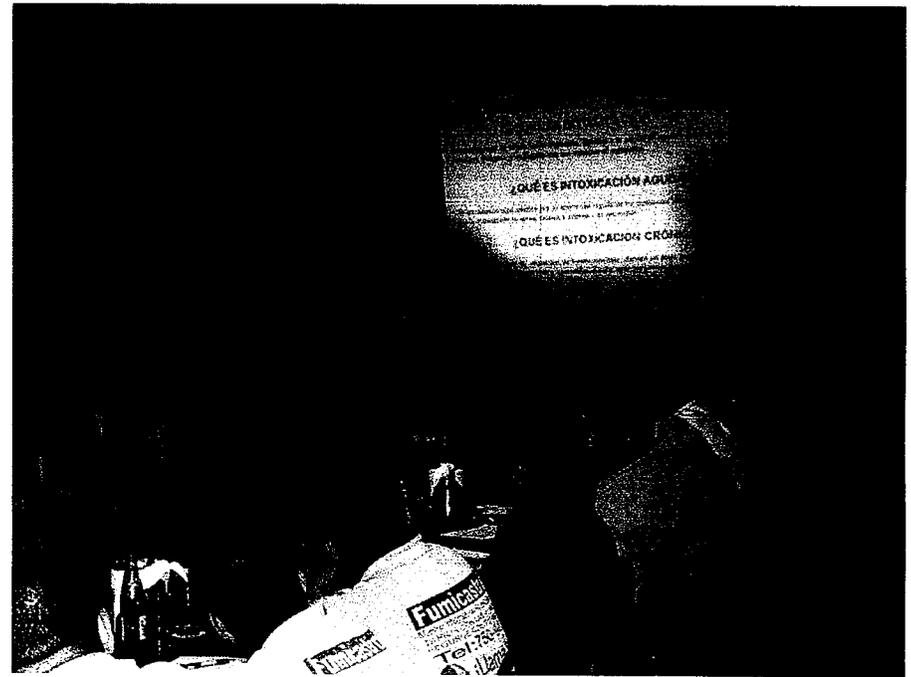


FMC

www.fmcagroquimica.com.mx



Training in First Aid Procedures for Agrochemical Poisoning.



Dra. Paola Santillán

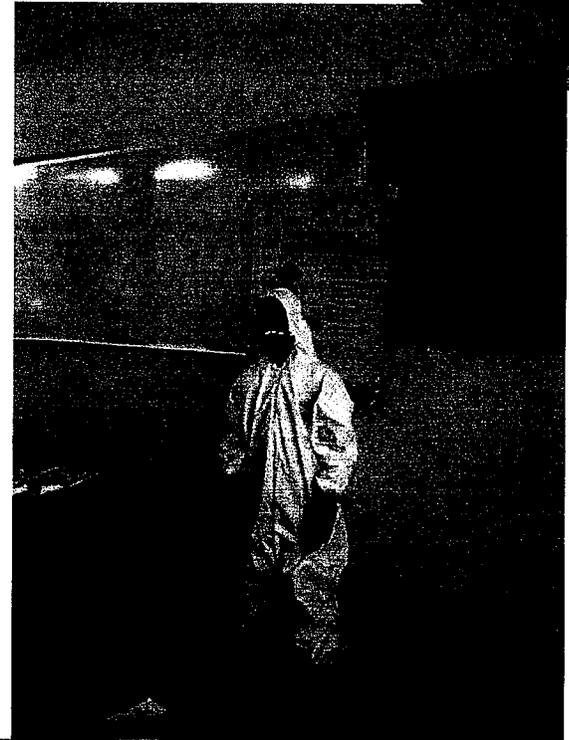
CRECEMOS
CONTIGO

FMC

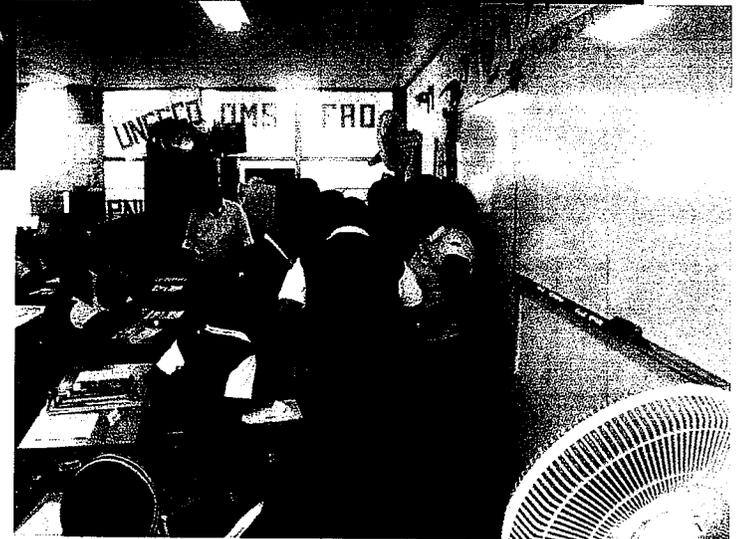
www.fmcagroquimica.com.mx



Training kids in the Rural School “María Carmen Sauza Mora”, Tequila, Jal.



70 Students



Training: 7 Habits to Act Responsibly

Our Commercial Technical Representatives training growers.



FMC
eres **TU**

**CRECEMOS
CONTIGO**

FMC

www.fmcagroquimica.com.mx



Training in FMC Storage

February 19 2010.



Training in FMC Storage

February 19 2010.



FMC
eres **TU**

**CRECEMOS
CONTIGO**

FMC

www.fmcagroquimica.com.mx



F

Product Stewardship

FMC

Chemical (Thailand) Ltd.

Product Stewardship Already

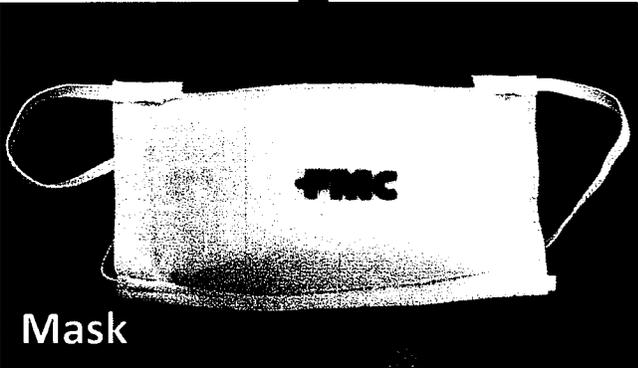
- Safety kit (Mask, Rubber glove)
- Rubber boot (Rice field)
- Support printing treatment booklet
- Picture cartoon design and wording safe use
- Safe use message in Leaf let, PVC Stand, Banner, Paper poster, PVC porter
- Grand opening FMC, presentation stewardship plan
- Farmer meeting start implement safe use presentation and give safety kit

Product Stewardship Shorter term

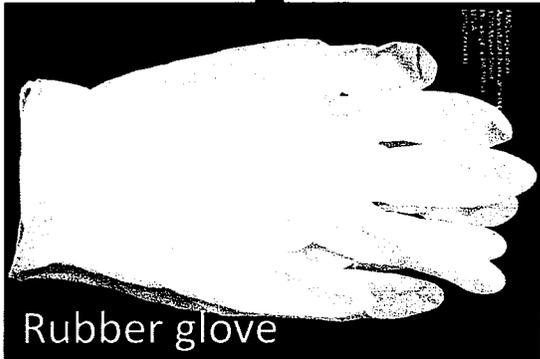
- Distributors/dealers training/certification
- Farmer training/certification (play role)
- Get applicators to use motorized knapsack blower instead of hand application
- Doctor/health care personnel training on CMs
Poisoning and efficacy treatment (by rotating to each region)
- Children training in school

Product Stewardship Longer term

- New formulation – development/modifications i.e. reduce% ai content cs-formulation, premix for.
- Carbofuran poisoning case monitoring by region and intensive usage; provide blood test
- Antidotes vs. CMs supply to the district hospitals throughout the country
- Resistance monitoring vs. key insecticide, i.e. rice stem borer, leaf folder, or BPH
- Other environment impact studies i.e. on contamination, residue in the river, canals; fish toxicity
- Monitoring on the residue in food crops
- Carbofuran traceability projects in food crops



Mask



Rubber glove

Safety kid

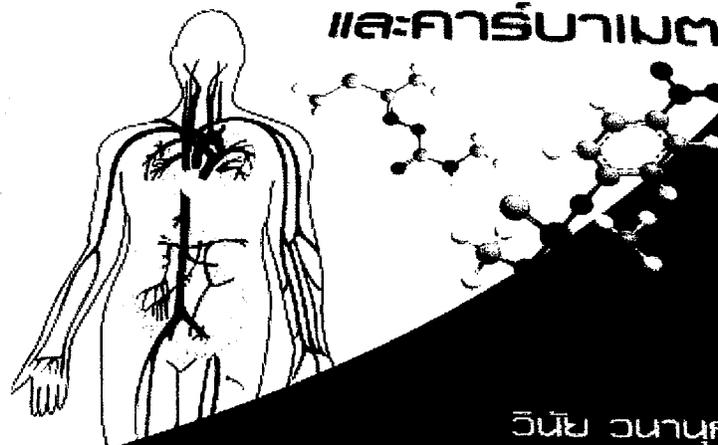


Rubber boot for rice field



กรมวิทยาศาสตร์
และเทคโนโลยี

ภาวะเป็นพิษ
อาการ
ออร์แกนฟอสฟอรัส
และคาร์บาเมต



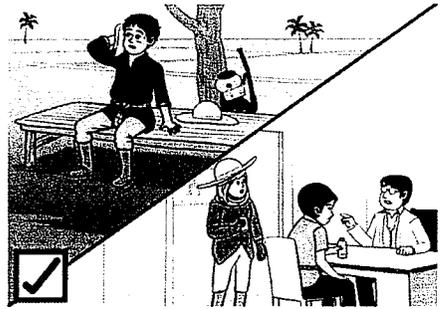
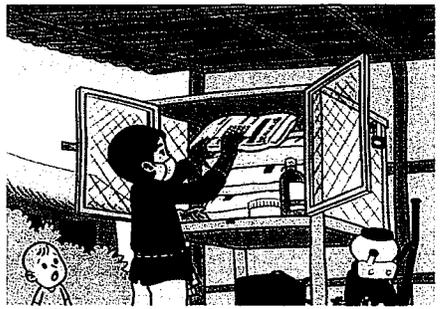
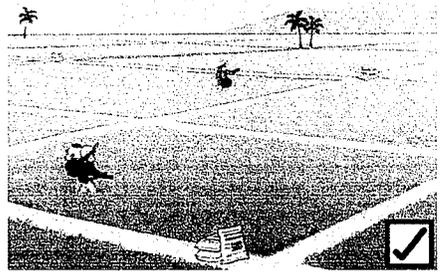
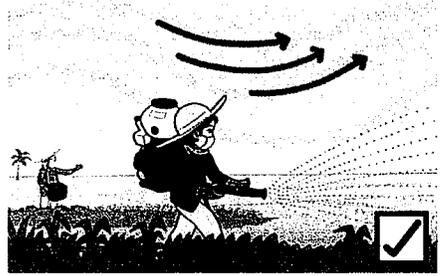
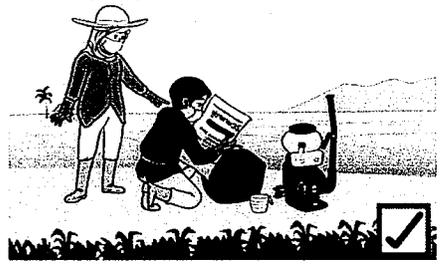
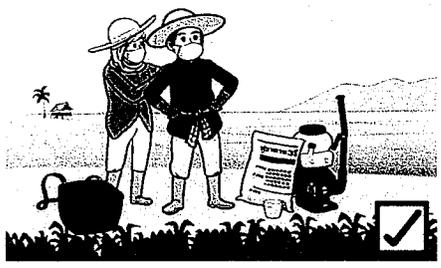
วินัย วนานุกูล

บริษัท เอฟเอ็มซี เคมีคัล(ประเทศไทย) จำกัด สนับสนุนการจัดพิมพ์

Toxicity from Organophosphorus and Carbamate Book (170 p., CVD)

FMC

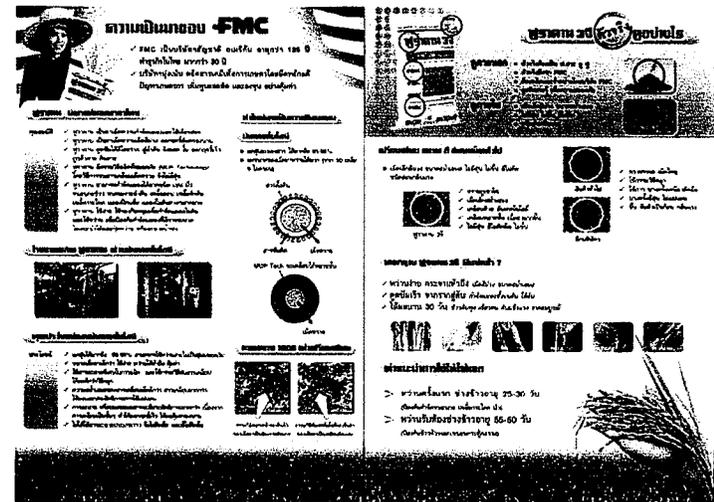
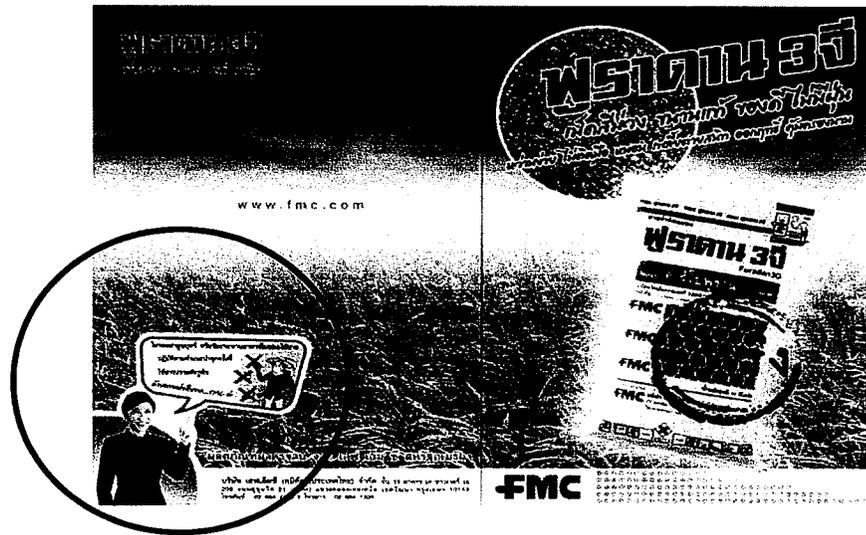
Innovation
That touches
Your life
EVERYDAY



AGRICULTURE PRODUCT

Cartoon safe use for Furadan 3G

Safe use message on product leaflet



(Stop smoking and eating during application.
Follow guide line recommendation.
with complementary from FMC)



เราห่วงใย เกษตรกรไทย
 ในการใช้สารป้องกันกำจัดศัตรูพืช
 อย่างปลอดภัย ด้วยมาตรฐานดี
 จาก **FMC**

30
แถมฟรี!
ชื่อ ฟูราดาน 3จี
 1 กระสอบ แถมฟรี 1 ก้อน

มาตรฐาน **ฟูราดาน 3จี**
 ควบคุม แมลงศัตรูพืช
 ควบคุม วัชพืชรูปลูก
 ควบคุม 30 ชนิด

ฟูราดาน 3จี
 Furan 3G
FMC
FMC
FMC
FMC

**PVC Stand
 (120X180 cm.)**

**(We care Thai farmer
 use pesticide safety
 with complementary
 from FMC)**



**Banner
(100x200 cm.)**



**Paper poster
(60X80 cm.)**



**PVC poster
(60X80 cm.)**

FMC Furadan 3G FMC Furadan 3G FMC Furadan 3G

สารกำจัดแมลง

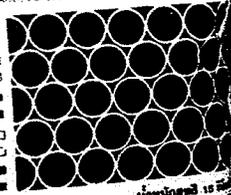
ฟูราดาน 3จี

Furadan3G

ฟูราดาน คาร์โบฟูราน (carbofuran)

ทะเบียนวัตถุอันตรายเลขที่ 1209/2544 กลุ่มสารเคมี carbonyl
สารสังเคราะห์

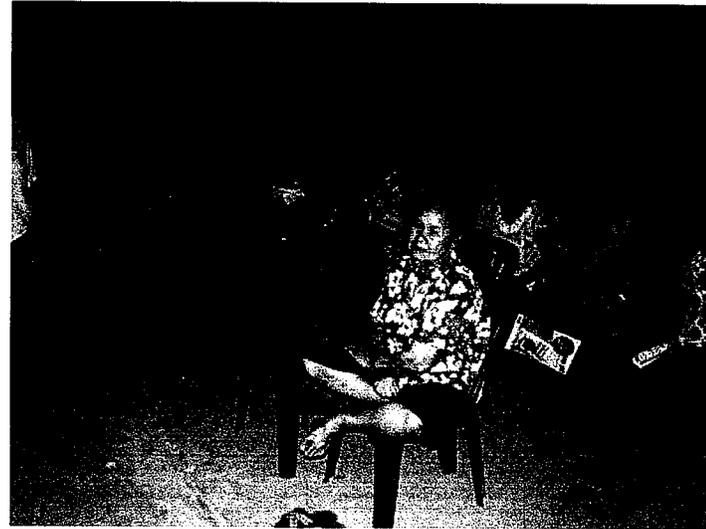
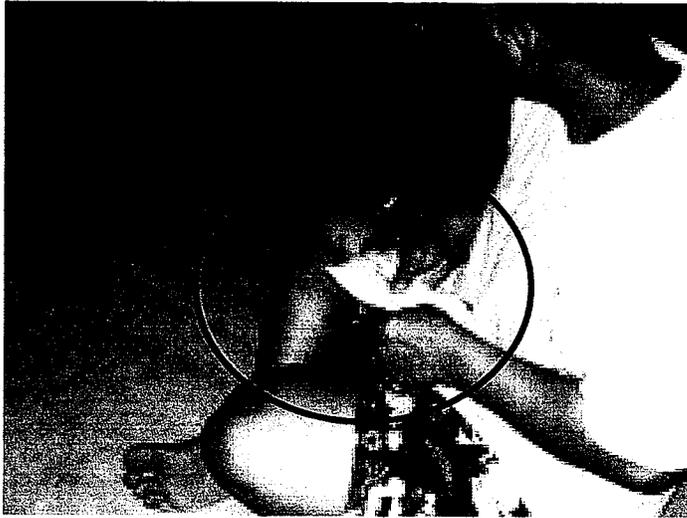
FMC
FMC
FMC
FMC
FMC



น้ำหนักสุทธิ 10 กิโลกรัม

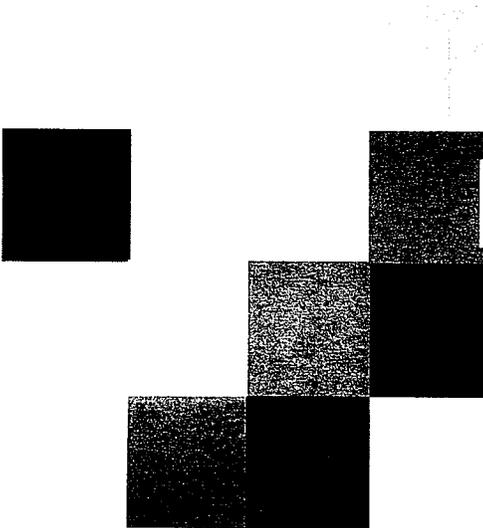
บริษัท ฟูราน 3จี จำกัด (ประเทศไทย)
255 ถนนสุขุมวิท 21 แขวงคลองเตยเหนือ เขตวัฒนา กรุงเทพฯ
โทร 0-2644-4123 โทรสาร 0-2644-2465





Farmer meeting

G



LAN Carbamates defense

Darío Isauro Jeronimo
Development Manager

Carbamates defense

- Product stewardship efforts
 - An extensive program with our distributors in Central America to avoid intoxications and have an excellent product performance.
 - Supporting application equipment in CA and México.
 - Promote the use of Liquid formulation in drip irrigation system in vegetables.

Carbamates defense

Product stewardship for Furadan 10 G

- ✓ Training sessions
- ✓ Protective equipments
- ✓ Application equipment providing
- ✓ Application supervision to assure that there are not intoxications as well as a good product distribution for have better performance
- ✓ Colecting and elimination bags and bottles
- ✓ Colinesterasa exams

Carbamates defense

1.- Training sessions



Who is participating

- ✓ Farm manager
- ✓ Administrative personel
- ✓ Bodegueros
- ✓ Workers supervisors
- ✓ Nematicides manager
- ✓ Aplications supervisor
- ✓ Workers

Carbamates defense

3.- Application equipment we provide



FMC


INNOVA
SOLUTIONS

Carbamates defense

Application supervision

Workers safety

Application quality

Contingency management



Carbamates defense

- ✓ Formulación
 - ✓ High technology Formulación
 - ✓ Double pass
 - ✓ Dust free
 - ✓ Silica as carrier
 - ✓ Safety to the workers



Carbamates defense

Furadan liquid product stewardship

Acomplishment with the law in each country

Articles 59, 60, 61 and 62 of decree . 24337-MAG-S.

“Mínimum Stock” with retailers in CA

Recommendation to be sprayed to the soil (not foliar)

In drip irrigation spray at Post-trasplant

Colecting empty containers

Carbamates defense



FMC


INNOVA
SOLUTIONS

Carbamates defense



FMC


INNOVA
SOLUTIONS

Carbamates defense



FMC


INNOVA
SOLUTIONS

Carbamates defense

5.- Collecting empty containers

FMC-Agro Pro Central America

- ✓ Collecting with each end user
- ✓ Triple rinse
- ✓ Put the containers at the collection centers
- ✓ Destroy



FMC

Carbamates defense

■ Replacement strategies

- Development of Bifenthrin family to contro roots and foliar pest, stand alone and in combination with others active ingredients

Brigadier 0.3 G, Talstar 0.2 G, Brigadier 100 TF,

Brigadier 30 TS, Brigadier 20 SD, Brigadier 200 TS

Talstar 100 WP, Talstar 100 CE, Talstar xtracontrol

- Identify and develop new segments. Nematicide,

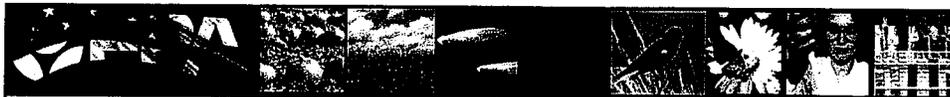
- Develop new premixes.

Carbamates defense

- Replacement strategies

- Carbosulfan development in key markets
 - granular formulation at planting
 - liquid formulation in recharge
- EPA tolerances are needed for use in vegetables.

#

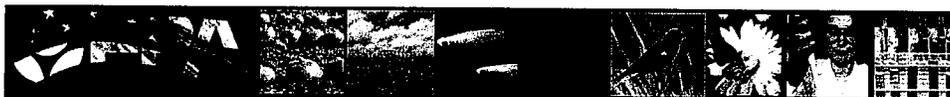


Overview of the Field Data and Incident Reports

Melissa Panger, Ph.D.
Biologist
Environmental Fate and Effects Division
February 5, 2008

1

United States Environmental Protection Agency



One Line of Evidence Used in the Carbofuran Risk Assessment

- Field Data
 - Reported ecological incidents
 - Field studies

2

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Incident Reports and Field Studies

- **DO NOT** allow for a quantification of the level of wildlife mortality associated with carbofuran use
- **DO** demonstrate that when carbofuran is used as currently registered, wildlife mortality can and does occur

3

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Ecological Incident Reports

- Ecological Incident Information System (EIS)
- Contains reports submitted primarily from:
 - State agencies (voluntary)
 - Toxicology laboratories (voluntary)
 - Registrants (reporting requirements)

4

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Ecological Incident Reports

- There is no national-level systematic program for the monitoring of pesticide ecological incidents
- Reported incidents likely represent a small fraction of actual incidents that occur...

WHY?

5

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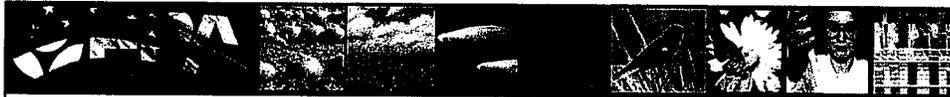


Carcasses May Often Go Unseen

- Carcasses can be very difficult to see
 - Animals often hide when they are sick/dying
 - Carcass efficiency rates (even for trained individuals) are often <100%
- Incidents involving agricultural pesticides typically occur in rural settings
- Carcasses can be removed
 - Scavengers
 - Decay

6

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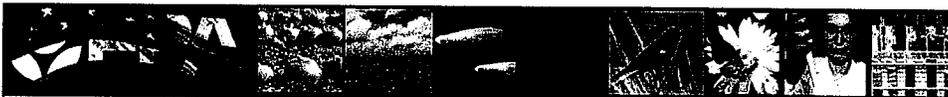


Incidents May Not Get Reported

- The incident observer...
 - May not realize the importance of reporting the incident
 - May not know who to report the incident to

7

United States Environmental Protection Agency



An Incident May Not Be Linked to a Cause

- Affected animals may move off-site
- Tissues and residues may deteriorate
- The incident may not be investigated due to limited resources

8

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Changes in State Monitoring Efforts?

“The reason for the decrease in incident reporting is largely due to lack of resources to conduct the work needed to identify, investigate and track incidental poisonings. We have been unable to fund the analytical costs associated with these investigations and thus there have been few incidents reported.”

New York State Department of Environmental Conservation
Bureau of Habitat

9

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Incident Reports May Not Be Submitted to the Agency

- Reporting by non-registrants is completely voluntary

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Ecological Incident Reports

- Carcasses may often go unseen
- Incidents may not get reported
- An incident may not be linked to a cause
- Incident reports may not be submitted to the Agency
- **Only acute toxic effects are reported in incidents**

11

United States Environmental Protection Agency

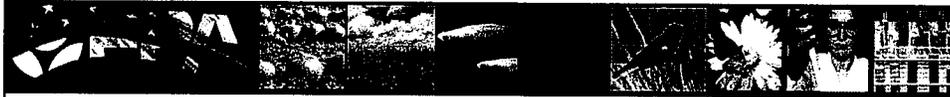


Carbofuran Grape Monitoring - CA

- Grape use
- In 1992 and 1993, CA conducted a grape monitoring program
 - Pre-1992 = 1 grape incident (1986)
 - 1992-1993 = 27 grape incidents
 - Post-1993 = 0 grape incidents

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Ecological Incident Reports

• CANNOT DO...

- An absence of evidence cannot be used as evidence of absence
- Information in the database cannot be used to quantify the level of risk

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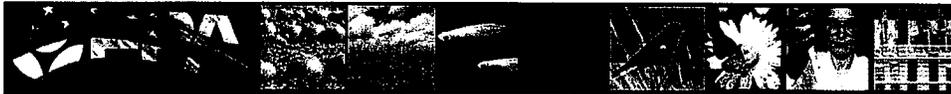
Ecological Incident Reports

• CAN DO...

- Incident reports can be used to demonstrate effects associated with specific pesticides (and their uses/use patterns)
- Demonstrate that under field conditions:
 - One or more exposure pathways are complete
 - Exposure levels are sufficient to result in field-observable effects

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Carbofuran Incidents (from EIS – 1972-2007)

- 399 reported incidents
 - 84 = REGISTERED USE
 - 129 = MISUSE (intentional or unintentional)
 - 186 = UNDETERMINED

15

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Carbofuran Incidents - Registered Uses (from EIS)

- Effects reported – Primarily mortality in birds, but also reported:
 - Mortality in mammals
 - Mortality in fish
 - Invertebrate mortality (terrestrial and aquatic)
 - Incapacitation in birds
- Number of individuals/incident range from 1 to ~2,500 (birds)

16

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Carbofuran Incidents - Registered Uses (from EIIIS)

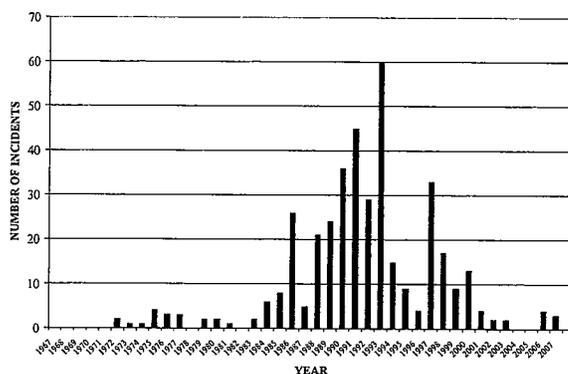
- **Associated with the following use sites:**
 - Agricultural area
 - Alfalfa
 - Corn
 - Soybean
 - Spinach

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Number of All Carbofuran Incidents Received Per Year



18

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Decrease in Reported Carbofuran Incidents... WHY?

- May be due to:
 - **Actual decrease in carbofuran incidents**
 - Changes in state monitoring efforts
 - Changes in registrant reporting requirements

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Actual Decrease in Carbofuran Incidents?

- Grape use
- In 1992 and 1993, CA conducted a grape monitoring program
 - Pre-1992 = 1 grape incident (1986)
 - 1992-1993 = 27 grape incidents
 - Post-1993 = 0 grape incidents

20

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Decrease in Reported Carbofuran Incidents... WHY?

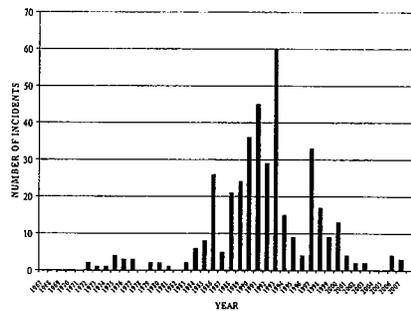
- May be due to:
 - Actual decrease in carbofuran incidents
 - **Changes in state monitoring efforts**
 - Changes in registrant reporting requirements

21

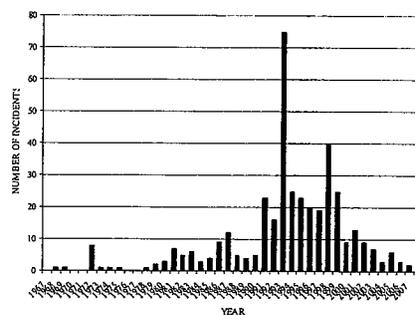
United States Environmental Protection Agency



Decrease in Reported Incidents



Carbofuran



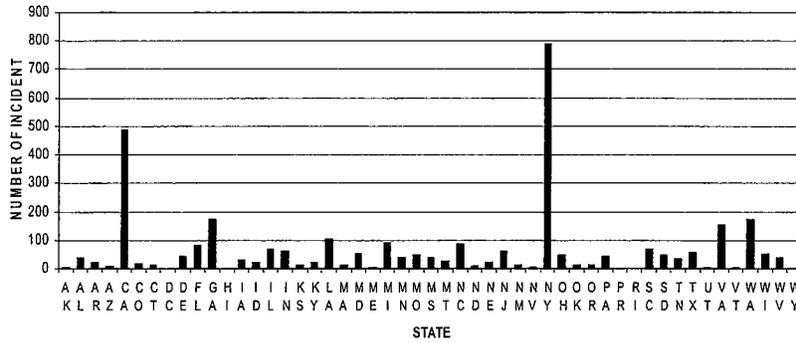
Non-Carbofuran

22

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Changes in State Monitoring Efforts?

REPORTED ANIMAL INCIDENTS PER STATE



~ 40% of all terrestrial animal incidents (registered uses) in the EIS come from CA and NY

23

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Changes in State Monitoring Efforts?

“The reason for the decrease in incident reporting is largely due to lack of resources to conduct the work needed to identify, investigate and track incidental poisonings. We have been unable to fund the analytical costs associated with these investigations and thus there have been few incidents reported.”

New York State Department of Environmental Conservation
Bureau of Habitat

24

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Decrease in Reported Carbofuran Incidents... WHY?

- May be due to:
 - Actual decrease in carbofuran incidents
 - Changes in state monitoring efforts
 - **Changes in registrant reporting requirements**

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Changes in Registrant Reporting Requirements?

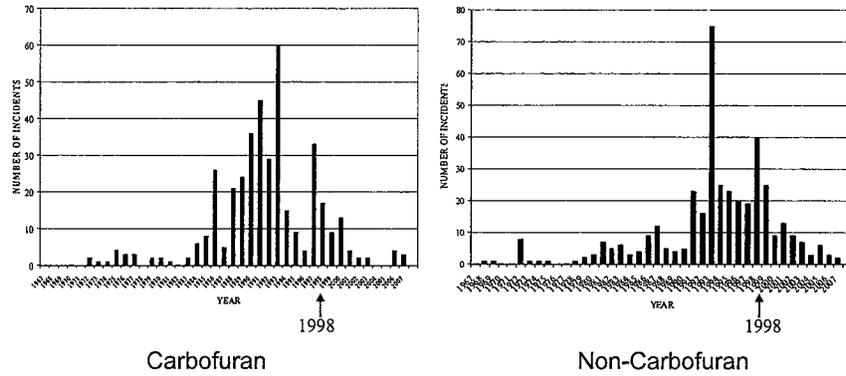
- In 1998 there was a change in the incident reporting requirements for registrants
- Registrants are now only required to submit detailed information on 'major' incidents to the Agency
 - Fish: $\geq 1,000$ of a schooling species or ≥ 50 of a non-schooling species
 - **Birds: ≥ 200 of a flocking species, or ≥ 50 of a songbird species, or ≥ 5 of a predatory species**
 - Mammals, reptiles, amphibians: ≥ 50 of a relatively common or herding species or ≥ 5 of a rare or solitary species
- 'Minor' incidents are generally reported aggregately and are not included in the EIS

26

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Decrease in Reported Incidents



27

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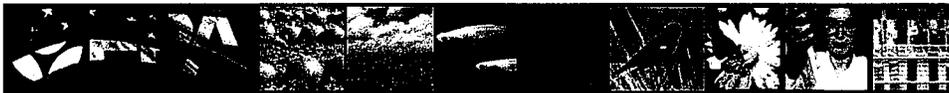


Reported Carbofuran Incidents – Registered Uses (Non-Grape), Flowable (from the EFED RED Chapter)

- From 1972 – 2000, Total = 31
 - Alfalfa = 21
 - Corn = 7
 - Other = 3
- Number of affected birds
 - > 7,400

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Reported Carbofuran Incidents – 2000 to 2007

- TOTAL = 37 reported incidents
 - 24 from the EIS
 - 8 aggregated from FMC and NWHC
 - 5 not yet in the EIS

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Reported Carbofuran Incidents – 2000 to 2007

- 19 likely intentional misuse
- 2 registered use:
 - 2000 – alfalfa, NM, 1200 birds
 - 2000 – alfalfa, CA, 4 bee hives
- 16 undetermined:
 - 2006 – sunflowers, CO, 2200 birds

30

United States Environmental Protection Agency



Ecological Incident Reports: CONCLUSIONS

- When carbofuran is used as currently registered, wildlife mortality can and does occur
- Not enough information available to conclude that a decrease in reported incidents is due to label mitigation and/or stewardship programs
- Incident reports can demonstrate that for registered uses under field conditions:
 - One or more exposure pathways are complete
 - Exposure levels are sufficient to result in field-observable effects
- Incident reports cannot be used quantitatively

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CARBOFURAN FIELD STUDIES

32

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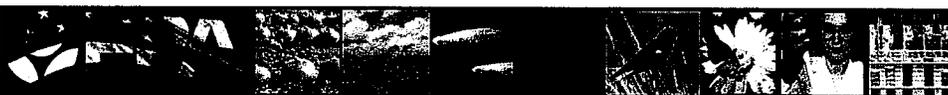


Field Studies

- Field studies discussed in EFED's RED science chapter primarily involve studies conducted:
 - In Canada, using flowable carbofuran for grasshopper control
 - By FMC, using flowable carbofuran in the U.S.

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Flowable Carbofuran Studies **– Grasshopper Control in Canada**

- Small sample size
 - Hortsman (1985)
 - Hortsman and Code (1987)
 - Irvine (1987, 1990)
 - Forsythe *et al.* (1989)
- Sampling may be biased toward underestimating exposure (live trapping)
 - Irvine (1987, 1990)
 - Forsythe *et al.* (1989)
- Did not involve birds
 - Brusnyk and Westworth (1987)

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Flowable Carbofuran Studies

– Grasshopper Control in Canada

0.12 lb a.i./acre

- Fox *et al.* (1989):
 - Carbofuran impacted the survival and reproduction success of burrowing owls
 - Direct overspray resulted in an 83% reduction in brood size and an 82% reduction in nest success (1986)
 - Of the 12 pairs of birds directly exposed to a carbofuran overspray in 1986 and 1987, 8 failed completely

35

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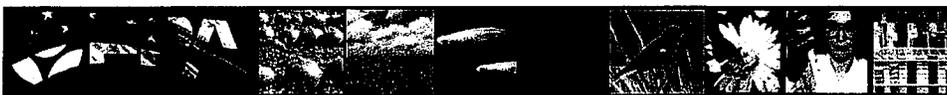


Field Studies Submitted by FMC – Flowable, U.S.

STUDY	PRODUCT	USE	STATE(S)
Effects of Furadan 4F on Avian and Insect Populations in Alfalfa (1983) (MRID: 130419)	Furadan 4F	Alfalfa	Utah
Effects of Furadan 4F on Birds associated with ... Corn Fields (1989) (MRID: 411106-01)	Furadan 4F	Corn	Nebraska, Texas, New Mexico
Effects of Furadan 4F on Birds... (1989) (MRID: 411107-01)	Furadan 4F	Alfalfa	Kansas, Oklahoma
Avian Monitoring in Furadan 4F Treated Cotton Fields... (1997) (MRID 445002-01)	Furadan 4F	Cotton	Arkansas, California, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

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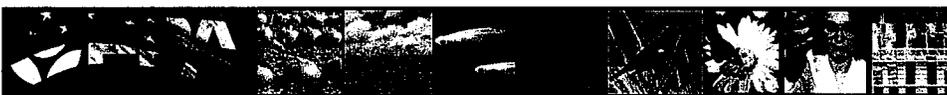
1983 FMC Utah, Alfalfa Study

STUDY	FORMULATION	USE/APPL. RATE	STATE(S)
Effects of Furadan 4F on Avian and Insect Populations in Alfalfa (1983) (MRID: 130419)	Furadan 4F	Alfalfa 1 lb a.i./acre (1 appl.)	Utah

Relied primarily on bird surveys to determine if carbofuran had an effect on bird densities

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FMC 1995 and 1996 Cotton Monitoring Studies

STUDY	FORMULATION	USE/APPL. RATE	STATE(S)
Avian Monitoring in Furadan 4F Treated Cotton Fields... (1997) (MRID 445002-01)	Furadan 4F	Cotton 0.25 lb a.i./acre (2 appl.)	Arkansas California Louisiana Mississippi Oklahoma Tennessee Texas

Insufficient methodology

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FMC 1995 and 1996 Cotton Monitoring Studies

- **Significant deficiencies included (but were not limited to):**
 - Not conducting carcass searches (*i.e.*, LA 1996 and TN 1996)
 - Conducting carcass searches on ATVs (*i.e.*, MS 1995 and 1996)
 - Not conducting (or reporting results from) carcass search efficiency tests (*e.g.*, TX 1995, CA 1995, and OK 1995)
 - Conducting carcass searches >2-days post-application (*e.g.*, TX 1995, MS 1995 and 1996)
 - Conducting carcass searches on less than the Agency-recommended search area (*i.e.*, all studies)

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FMC Field Studies (1989) - Methods

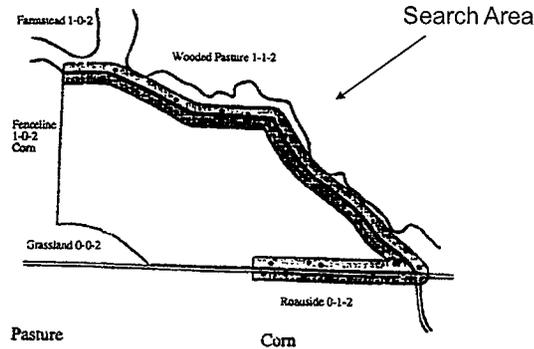
USE STATE	CROP	NO. OF PLOTS (replicates) (controls)	CHEMICAL USED IN CONTROL PLOTS	SEARCHES	SEARCH EFFICIENCY
Corn (1 lb a.i./acre; 2 appls)	Nebraska	15 (7 controls, 8 treatment)	Pydrin (pyrethroid)	5 human searchers spaced 5 – 10 ft apart (also some dog searches)	Ranged from <50% recovery to 100%
	Texas/New Mexico	16 (8 controls, 8 treatment)	Pounce (pyrethroid)		Ranged from 0% recovery to 100%
Alfalfa (1.0 and 0.5 lb a.i./acre; 2 appls)	Kansas	16 (8 controls, 8 treatment)	Lorsban 4E (chlorpyrifos)	- <u>Pre-treatment</u> searches - within 10 days of treatment - <u>Post-treatment</u> searches - within 7 days of treatment	Ranged from 44% recovery to 100%
	Oklahoma	16 (8 controls, 8 treatment)			Ranged from 25% recovery to 100%

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FMC Field Studies (1989)- Methods



Nebraska Corn Plot #15t, 1988

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FMC Field Studies (1989) - Results

Number of Bird Carcasses/Feather Spots

		NE Corn	TX/NM Corn	CORN TOTALS	KS Alfalfa	OK Alfalfa	ALFALFA TOTALS	TOTALS
Pre-treatment	Total	10	5	15	5	4	9	24
Post-treatment	Control Plot	5	2	7	7*	17*	24	31
	Treated Plot	14	17	31	15	7	22	53

* These controls were treated with chlorpyrifos

In addition to bird mortality, there was evidence of 18 non-bird pre-treatment mortalities and 110 non-bird post-treatment mortalities (57 in control plots and 53 in treated plots)

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FMC Field Studies (1989)

- Comparisons between pre-treatment/post-treatment and control/treated fields in the 1989 studies are meaningless:
 - Other chemicals were used on or near some of the control and treated fields (including chlorpyrifos, dimethoate, and methomyl)
 - Some of the control fields were adjacent to fields treated with carbofuran

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FMC Field Studies (1989)

- The studies provide some useful information:
 - The pre-treatment searches removed evidence of wildlife mortality prior to the post-treatment searches
 - Most of the bird carcasses tested from treated fields were positive for carbofuran

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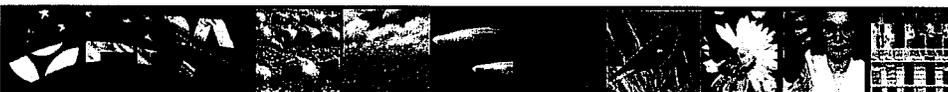


FMC Field Studies (1989)

- The mortality is likely biased toward the low-end:
 - Searchers likely did not locate all potential carcasses
 - Search efficiency rates <100%
 - Scavengers likely removed some carcasses
 - Limited search area

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Carcass Location

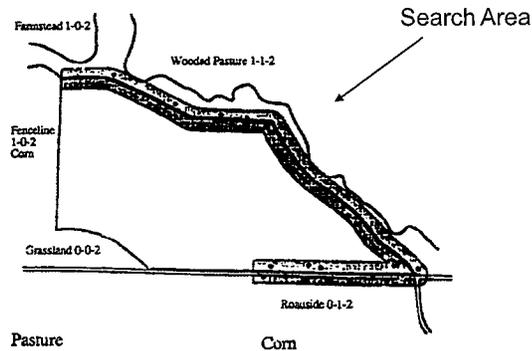
- Stinson *et al.* (1994)
 - Corn, granular carbofuran, VA
 - Recovered 114 bird carcasses associated with carbofuran
 - 74% of the bird carcasses recovered were in the corn fields

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1989 Field Studies - Methods



Nebraska Corn Plot #15t, 1988

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FMC Field Studies (1989) - Results

Number of Bird Carcasses/Feather Spots

		NE Corn	TX/NM Corn	CORN TOTALS	KS Alfalfa	OK Alfalfa	ALFALFA TOTALS	TOTALS
Pre-treatment	Total	10	5	15	5	4	9	24
Post-treatment	Control Plot	5	2	7	7*	17*	24*	31
	Treated Plot	14	17	31	15	7	22	53

* These controls were treated with chlorpyrifos

In addition to bird mortality, there was evidence of 18 non-bird pre-treatment mortalities and 110 non-bird post-treatment mortalities (57 in control plots and 53 in treated plots)

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Field Studies

- Conclusion:
 - Carbofuran use at current application rates can adversely impact wildlife

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CONCLUSIONS

- Due to shortcomings of the data from incident reports and the available field studies, they cannot be used to quantify the level of risk associated with carbofuran use

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I

***ABC DEATH INFORMATION WITH
OLD ENVIRONMENTAL PROTECTION
AGENCY***

Event I	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
1661	1/1/1972	6/30/1973	Lassen	CA	Canada Goose	13	EIIS: B0000-219-07		Carbofuran	Legal (Label)	Crop - Alfalfa		
31	12/15/1973		N/A	BC	Duck	60	EIIS: I005571-001		Carbofuran	Unknown	Crop - Turnip		
2487	3/13/1974	3/14/1974	riverside	CA	american wigeon	2400	CEETV: 231443	NWHC: Epizoo#1974-017	carbofuran	Unknown	Field		
	3/15/1974			CA	Widgeon duck	2450		4	Carbofuran	Abuse (too close to reservoir?)	Crop - Alfalfa	Solution	1 pt/acre near reservoir, reservoir is within 200 yards of duck club with a lake
					Canadian goose	2							
					Mallard duck	1							
36	11/25/1974		N/A	BC	Duck	50	EIIS: I005571-002		Carbofuran	Unknown	Crop - Potato		
37	1/1/1975		N/A	BC	American Wigeon	15	EIIS: I005571-003		Carbofuran	Unknown	Crop - Potato		
					Glaucous-winged Gull	1							
					Northern Pintail	1							
38	4/3/1975		Unknown	NY	Grebe	1	EIIS: B0000-300-8E		Carbofuran	Misuse	Unknown		
					Hooded Merganser	1							
					Horned Lark	1							
					Lesser Yellowlegs	1							
					Sandpiper	2							
41	8/6/1975	8/27/1975	Suffolk	NY	Common Grackle	21	EIIS: B0000-300-8F	NY: 6	Carbofuran	Abuse	Crop - Wheat		
					European Starling	20		NYFGJ: Stone79-F					
					Gull	20							
					Mourning Dove	95							
					Red-winged Blackbird	20							
					Rock Pigeon	1							
42	10/23/1975	11/4/1975	Unknown	UN	Green-winged Teal	1100	EIIS: I005508-001; NA: LTR 1201/75		Carbofuran	Abuse	Crop - Turnip		
46	1/1/1976		Riverside	CA	American Wigeon	63	EIIS: B0000-218-03		Carbofuran	Unknown	Crop - Alfalfa		
48	2/27/1976		Unknown	OK	Canada Goose	500	EIIS: I005570-001:	OK: D-10073	Carbofuran	Legal (Label)	Crop - Alfalfa		
49	3/11/1976		Riverside	CA	American Wigeon	5	EIIS: I005569-001: EPA FOIA Request	CADFG1: P-74	Carbofuran	Unknown	Crop - Alfalfa	not mentioned specifically	Pesticide was allegedly responsible for a waterfowl loss of unknown numbers. This conclusion was based on the presence of the pesticide at a level of 11.4 ppm in the proventricular and gizzard contents of five bird samples.
	4/9/1976			KS	Ducks	750	EPA FOIA request		Carbofuran	Abuse	Crop - Alfalfa	not mentioned specifically	Dead ducks were first found in the lake on 4/9; an estimated total of 750 ducks were found in and around the lake by investigators; Dead coots had reportedly been found in the area under similar circumstances the preceding year. At that time, the same applicator had been warned of the waterfowl hazard presented by carbofuran, had been offered devices to frighten away birds from fields, and had refused to use such devices.
	5/9/1976			KS	Ducks	750	EPA FOIA request		Carbofuran	Abuse	Crop - Alfalfa	Solution	28 acre field near lake sprayed with solution of 2 pt/15 gal water at 15 gal/acre; allegedly a label violation existed and was to be investigated

Event I	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable Solution	Notes
	3/20/1977			TX	Widgeon duck	110	EPA FOIA request		Carbofuran	Abuse	Crop - Alfalfa		2.5 miles from national wildlife refuge; possible charges against the agency issuing the permit, the grower, advisor, and applicator allegedly were being considered
65	3/21/1977		Glenn	CA	American Wigeon	1000	EIIS: B0000-216-01	CADFG: FW1-R-14,	Carbofuran	Abuse	Crop - Alfalfa		
66	3/29/1977	3/29/1977	Glenn	CA	American Wigeon	thousands	EIIS: I004665-001	CADFG: P-157	Carbofuran	Unknown	Crop - Alfalfa		
72	9/1/1977		Unknown	CA	American Wigeon	2	EIIS: B0000-400-29		Carbofuran	Unknown	Crop - Alfalfa		
2294	1/1/1979		unknown	NC	Red-tailed Hawk	1	CWS: CWS79-2	Baumberger: Baumberger1989-A Lyon: Lyon1990-B	carbofuran	Legal (Label)	Crop - Corn		
87	5/21/1979		Unknown	NY	American Robin	10	EIIS: I005559-001	NYDEC: 68-27	Carbofuran	Misuse	Crop - Corn		
95	4/10/1980		Long	GA	Egret	8	EIIS: I005305-001	GA: 17-80	Carbofuran	Unknown	Unknown		
2508	5/7/1981	5/7/1981	prince georges	MD	red-shouldered hawk	2	CEETV: 90464		carbofuran		Crop - Corn		
170	6/30/1983		Austin	TX	Black-bellied Whistling-duck	hundreds	EIIS: I005703-001	FWSLE?: MEMO/D-10933	Carbofuran	Abuse	Crop - Rice		
182	4/1/1984	10/1/1989	Sacramento	CA	Duck	thousands	EIIS: I005560-001	CA: D-11164	Carbofuran	Unknown	Unknown		
187	4/20/1984	4/21/1984	Colusa	CA	Duck	5	EIIS: I005651-001	CA: N38-84;N4784	Carbofuran	Unknown	Crop - Rice		
188	4/21/1984	4/21/1984	Colusa	CA	Mallard	2	EIIS: I005564-001		Carbofuran	Abuse	Crop - Rice		
189	4/22/1984	4/25/1984	Colusa	CA	Teal	2							
192	5/1/1984		Unknown	UN	Mallard	34	EIIS: I005564-002		Carbofuran	Abuse	Unknown		
193	5/1/1984		Yolo	CA	Lapland Longspur	60	EIIS: B0000-400-77		Carbofuran	Unknown	Crop - Rapeseed		
				CA	Duck	2	EIIS: I005555-001	CADFG: L139,148,158	Carbofuran	Legal (Label)	Crop - Rice		
221	4/23/1985		Unknown	CA	Mallard	31	EIIS: I005297-001	CADFG: L-87-85	Carbofuran	Legal (Label)	Crop - Rice		
2296	4/29/1985		Richmond	VA	bald eagle	2	EIIS: I004169-007	CWS: CWS85-9 FWSW: 5592-001 VA: 5592-001	carbofuran		Crop - Corn		
222	5/15/1985		Richmond City	VA	Bald Eagle	1	EIIS: I005650-001		Carbofuran	Unknown	Unknown		
2297	5/23/1985		Prince George	VA	bald eagle	1	CWS: CWS85-10		carbofuran	Legal (Label)	Crop - Corn and Peanut		
1684	9/1/1985	12/4/1985	Colusa	CA	Duck	66	EIIS: I005421-001	CADFG: P-944	Carbofuran	Unknown	Ranch		
					Northern Harrier	1							
2286	10/1/1985		unknown	CO	Northern Harrier	1	CWS: 85-1	Littrell: 1986a, 1986c, 1988c	carbofuran		Crop - Rice		
229	10/30/1985	11/18/1985	Colusa	CA	Waterfowl	65	EIIS: I005564-003		Carbofuran	Abuse	Ranch		
230	11/30/1985		Colusa	CA	Duck	35	EIIS: I005564-004		Carbofuran	Abuse	Ranch		
234	2/9/1986		Lancaster	PA	Crow	1	EIIS: I005671-001	NYDEC: 86-72-23	Carbofuran	Legal (Label)	Treeline		
					European Starling	2		NYDEC: 86-72-24					
					Red-tailed Hawk	1							
235	2/10/1986		Unknown	CA	Canada Goose	25	EIIS: I005524-004		Carbofuran	Legal (Label)	Crop - Alfalfa		
236	2/16/1986		Lancaster	PA	Red-tailed Hawk	1	EIIS: I005671-002	PA: LETR10/20/86	Carbofuran	Legal (Label)	Unknown		
237	2/23/1986		Unknown	CA	Duck	35	EIIS: I005524-002		Carbofuran	Unknown	Ranch		
238	2/23/1986		Unknown	CA	Duck	40	EIIS: I005524-003		Carbofuran	Unknown	Ranch		
239	3/1/1986	6/1/1986	Glenn	CA	Duck	1	EIIS: I004631-002	CADFG: P-975	Carbofuran	Unknown	Unknown		
240	3/1/1986	6/1/1986	Glenn	CA	Duck	1	EIIS: I004631-003	CADFG: P-987	Carbofuran	Unknown	Unknown		
241	3/1/1986	6/1/1986	Glenn	CA	Cinnamon Teal	1	EIIS: I004631-004	CADFG: P-1025	Carbofuran	Unknown	Unknown		
					Mallard	1							
					Waterfowl	20							
242	3/1/1986	6/1/1986	Sutter	CA	Duck	4	EIIS: I004631-005	CADFG: P-977	Carbofuran	Legal (Label)	Unknown		
243	3/1/1986		Sutter	CA	Mallard	1	EIIS: I004631-006	CADFG: P-1031	Carbofuran	Unknown	Non-Agricultural		Roadway
244	4/1/1986	5/4/1986	Colusa	CA	Duck	20	EIIS: I004631-007	CADFG: P-985	Carbofuran	Unknown	Field		
					Mallard	2							
					Shorebird	1							
					Teal	1							
2311	4/10/1986		garfield	MT	bald eagle	1	CWS: CWS86-13	FWSW: 6307-001	carbofuran	Misuse	Grazing Land		
					golden eagle	1							
249	4/23/1986	4/23/1986	Hanover	VA	American Goldfinch	75	EIIS: I004169-011	VDGIF: 2-86	Carbofuran	Unknown	Unknown		
250	4/23/1986	4/23/1986	Essex	VA	Bald Eagle	1	EIIS: I005653-001	VA: PR-3292	Carbofuran	Unknown	Crop - Corn		
2490	5/4/1986	10/1/1986	Sacramento	CA	Mallard	243	CEETV: 231444	NWHIC: 1986-095	carbofuran	Unknown	Crop - Rice		
256	5/23/1986		Surry	VA	Eagle	1	EIIS: I004169-012	VDGIF: 3-86	Carbofuran	Unknown	Crop - Corn		
					Turkey Vulture	1							
257	5/25/1986	5/29/1986	Henrico	VA	Red-tailed Hawk	1	EIIS: I004169-013 EIIS: I005659-001	FWS: 7634 HE VA: 4-86	Carbofuran	Unknown	Forest		

Event I	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
259	6/1/1986		N/A	SK	California Gull	45	EIIS: B0000-400-79 EIIS: I005303-001		Carbofuran	Unknown	Agricultural Area		
260	6/2/1986		Unknown	NY	Passerine	20	EIIS: I005524-005		Carbofuran	Unknown	Crop - Potato		
264	7/29/1986		N/A	NF	Herring Gull	30	EIIS: I005702-001 USS: N86-4787		Carbofuran	Legal (Label)	Agricultural Area		
266	8/5/1986		Glenn	CA	Duck	3	EIIS: I005524-007a		Carbofuran	Unknown	Crop - Rice		
1768	8/5/1986		Colusa	CA	Duck	20	EIIS: I005524-007b		Carbofuran	Unknown	Crop - Rice		
1769	8/5/1986		Sutter	CA	Duck	5	EIIS: I005524-007c		Carbofuran	Unknown	Crop - Rice		
269	9/1/1986		Glenn	CA	American Wigeon	3	EIIS: I004631-009		Carbofuran	Unknown	Unknown		
					Mallard	150							
					Red-tailed Hawk	2							
270	9/1/1986	12/1/1986	Colusa	CA	Mallard	50	EIIS: I004631-010		Carbofuran	Unknown	Unknown		
					Northern Pintail	5							
2312	10/1/1986		glenn	CA	red-tailed hawk	4	CWS: CWS96-14		carbofuran	Legal (Label)	Crop - Rice		
275	10/23/1986	11/29/1986	Glenn	CA	Duck	179	EIIS: I005531-001		Carbofuran	Unknown	Ranch		
					Red-tailed Hawk	2							
279	11/11/1986	11/26/1986	Colusa	CA	Duck	58	EIIS: I005532-001		Carbofuran	Unknown	Unknown		
283	12/18/1986		Lake	CA	American Robin	3	EIIS: I005526-001	CA: D-9925	Carbofuran	Legal (Label)	Vineyard		
					Cooper's Hawk	2							
					European Starling	3							
292	3/1/1987		Unknown	MD	Bald Eagle	1	EIIS: I005660-001	MD: CN-5270	Carbofuran	Unknown	Unknown		
2329	3/15/1987		calvert	MD	bald eagle	4	CWS: CWS87-17	FWSW: 7014-001 FWSW: 7014-002 CADFG: P-1057	carbofuran	Unknown	Crop - Corn		
303	4/23/1987		Glenn	CA	Mallard	3	EIIS: I005298-001		Carbofuran	Unknown	Crop - Rice		
312	6/4/1987		Ontario	NY	American Robin	3	EIIS: I005302-001		Carbofuran	Misuse	Crop - Corn		
354	9/29/1987	10/12/1987	Unknown	VA	Great Horned Owl	1	EIIS: I004169-015	VA: 2-87	Carbofuran	Unknown	Unknown		
					Unknown Bird	10							
362	12/1/1987		Newton	GA	Northern Cardinal	1	EIIS: I005561-001	GA: 189-87	Carbofuran	Abuse	Field		
					Song Sparrow	2							
					White-throated Sparrow	1							
365	1/1/1988		Unknown	CA	Waterfowl	1	EIIS: I003930-001		Carbofuran	Legal (Label)	Crop - Rice		
366	1/7/1988	1/7/1988	Colusa	CA	Duck	50	EIIS: I003948-001	CADFG1: P-1105	Carbofuran	Unknown	Unknown		
367	1/7/1988	4/1/1988	Colusa	CA	Duck	50	EIIS: I005565-001	CADFG: P-1105/1107	Carbofuran	Unknown	Crop - Rice		
369	1/29/1988		Unknown	VA	Shrike	1	EIIS: I003177-002		Carbofuran	Unknown	Non-Agricultural		Roadway
					Chlordane								
					DDT								
					Diazinon								
373	2/23/1988		Wilkinson	GA	Red-tailed Hawk	2	EIIS: I000103-012	GA: 29-88	Carbofuran	Unknown	Orchard		
380	2/28/1988	2/28/1988	Kent	DE	Bald Eagle	1	EIIS: I005662-001	DE: 6432	Carbofuran	Unknown	Stream/River		
383	3/8/1988	5/17/1992	Dorchester	MD	Bald Eagle	6	EIIS: I000916-001		Carbofuran	Unknown	Unknown		
					Golden Eagle	4							
384	3/16/1988		Montgomery	VA	Shrike	1	EIIS: I003177-001	VDGIF: 2-88	Carbofuran	Unknown	Non-Agricultural		Roadway
					DDT								
					Diazinon								
					Mirex								
2331	3/22/1988		dorchester	MD	bald eagle	1	CWS: CWS88-2	FWSW: 7876-001	carbofuran	Unknown			
2341	3/30/1988		dorchester	MD	American Crow	1	CWS: CWS88-12	FWSW: 7877-001	carbofuran	Unknown	Crop - Milo		
					Mallard	2							
					bald eagle	1							
					red-tailed hawk	1							
2342	4/15/1988		Dorchester	MD	Bald Eagle	1	CWS: CWS88-13		carbofuran	Unknown	Crop - Farm		
2343	4/22/1988		dorchester	MD	bald eagle	1	CWS: CWS88-14	FWSW: 7907-001	carbofuran	Unknown	Wildlife Refuge		
2330	5/1/1988		dorchester	MD	bald eagle	1	CWS: CWS88-1	FWSW: 7918-001	carbofuran	Unknown	Agricultural Area		
394	5/1/1988		Dorchester	MD	Brown-headed Cowbird	1	EIIS: I005557-001	FWSW: 8066-001-005	Carbofuran	Legal (Label)	Field		
					Least Sandpiper	1							
					Semipalmated Plover	1							
					Semipalmated Sandpiper	1							
395	5/1/1988		Unknown	ID	Canada Goose	hundreds	EIIS: I005751-001		Carbofuran	Misuse	Crop - Alfalfa		
398	5/16/1988		Worcester	MD	Bald Eagle	1	EIIS: I000916-002		Carbofuran	Unknown	Unknown		
399	5/17/1988		Worcester	MD	Bald Eagle	8	EIIS: I005663-001	MD: 30000/47A	Carbofuran	Misuse	Crop - Corn		
400	5/21/1988		Malheur	OR	Goose	36	EIIS: B0000-300-9	FWSLE: INV 0566A1	Carbofuran	Legal (Label)	Crop - Alfalfa		
401	5/22/1988		Unknown	ID	Canada Goose	150	EIIS: I005572-003		Carbofuran	Misuse	Crop - Alfalfa		
402	5/26/1988		Kent	MD	Bald Eagle	1	EIIS: I000916-003		Carbofuran	Unknown	Unknown		

Event I	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
419	9/1/1988		Essex	ON	Blackbird	1	EIIS: B00000000038	ON: PC00624	Carbofuran	Misuse	Crop - Rapeseed		
420	9/5/1988		Unknown	UN	Sparrow	1	EIIS: I005507-001		Carbofuran	Legal (Label)	Crop - Rapeseed		
2339	10/14/1988		kent	MD	Blackbird	hundreds							
					red-tailed hawk	1	CWS: CWS88-10	FWSW: 8305-001	carbofuran		Crop - Wheat		
423	10/24/1988	11/14/1988	Colusa	CA	Duck	50	EIIS: B0000-520-16	CA: P-1192	Carbofuran	Unknown	Flooded Field		
424	10/24/1988	1/26/1989	Colusa	CA	Duck	hundreds	EIIS: I005423-001	CA: 82-COL-88	Carbofuran	Unknown	Non-Agricultural		Airstrip / Airport
426	10/25/1988		Colusa	CA	Duck	70	EIIS: I003948-009	CADFG1: P-1192-94	Carbofuran	Unknown	Unknown		
427	10/30/1988		Colusa	CA	Duck	79	EIIS: I005558-001	CA: D-9976	Carbofuran	Unknown	Crop - Rice		
430	11/16/1988		Marquette	WI	Dark-eyed Junco	7	EIIS: I005704-001	FWS: 1310	Carbofuran	Abuse	Apple Orchard		
					European Starling	1							
					Hawk	1							
					Red-tailed Hawk	2							
2332	12/15/1988		dorchester	MD	bald eagle	1	CWS: CWS88-3	FWSW: 8466-002	carbofuran				
2333	12/23/1988		fergus	MT	bald eagle	1	CWS: CWS88-4	FWSW: 8609-001	carbofuran				
2344	1/1/1989		unknown	PA	turkey vulture	1	CWS: CWS89-1		carbofuran				
434	1/20/1989	3/15/1990	New Castle	DE	Red-tailed Hawk	71	EIIS: I005749-001	DEDFG: INV 9184AI	Carbofuran	Abuse	Ranch		
					Rock Pigeon	71							
435	1/27/1989		Unknown	DE	Crow	1	EIIS: B0000-300-10		Carbofuran	Abuse	Crop - Corn		
					Goose	5							
					Hawk	1							
					Owl	1							
					Rock Pigeon	1							
436	1/27/1989		New Castle	DE	Crow	1	EIIS: I000116-008		Carbofuran	Abuse	Agricultural Area		
					Owl	1							
					Red-tailed Hawk	1							
					Vulture	1							
440	3/1/1989	4/5/1990	Pennington	SD	Ferruginous Hawk	1	EIIS: I000923-001	SD: CR90-50053-0	Carbofuran	Abuse	Ranch		sheep
					Golden Eagle	2							
452	4/11/1989	4/20/1989	Unknown	SD	Bald Eagle	2	EIIS: I005503-001		Carbofuran	Abuse	Ranch		
453	4/20/1989		Meade	SD	Bald Eagle	2	EIIS: I000805-001		Carbofuran	Abuse	Ranch		sheep
					Crow	1							
455	5/7/1989	5/18/1989	New Castle	DE	Common Grackle	3	EIIS: I001599-001		Carbofuran	Legal (Label)	Crop - Corn		
					Mallard	1							
459	5/20/1989	5/28/1989	Albemarle	VA	Chipping Sparrow	1	EIIS: B0000-500-57	VDGIF: 83-89	Carbofuran	Legal (Label)	Crop - Corn		
461	5/20/1989	5/20/1989	Albemarle	VA	American Robin	5	EIIS: I000097-015	VA: 2-89	Carbofuran	Legal (Label)	Crop - Corn		
					Chipping Sparrow	1	EIIS: I004169-026	VA: 82-89	Carbofuran				
					European Starling	2	EIIS: I005750-001		Paraquat dichloride				
					Grackle	1							
					Unknown Bird	10							
472	6/6/1989		Adams	NE	American Robin	3	EIIS: I005556-001	NE: 061389186802	Carbofuran	Legal (Label)	Crop - Corn		
					Blackbird	8							
					Killdeer	1							
					Sparrow	1							
473	6/19/1989	6/19/1989	Dorchester	MD	Bald Eagle	1	EIIS: I005664-001		Carbofuran	Unknown	Swamp		
478	8/14/1989		N/A	BC	Canada Goose	9	EIIS: I005205-005		Carbofuran	Unknown	Crop - Turnip		
480	8/26/1989		Deuel	SD	Canada Goose	6	EIIS: I000805-008	SD: 89P19	Carbofuran	Unknown	Non-Agricultural		
					Gull	1			Parathion				
481	10/1/1989	3/24/1993	Garfield	MT	Black-billed Magpie	1	EIIS: I001606-007	USFWSLE6: 4506AO	Carbofuran	Abuse	Ranch		
					Golden Eagle	1							
					Raptor	22							
482	10/11/1989	10/22/1989	Colusa	CA	Duck	1700	EIIS: I005417-007	CADFG: P-1266	Carbofuran	Unknown	Flooded Field		
485	10/26/1989		Solano	CA	Duck	6	EIIS: I005417-009	CADFG: P-1257	Carbofuran	Legal (Label)	Field		
									Chlorpyrifo				
486	11/9/1989		Colusa	CA	Duck	22	EIIS: I005417-006	CADFG: P-1269	Carbofuran	Unknown	Unknown		
488	11/15/1989		San Bernardino	CA	Duck	12	EIIS: I005417-008	CA: P-1270	Carbofuran	Abuse	Non-Agricultural		Turf/Golf
489	11/15/1989		San Bernardino	CA	Mallard	12	EIIS: I005419-004		Carbofuran	Abuse	Non-Agricultural		Turf/Golf
490	11/20/1989		Charles Mix	SD	Bald Eagle	1	EIIS: I005504-001	SD: D11853	Carbofuran	Unknown	Unknown		
491	1/19/1990		Sacramento	CA	Northern Harrier	2	EIIS: I005419-001	CA: 041990	Carbofuran	Misuse	Crop - Corn		
					Red-tailed Hawk	2							
					Waterfowl	158							
492	1/23/1990		Sacramento	CA	Duck	157	EIIS: I004865-001		Carbofuran	Misuse	Crop - Corn		
493	1/25/1990		Haakon	SD	Eagle	2	EIIS: I005505-001		Carbofuran	Abuse	Unknown		
					Hawk	2							

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494	1/30/1990		Union	NM	Bald Eagle	1	EIIS: 1001606-006	FWS: 5543AK	Carbofuran	Abuse	Unknown		
					Black-billed Magpie	3							
					Golden Eagle	6							
495	1/30/1990		Bernalillo	NM	Bald Eagle	1	EIIS: 1005419-002		Carbofuran	Abuse	Ranch		
					Golden Eagle	6							
2370	3/1/1990		pennington	SD	golden eagle	1	CWS: CWS90-12	FWSW: 9456	carbofuran		Grazing Land		
1695	3/15/1990	4/1/1991	Kent	DE	Gull	1	EIIS: 1005752-001	SCWDS: 98-90	Carbofuran	Legal (Label)	Crop - Corn		
					Mallard	2							
					Snow Goose	15							
501	3/22/1990	3/26/1990	Unknown	VA	Grackle	25	EIIS: 1005527-001		Carbofuran	Misuse	Crop - Potato		
502	3/26/1990		Accomack	VA	European Starling	10	EIIS: 1004169-032	VDGIF: 1-90	Carbofuran	Legal (Label)	Crop - Potato		
					Grackle	10							
503	3/30/1990		Musselshell	MT	Bald Eagle	1	EIIS: 1005419-003		Carbofuran	Abuse	Unknown		
					Golden Eagle	2							
504	4/9/1990		Essex	VA	Bald Eagle	1	EIIS: B00000000039		Carbofuran	Misuse	Crop - Corn		
					Blue Jay	1							
					Common Grackle	1							
					Red-winged Blackbird	1							
505	4/9/1990	4/17/1990	Essex	VA	Red-winged Blackbird	200	EIIS: B0000-502-17	VDGIF: 2-90a	Carbofuran	Unknown	Unknown		
506	4/10/1990	4/20/1990	Essex	VA	Grackle	5	EIIS: 1005481-001	VA: D-11746	Carbofuran	Unknown	Unknown		
					Red-winged Blackbird	18							
508	4/11/1990		Bennett	SD	Ferruginous Hawk	1	EIIS: 1000923-002	SD: 90-051 M	Carbofuran	Abuse	Ranch		sheep
					Golden Eagle	2							
					Hawk	2							
					Unknown Bird	1							
509	4/19/1990		Burleigh	ND	Bald Eagle	1	EIIS: 1000915-001	ND: 90-104	Carbofuran	Abuse	Agricultural Area		
2359	4/26/1990		rio blanco	CO	golden eagle	1	CWS: CWS90-1	FWSW: 9509	carbofuran		Grazing Land		
510	4/27/1990		San Joaquin	CA	Finch	1000	EIIS: 1004665-004	CADFG1: P-1288	Carbofuran	Legal (Label)	Vineyard		
511	4/27/1990		Unknown	CA	European Starling	hundreds	EIIS: 1005527-003	CA: 042790A	Carbofuran	Misuse	Vineyard		
					House Finch	hundreds							
					Sparrow	hundreds							
512	4/28/1990		Kent	DE	Laughing Gull	1	EIIS: 1003637-001		Carbofuran	Legal (Label)	Crop - Corn		
					Mallard	1							
					Snow Goose	34							
					Teal	6							
513	4/28/1990		Kent	DE	Mallard	2	EIIS: 1003637-002		Carbofuran	Legal (Label)	Crop - Corn		
2371	4/29/1990		mc kenzie	ND	bald eagle	1	CWS: CWS90-13	FWSW: 9497-001	carbofuran		Near Raccoon/Bait		
2367	4/30/1990		unknown	NJ	American Kestrel	1	CWS: CWS90-9		carbofuran		Orchard		
					Red-tailed Hawk	1							
514	4/30/1990		Kent	DE	Snow Goose	40	EIIS: 1005527-002		Carbofuran	Legal (Label)	Crop - Corn		
516	5/4/1990		Kent	DE	Laughing Gull	1	EIIS: 1000116-005		Carbofuran	Unknown	Crop - Corn		
					Mallard	1							
					Snow Goose	34							
					Teal	6							
2368	5/14/1990		Johnson	WY	Golden Eagle	3	CWS: CWS90-10		carbofuran		Unknown		
517	5/19/1990		Wythe	VA	Red-tailed Hawk	1	EIIS: 1005510-003	VDGIF: 4-90	Carbofuran	Unknown	Unknown		
519	5/26/1990		Sutter	CA	American Goldfinch	20	EIIS: 1005417-002	CADFG: P-1221	Carbofuran	Unknown	Unknown		
2361	7/1/1990		unknown	IA	great horned owl	1	CWS: CWS90-3		carbofuran		Crop - Corn		
529	7/21/1990		Essex	VA	Red-tailed Hawk	2	EIIS: 1005510-004	VDGIF: 5-90	Carbofuran	Unknown	Unknown		
531	9/9/1990		Essex	VA	Blackbird	hundreds	EIIS: 1004169-033	VDGIF: 2-90	Carbofuran	Legal (Label)	Agricultural Area		
					Blue Jay	1							
					Eastern Bluebird	1							
					European Starling	50							
					Grackle	50							
					Northern Cardinal	1							
					Sparrow	1							
532	9/19/1990		N/A	BC	Bald Eagle	12	EIIS: 1005866-001		Carbofuran	Unknown	Unknown		
					Red-tailed Hawk	4							
2360	9/20/1990		charles mix	SD	bald eagle	1	CWS: CWS90-2		carbofuran		Flooded Field		
534	10/26/1990		Colusa	CA	American Wigeon	3	EIIS: B0000-501-93		Carbofuran	Legal (Label)	Flooded Field		
					Mallard	24							
					Northern Pintail	3							
535	11/29/1990		Westmoreland	VA	Bald Eagle	1	EIIS: 1004169-037	NYDEC: 8-90 VA: 8 - 90	Carbofuran Chlordane Dieldrin	Unknown	Unknown		

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537	11/30/1990		Napa	CA	American Robin	1	EIIS: I005416-006		Carbofuran	Misuse	Vineyard		
					European Starling	1							
					Finch	1							
538	12/10/1990		Napa	CA	American Robin	1	EIIS: I005416-003		Carbofuran	Unknown	Vineyard		
					European Starling	1							
					Finch	1							
539	12/10/1990		Unknown	CA	American Robin	1	EIIS: I005416-004		Carbofuran	Misuse	Vineyard		
					European Starling	1							
					Finch	1							
540	12/11/1990		Colusa	CA	Duck	18	EIIS: I005416-002		Carbofuran	Legal (Label)	Crop - Rice		
544	12/20/1990		Unknown	CA	American Robin	1	EIIS: I005416-005		Carbofuran	Legal (Label)	Vineyard		
					European Starling	1							
					Finch	1							
2386	1/6/1991		Weber	UT	Bald Eagle	1	CWS: CWS91-15	FWSW: 9961-001	famphur	Misuse			
					Great Horned Owl	1							
					Northern Harrier	1							
					Prairie Falcon	1							
					Red-tailed Hawk	3							
2387	1/7/1991		Napa	CA	American Kestrel	1	CWS: CWS91-16		carbofuran	Legal (Label)	Vineyard		
					American Robin	15							
					European Starling	1							
					Northern Harrier	1							
					Red-tailed Hawk	7							
2390	1/9/1991		Napa	CA	Red-tailed Hawk	1	CWS: CWS91-19		carbofuran		Vineyard		
546	1/9/1991		Napa	CA	European Starling	25	EIIS: I004665-005	CADFG1: P-1347	Carbofuran	Legal (Label)	Vineyard		
2372	1/26/1991		new madrid	MO	bald eagle	1	CWS: CWS91-1	FWSW: 10021-001	carbofuran				
2382	2/27/1991		Medina	TX	Vulture	2	CWS: CWS91-11		carbofuran	Misuse	Grazing Land		
2373	3/15/1991		moftat	CO	golden eagle	1	CWS: CWS91-2		carbofuran				
560	4/1/1991		Logan	KS	Bald Eagle	1	EIIS: I000012-001	KS: 91-6-6214 AM	Carbofuran	Unknown	Unknown		
561	4/1/1991	4/7/1991	King George	VA	American Pipit	2	EIIS: I000504-030	SCWDS: 76-91	Carbofuran	Unknown	Crop - Corn		
					Brown-headed Cowbird	1							
					House Sparrow	1							
					Rusty Blackbird	1							
					Savannah Sparrow	1							
562	4/1/1991		Isle of Wight	VA	Common Grackle	2	EIIS: I000504-031		Carbofuran	Unknown	Crop - Corn		
					Savannah Sparrow	9	EIIS: I000504-034	SCWDS: 77-91					
					White-throated Sparrow	1		SCWDS: 92-91					
585	4/1/1991	5/1/1991	Caroline	VA	American Kestrel	1	EIIS: I000504-035	SCWDS: 98-91	Carbofuran	Unknown	Crop - Corn		
					Cedar Waxwing	1							
					Chipping Sparrow	2							
					Swamp Sparrow	1							
568	4/5/1991	4/6/1991	Isle of Wight	VA	American Robin	3	EIIS: I000504-026	SCWDS: 69-91	Carbofuran	Unknown	Crop - Corn		
					Eastern Bluebird	1	EIIS: I000504-027	SCWDS: 70-91					
							EIIS: I000504-028	SCWDS: 71-91					
							EIIS: I000504-029	SCWDS: 72-91					
							EIIS: I004169-050	VDGIF: 26-91					
569	4/8/1991		Sheridan	MT	Golden Eagle	6	EIIS: I001606-001	USFWSLE6: 3257AM	Carbofuran	Abuse	Unknown		
570	4/9/1991	4/14/1991	Surry	VA	Brown-headed Cowbird	1	EIIS: I000504-032	SCWDS: 91-91	Carbofuran	Unknown	Crop - Corn		
					Chipping Sparrow	1							
					Eastern Meadowlark	1							
					Northern Cardinal	1							
					Savannah Sparrow	2							
					White-throated Sparrow	2							
571	4/9/1991	4/10/1991	King George	VA	American Pipit	2	EIIS: I004169-051	VDGIF: 27-91	Carbofuran	Unknown	Crop - Corn		
					Brown-headed Cowbird	1							
					House Sparrow	1							
					Rusty Blackbird	1							
					Savannah Sparrow	1							
572	4/9/1991	4/13/1991	Surry	VA	Brown-headed Cowbird	1	EIIS: I004169-052	VDGIF: 28-91	Carbofuran	Unknown	Unknown		
					Chipping Sparrow	1							
					Eastern Meadowlark	1							
					Northern Cardinal	1							
					Savannah Sparrow	2							
					White-throated Sparrow	2							

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573	4/10/1991	4/18/1991	Isle of Wight	VA	Common Grackle	2	EIIS: I004169-054	VDGIF: 30-91	Carbofuran	Unknown	Crop - Corn		
					Savannah Sparrow	13							
					White-throated Sparrow	11							
574	4/11/1991	4/12/1991	Isle of Wight	VA	Eastern Phoebe	1	EIIS: I000504-033	NYDEC: 8-91 SCWDS: 97-91	Carbofuran	Unknown	Crop - Corn		
					Ovenbird	1							
576	4/16/1991	4/16/1991	Surry	VA	Chipping Sparrow	1	EIIS: I004169-053	VDGIF: 29-91	Carbofuran	Unknown	Crop - Corn		
677	4/17/1991	4/17/1991	Essex	VA	Eagle	1	EIIS: I004169-010	VDGIF: 1-86	Carbofuran	Unknown	Crop - Corn		
578	4/17/1991		Madison	VA	Bald Eagle	1	EIIS: I004169-043	VDGIF: 7-91	Carbofuran	Unknown	Crop - Corn		
					Red-tailed Hawk	2							
					Vulture	2							
579	4/18/1991		Madison	VA	Bald Eagle	1	EIIS: I001601-001	LE6: 3887AM	Carbofuran	Unknown	Crop - Corn		
					Red-tailed Hawk	1							
					Turkey Vulture	1							
580	4/18/1991	4/26/1991	New Kent	VA	Boat-tailed Grackle	1	EIIS: I004169-055	VDGIF: 31-91	Carbofuran	Unknown	Unknown		
					Red-winged Blackbird	2							
581	4/19/1991	5/1/1991	Caroline	VA	American Kestrel	3	EIIS: I004169-056	VDGIF: 32-91	Carbofuran	Unknown	Crop - Corn		
					American Robin	2							
					Cedar Waxwing	1							
					Chipping Sparrow	2							
					European Starling	2							
					Swamp Sparrow	1							
583	4/29/1991	5/24/1991	Amelia	VA	Eastern Bluebird	2	EIIS: I004169-057	VDGIF: 33-91	Carbofuran	Unknown	Crop - Corn		
					European Starling	1							
					Grasshopper Sparrow	1							
					Mourning Dove	1							
					Wren	1							
586	5/1/1991		Amelia	VA	Eastern Bluebird	2	EIIS: I000504-036	VA: 100-91	Carbofuran	Unknown	Crop - Corn		
587	5/13/1991	5/29/1991	King George	VA	American Robin	1	EIIS: I004169-059	VDGIF: 35-91	Carbofuran	Unknown	Crop - Corn		
					Boat-tailed Grackle	1							
					Grosbeak	1							
					Mourning Dove	1							
					Northern Cardinal	1							
					Summer Tanager	1							
588	5/15/1991		Amelia	VA	American Crow	1	EIIS: I000504-037	VA: 117-91	Carbofuran	Unknown	Agricultural Area		
					American Kestrel	1							
					American Robin	1							
					Blue Grosbeak	1							
					Boat-tailed Grackle	1							
					Carolina Wren	1							
					Chipping Sparrow	1							
					European Starling	1							
					Grasshopper Sparrow	1							
					Mourning Dove	1							
					Northern Bobwhite	1							
590	6/1/1991	6/7/1991	King George	VA	Summer Tanager	1	EIIS: I000504-038	SCWDS: 136-91	Carbofuran	Unknown	Crop - Corn		
594	7/11/1991	7/11/1991	Virginia Beach	VA	Mallard	6	EIIS: I003176-005 EIIS: I004169-048	VDGIF: 16-91	Carbofuran Diazinon Heptachlor	Unknown	Non-Agricultural		
597	9/20/1991		San Joaquin	CA	Songbird	30	EIIS: I005525-004	CA: P-1418	Carbofuran	Unknown	Vineyard		
598	10/26/1991		Colusa	CA	Duck	30	EIIS: I005416-001		Carbofuran	Unknown	Crop - Rice		
599	11/1/1991		San Joaquin	CA	European Starling	4	EIIS: I000599-008	CADFG1: P-1429/1431	Carbofuran	Unknown	Vineyard		Stream/River
					Great Egret	2							
					Great Heron	1							
					Unknown Bird	200							
600	11/1/1991		Colusa	CA	Duck	40	EIIS: I001602-001	CADFG: P-1436	Carbofuran	Legal (Label)	Crop - Rice		Airstrip/Airport
					Red-tailed Hawk	1							

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2488	11/11/1991	11/11/1991	San joaquin	CA	Great Egret	6	CEETV: 230633		carbofuran	Unknown			
					black-crowned night-heron	3	CEETV: 230634						
					great blue heron	5	CEETV: 230635						
							CEETV: 230636						
							CEETV: 230637						
							CEETV: 230638						
							CEETV: 230639						
							CEETV: 230640						
							CEETV: 230641						
							CEETV: 230642						
							CEETV: 230643						
							CEETV: 230644						
							CEETV: 230645						
							CEETV: 230646						
601	11/11/1991		Mendocino	CA	Songbird	40	EIIS: I005525-005	CA: P-1429	Carbofuran	Unknown	Vineyard		
602	11/12/1991		Sonoma	CA	European Starling	6	EIIS: I005525-007	CA: P-1430	Carbofuran	Unknown	Vineyard		
606	11/21/1991		Napa	CA	Finch	36	EIIS: I005525-008	CA: P-1433	Carbofuran	Unknown	Vineyard		
2374	11/27/1991		talbot	MD	bald eagle	1	CWS: CWS91-3	FWSW: 10486-001	carbofuran				
607	12/3/1991		Napa	CA	American Robin	9	EIIS: I005525-009	CA: P-1441	Carbofuran	Unknown	Vineyard		
608	12/3/1991		Napa	CA	Songbird	44	EIIS: I005525-010	CA: P-1442	Carbofuran	Unknown	Vineyard		
609	12/3/1991		Napa	CA	Songbird	20	EIIS: I005525-011	CA: P-1443	Carbofuran	Unknown	Vineyard		
610	12/3/1991		Napa	CA	American Robin	2	EIIS: I005525-012	CA: P-1444	Carbofuran	Unknown	Vineyard		
2375	12/5/1991		queen annes	MD	bald eagle	1	CWS: CWS91-4	FWSW: 10485-001	carbofuran	Unknown			
611	12/11/1991		Napa	CA	Red-tailed Hawk	1	EIIS: I005525-013	CA: P-1445	Carbofuran	Unknown	Vineyard		
613	12/30/1991		Napa	CA	Red-tailed Hawk	1	EIIS: I005525-014	CA: P-1447	Carbofuran	Unknown	Vineyard		
614	1/1/1992		Sonoma	CA	Hawk	1	EIIS: I000599-009	CA: P-1449	Carbofuran	Legal (Label)	Unknown		
615	1/9/1992		Sonoma	CA	Hawk	1	EIIS: I000599-010	CA: P-1450	Carbofuran	Legal (Label)	Unknown		
619	2/1/1992		Fergus	MT	Golden Eagle	3	EIIS: I001606-002	LE8: 3890AN	Carbofuran	Abuse	Unknown		
621	2/4/1992		Yuba	CA	Eagle	1	EIIS: I002882-001	CA: D9200385	Carbofuran	Unknown	Field		
626	2/15/1992		Hidalgo	TX	Cattle Egret	100	EIIS: I000917-002	CEETV: 190956 CEETV: 190957 TX: 05-92-0005	Carbofuran	Unknown	Field		
627	3/1/1992		Stanislaus	CA	Northern Harrier	1	EIIS: I000599-007	CADFG1: P-1455	Carbofuran	Unknown	Crop - Alfalfa		
					Songbird	1							
					White-tailed Kite	1							
628	3/1/1992		Brunswick	NC	Eastern Bluebird	1	EIIS: I000924-001	FWSLE: 10684/92-042	Carbofuran	Legal (Label)	Crop - Corn		
					Finch	1							
					Red-winged Blackbird	5							
630	3/3/1992		Knox	TN	Unknown Bird	3	EIIS: I000124-002	TN: 503656	Carbofuran	Misuse	Non-Agricultural		Residential Turf
2255	3/3/1992	3/3/1992	judith basin	MT	Golden Eagle	3	FWSLE: 3890AN		carbofuran	Unknown			
632	4/1/1992		Caroline	VA	Common Grackle	2	EIIS: I000137-002	SCWDS: 60-92	Carbofuran	Unknown	Field		
					Mourning Dove	4							
634	4/16/1992	4/21/1992	Caroline	VA	American Crow	2	EIIS: I004169-065	VA: 4-92	Carbofuran	Misuse	Agricultural Area		
					Common Grackle	2							
					Eastern Bluebird	3							
					Mourning Dove	5							
636	5/5/1992		Sheridan	MT	Bald Eagle	5	EIIS: I001606-004	LE6: 5927AN	Carbofuran	Misuse	Unknown		
					Golden Eagle	2							
640	5/15/1992		Grand	CO	Common Raven	3	EIIS: I001606-005	LE6: 6189AN	Carbofuran	Abuse	Unknown		
					Golden Eagle	1							
2406	5/20/1992		Unknown	MT	Golden Eagle	3	CWS: CWS92-16		carbofuran				
644	5/28/1992	6/21/1992	Yuma	AZ	Mourning Dove	3	EIIS: I001596-001	NMLE: 6696AN	Carbofuran	Abuse	Non-Agricultural		Airstrip / Airport
					Sparrow	12							
646	5/30/1992		Yadkin	NC	Blackbird	1	EIIS: I000799-007	NC: IR92-72	Carbofuran	Abuse	Crop - Corn		
					Blue Jay	1							
					Crow	2							
					European Starling	3							
					Great-tailed Grackle	3							
					Mourning Dove	1							
					Northern Cardinal	1							
					Red-tailed Hawk	1							
649	6/7/1992		Hanover	VA	American Crow	2	EIIS: I000504-017	SCWDS: 100-92	Carbofuran	Unknown	Unknown		
650	6/7/1992	6/7/1992	Hanover	VA	American Crow	2	EIIS: I004169-066	VA: 9-92	Carbofuran	Unknown	Unknown		
666	9/15/1992	11/6/1992	Monterey	CA	Unknown Bird	12	EIIS: I000444-022		Carbofuran	Legal (Label)	Vineyard		
668	10/12/1992		Pocahontas	WV	Canada Goose	9	EIIS: I000446-001		Carbofuran	Unknown	Non-Agricultural		Lake
670	10/19/1992	10/20/1992	Pocahontas	WV	Canada Goose	9	EIIS: I000504-021		Carbofuran	Unknown	Non-Agricultural		Lake

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671	10/23/1992		Monterey	CA	Lawrence's Goldfinch	1	EIIS: I000599-004	CADFG1: P-1515	Carbofuran	Legal (Label)	Vineyard		
673	11/11/1992		Kern	CA	American Robin	1	EIIS: I000599-002	CADFG1: P-1517	Carbofuran	Legal (Label)	Vineyard		
674	11/11/1992		Monterey	CA	Yellow-rumped Warbler	1							
					Dark-eyed Junco	1	EIIS: I000599-005	CADFG1: P-1514	Carbofuran	Legal (Label)	Vineyard		
					House Finch	1							
					Mourning Dove	1							
					Yellow-rumped Warbler	1							
675	11/1/1992		Monterey	CA	House Finch	1	EIIS: I000599-006	CADFG1: P-1513	Carbofuran	Legal (Label)	Vineyard		
					Savannah Sparrow	1							
					Songbird	1							
679	12/26/1992	1/4/1993	Republic	KS	Bald Eagle	4	EIIS: I0004632-001	KSAPHD: 93003(KS)	Carbofuran	Abuse	Ranch		
					Red-tailed Hawk	1							
680	12/29/1992	1/7/1993	New Castle	DE	Common Crow	2	EIIS: I001600-001	LE6: 11228	Carbofuran	Abuse	Unknown		
					Northern Harrier	1							
					Red-tailed Hawk	1							
683	1/1/1993	1/1/1994	Crosby	TX	Great Horned Owl	1	EIIS: I001596-002	NMLE: 6461AP	Carbofuran	Abuse	Agricultural Area		
690	2/2/1993	2/19/1993	Charles City	VA	Cedar Waxwing	160	EIIS: I004169-080	VDGIF: 4-93	Carbofuran	Unknown	Unknown		
692	2/13/1993		Screven	GA	Dark-eyed Junco	2	EIIS: I000504-007	SCWDS: 26-93	Carbofuran	Unknown	Non-Agricultural		
					Red-shouldered Hawk	1							
					Songbird	8							
697	2/27/1993		Hutchinson	SD	Songbird	3	EIIS: I001606-014	LE6: 7817AP	Carbofuran	Abuse	Unknown		
698	3/1/1993		San Joaquin	CA	House Finch	15	EIIS: I000599-003		Carbofuran	Legal (Label)	Crop - Alfalfa		
					House Sparrow	1							
699	3/1/1993		Burnett	WI	Bald Eagle	3	EIIS: I001605-002		Carbofuran	Unknown	Lake		
703	3/22/1993		San Joaquin	CA	House Finch	15	EIIS: I004632-002		Carbofuran	Unknown	Unknown		
					House Sparrow	1							
707	4/1/1993		Kern	CA	House Finch	3	EIIS: I000599-001		Carbofuran	Legal (Label)	Vineyard		
708	4/1/1993		Prairie	AR	Owl	1	EIIS: I000912-001		Carbofuran	Abuse	Waterway		
712	4/15/1993		Rosebud	MT	Black-billed Magpie	4	EIIS: I001606-008	LE6: 7180-AO	Carbofuran	Abuse	Unknown		
					Golden Eagle	2							
					Owl	1							
713	4/23/1993	4/27/1993	Monterey	CA	American Robin	2	EIIS: I004632-004	CADFG1: P-1555-1-9	Carbofuran	Unknown	Unknown		
					Brewer's Blackbird	5							
					Bronzed Cowbird	1							
					House Finch	10							
					Oregon Junco	2							
714	4/26/1993		Kern	CA	House Finch	3	EIIS: I004632-003		Carbofuran	Unknown	Unknown		
715	5/1/1993		Monterey	CA	American Robin	2	EIIS: I000599-011	CADFG1: P-1555	Carbofuran	Legal (Label)	Vineyard		
					Brewer's Blackbird	5							
					Brown-headed Cowbird	1							
					House Finch	10							
					Oregon Junco	2							
					Sparrow	1							
716	5/7/1993	5/18/1993	Kent	DE	Common Grackle	1	EIIS: I001599-002		Carbofuran	Legal (Label)	Crop - Corn		
					European Starling	1							
					Red-winged Blackbird	1							
					Rock Pigeon	1							
					Tree Swallow	2							
717	5/27/1993		Kent	DE	Blue Jay	3	EIIS: I002047-001	DE: 7886AO	Carbofuran	Unknown	Crop - Corn		
					Red-winged Blackbird	1							
					Rock Pigeon	1							
2420	5/31/1993		Butte	SD	Bald Eagle	5	CWS: CWS93-14		carbofuran				
					Downy Woodpecker	1							
718	6/10/1993		Canyon	ID	Canada Goose	40	EIIS: I000920-001	ID: 93056	Carbofuran	Legal (Label)	Crop - Alfalfa		
725	8/16/1993		Monterey	CA	Red-winged Blackbird	10	EIIS: I000599-013	CA: P-1599	Carbofuran	Unknown	Vineyard		
726	8/16/1993		Monterey	CA	Red-winged Blackbird	5	EIIS: I004632-008		Carbofuran	Unknown	Unknown		
727	9/1/1993		Monterey	CA	Flycatcher	4	EIIS: I000599-014		Carbofuran	Legal (Label)	Vineyard		
					House Finch	9							
					House Sparrow	1							
					Yellow-rumped Warbler	1							
728	9/1/1993		Glenn	CA	Mallard	12	EIIS: I003930-002		Carbofuran	Legal (Label)	Crop - Rice		
731	9/15/1993		Monterey	CA	House Finch	1	EIIS: I000599-016		Carbofuran	Legal (Label)	Vineyard		
732	9/15/1993		Monterey	CA	Lark Sparrow	3	EIIS: I000599-018		Carbofuran	Legal (Label)	Vineyard		

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733	9/22/1993		Monterey	CA	Lark Sparrow	1	EIIS: I000599-015		Carbofuran	Legal (Label)	Vineyard		
					Purple Finch	1							
					Savannah Sparrow	1							
735	9/22/1993		Monterey	CA	Lark Sparrow	3	EIIS: I004632-010		Carbofuran	Unknown	Unknown		
					Purple Finch	1							
					Savannah Sparrow	1							
738	10/1/1993		Monterey	CA	House Finch	9	EIIS: I004632-009		Carbofuran	Unknown	Unknown		
					House Sparrow	1							
					Yellow-rumped Warbler	5							
739	10/11/1993		Monterey	CA	Northern Flicker	1	EIIS: I000599-012	CA: P-1598	Carbofuran	Unknown	Vineyard		
					Yellow-rumped Warbler	3							
740	10/11/1993		Monterey	CA	Northern Flicker	1	EIIS: I004632-007	CADFG1: P-1598	Carbofuran	Unknown	Unknown		
					Yellow-rumped Warbler	3							
741	10/11/1993		Monterey	CA	House Finch	1	EIIS: I004632-011		Carbofuran	Unknown	Unknown		
742	10/12/1993		Monterey	CA	Yellow-rumped Warbler	1	EIIS: I000599-017	CA: P-1603	Carbofuran	Legal (Label)	Vineyard		
743	10/12/1993		Monterey	CA	Yellow-rumped Warbler	1	EIIS: I004632-012	CADFG1: P-1603	Carbofuran	Unknown	Unknown		
744	10/18/1993		Butte	SD	Bald Eagle	1	EIIS: I001606-010	LE6: 2281AP	Carbofuran	Abuse	Unknown		
745	10/20/1993		Monterey	CA	House Finch	4	EIIS: I000599-019	CADFG1: P-1605	Carbofuran	Legal (Label)	Vineyard		
					Western Meadowlark	1							
					Yellow-rumped Warbler	2							
746	10/20/1993		Monterey	CA	House Finch	4	EIIS: I004632-014	CADFG1: P-1695	Carbofuran	Unknown	Unknown		
					Western Meadowlark	1							
					Yellow-rumped Warbler	2							
747	10/21/1993		Monterey	CA	House Finch	2	EIIS: I000599-020		Carbofuran	Legal (Label)	Vineyard		
					Yellow-rumped Warbler	3							
748	10/21/1993		Monterey	CA	Brewer's Blackbird	2	EIIS: I000599-025		Carbofuran	Legal (Label)	Vineyard		
					House Finch	2							
					Lawrence's Goldfinch	1							
					Yellow-rumped Warbler	19							
749	10/21/1993		Monterey	CA	Brewer's Blackbird	2	EIIS: I000599-027	CA: P-1627	Carbofuran	Legal (Label)	Vineyard		
					House Finch	2							
					Yellow-rumped Warbler	19							
750	10/21/1993		Monterey	CA	Lark Sparrow	3	EIIS: I004632-013		Carbofuran	Unknown	Unknown		
751	10/21/1993		Monterey	CA	House Finch	2	EIIS: I004632-015		Carbofuran	Unknown	Unknown		
					Yellow-rumped Warbler	2							
752	10/21/1993		Monterey	CA	Brewer's Blackbird	2	EIIS: I004632-024		Carbofuran	Unknown	Unknown		
					House Finch	2							
					Lawrence's Goldfinch	1							
					Yellow-rumped Warbler	19							
753	10/25/1993		Monterey	CA	Brewer's Blackbird	1	EIIS: I000599-026	CA: P-1626	Carbofuran	Legal (Label)	Vineyard		
					Finch	1							
					Yellow-rumped Warbler	6							
754	10/25/1993		Monterey	CA	Brewer's Blackbird	1	EIIS: I004632-023	CADFG1: P-1626	Carbofuran	Unknown	Unknown		
					House Finch	1							
					Yellow-rumped Warbler	6							
755	10/26/1993		Monterey	CA	Mourning Dove	1	EIIS: I000599-024	CA: P-1624	Carbofuran	Legal (Label)	Vineyard		
756	10/26/1993		Monterey	CA	Mourning Dove	1	EIIS: I004632-021	CADFG1: P-1624	Carbofuran	Unknown	Unknown		
757	10/27/1993		Monterey	CA	Mourning Dove	1	EIIS: I004632-022	CA: P-1625	Carbofuran	Unknown	Unknown		
					Yellow-rumped Warbler	7							
758	10/28/1993	11/3/1993	Monterey	CA	Blackbird	1	EIIS: I000599-021	CA: P-1616 ET AL	Carbofuran	Legal (Label)	Vineyard		
					Finch	12							
					Mourning Dove	34							
					Northern Flicker	22							
					Sharp-shinned Hawk	1							
					Western Bluebird	11							
					Yellow-rumped Warbler	133							
759	10/28/1993		Monterey	CA	Horned Lark	4	EIIS: I004632-017	CADFG1: P-1616	Carbofuran	Unknown	Unknown		
					House Finch	10							
					Lark Sparrow	3							
					Lawrence's Goldfinch	19							
					Mourning Dove	10							
					Northern Flicker	1							
					Sparrow	16							
					Western Bluebird	4							
					Yellow-rumped Warbler	120							

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760	10/29/1993		Monterey	CA	House Finch	1	EIIS: I004632-018	CADFG1: P-1617	Carbofuran	Unknown	Unknown		
					Mourning Dove	4							
					Northern Flicker	5							
					Oregon Junco	1							
					Western Bluebird	5							
					Yellow-rumped Warbler	6							
761	10/29/1993		Monterey	CA	California Quail	1	EIIS: I004632-028	CADFG1: P-1632	Carbofuran	Unknown	Unknown		
					Hermit Thrush	1							
					House Finch	3							
					Lark Sparrow	1							
					Mourning Dove	7							
					Song Sparrow	2							
					Western Bluebird	3							
					Yellow-rumped Warbler	29							
762	10/30/1993		Monterey	CA	Lawrence's Goldfinch	16	EIIS: I004632-019	CADFG1: P-1618	Carbofuran	Unknown	Unknown		
					Mourning Dove	2							
					Yellow-rumped Warbler	3							
2408	10/31/1993		Monterey	CA	Hawk	1	CWS: CWS93-2		carbofuran		Vineyard		
763	10/31/1993		Monterey	CA	Mourning Dove	6	EIIS: I004632-020	CADFG1: P-1619	Carbofuran	Unknown	Unknown		
					Northern Flicker	16							
					Sharp-shinned Hawk	1							
					Western Bluebird	1							
764	11/1/1993		Monterey	CA	Yellow-rumped Warbler	4	EIIS: I000599-034		Carbofuran	Legal (Label)	Vineyard		
765	11/1/1993		Monterey	CA	Yellow-rumped Warbler	4	EIIS: I004632-031		Carbofuran	Unknown	Unknown		
766	11/2/1993		Monterey	CA	Brewer's Blackbird	1	EIIS: I004632-026	CADFG1: P-1630	Carbofuran	Unknown	Unknown		
					Mourning Dove	1							
					Yellow-rumped Warbler	2							
767	11/3/1993		Monterey	CA	California Quail	1	EIIS: I004632-030	CADFG1: P-1635	Carbofuran	Unknown	Unknown		
					House Finch	1							
					Lawrence's Goldfinch	1							
					Mourning Dove	13							
					Northern Flicker	1							
					Song Sparrow	1							
					Western Meadowlark	1							
					Yellow-rumped Warbler	11							
768	11/5/1993		Monterey	CA	Yellow-rumped Warbler	7	EIIS: I000599-035	CA: P-1637	Carbofuran	Legal (Label)	Vineyard		
769	11/5/1993		Monterey	CA	Yellow-rumped Warbler	7	EIIS: I004632-032	CADFG1: P-1637	Carbofuran	Unknown	Unknown		
770	11/7/1993		Glenn	CA	Mallard	12	EIIS: I001598-001		Carbofuran	Unknown	Crop - Rice		
771	11/7/1993		Glenn	CA	Mallard	12	EIIS: I004632-016		Carbofuran	Unknown	Unknown		
772	11/7/1993		Glenn	CA	Mallard	12	EIIS: I004665-007		Carbofuran	Legal (Label)	Crop - Rice		
773	11/8/1993		Monterey	CA	House Finch	1	EIIS: I000599-029	CA: P-1629	Carbofuran	Legal (Label)	Vineyard		
					Yellow-rumped Warbler	11							
774	11/8/1993		Monterey	CA	Song Sparrow	1	EIIS: I000599-031	CA: P-1631	Carbofuran	Legal (Label)	Vineyard		
775	11/8/1993		Monterey	CA	House Finch	1	EIIS: I004632-025	CADFG1: P-1629	Carbofuran	Unknown	Unknown		
					Yellow-rumped Warbler	11							
776	11/8/1993		Monterey	CA	Song Sparrow	1	EIIS: I004632-027	CADFG1: P-1631	Carbofuran	Unknown	Unknown		
777	11/13/1993		Monterey	CA	Yellow-rumped Warbler	1	EIIS: I000599-032	CA: P-1633	Carbofuran	Legal (Label)	Vineyard		
778	11/13/1993		Monterey	CA	Yellow-rumped Warbler	1	EIIS: I004632-029	CADFG1: P-1633	Carbofuran	Unknown	Unknown		
2416	12/31/1993		Unknown	WY	Common Raven	1	CWS: CWS93-10		carbofuran				
					Golden Eagle	5							
					Magpie	2							
792	1/21/1994		Wheatland	MT	Bald Eagle	1	EIIS: I001606-012	FWSLE6: 8285AP	Carbofuran	Abuse	Unknown		
1745	1/28/1994	1/28/1994	Clayton	IA	Bald Eagle	1	FWSLE: 6463AP		Carbofuran	Unknown	Garnavillo		
1746	1/30/1994	1/30/1994	Crosby	TX	Great Horned Owl	1	FWSLE: 6461AP		Carbofuran	Abuse			
					Red-tailed Hawk	1							
812	2/21/1994	2/23/1994	Tazewell	VA	Golden Eagle	1	EIIS: I001604-001	VA: 12617-001-	Carbofuran	Misuse	Unknown		
					Red-tailed Hawk	2							
					Unknown Bird	2							
813	2/23/1994		Unknown	MO	Great Horned Owl	1	EIIS: I001607-001	LE6: 6081AP	Carbofuran	Abuse	Unknown		
					Turkey Vulture	2							
817	3/23/1994		Pondera	MT	Bald Eagle	1	EIIS: I001606-011	LE6: 7900AP	Carbofuran	Abuse	Unknown		
					Golden Eagle	2							
819	4/1/1994	4/24/1994	Burnett	WI	Bald Eagle	17	EIIS: I001603-001		Carbofuran	Abuse	Crop - Corn		
					Common Raven	1							
820	4/6/1994		Burnett	WI	Bald Eagle	6	EIIS: I001605-001		Carbofuran	Unknown	Lake		

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821	4/8/1994	4/14/1994	Burnett	WI	Bald Eagle	4	EIIS: I001605-003		Carbofuran	Unknown	Lake		
					Common Raven	1							
					Crow	1							
822	4/10/1994		Moody	SD	Hawk	1	EIIS: I001606-013	LE6: 8896AP	Carbofuran	Abuse	Unknown		
837	8/12/1994		Genesee	NY	American Goldfinch	12	EIIS: I003908-012		Carbofuran	Unknown	Crop - Corn		
					Baltimore Oriole	1							
					Brown-headed Cowbird	2							
					House Finch	2							
					House Sparrow	4							
					Mourning Dove	3							
					Red-tailed Hawk	1							
					Red-winged Blackbird	51							
					Rock Pigeon	1							
					Sparrow	7							
838	8/17/1994		Chautauqua	NY	Crow	1	EIIS: I003908-013		Carbofuran	Unknown	Unknown		
					Gull	1							
					Ring-billed Gull	62							
840	9/2/1994		Imperial	CA	Cliff Swallow	13	EIIS: I003351-025		Carbofuran	Unknown	Unknown		
841	9/2/1994		Imperial	CA	Cliff Swallow	230	EIIS: I004665-009		Carbofuran	Unknown	Unknown		
843	9/13/1994		Sheridan	MT	Crow	1	EIIS: I001606-009	LE6: 930529	Carbofuran	Abuse	Unknown		
					Golden Eagle	3							
					Red-tailed Hawk	1							
851	10/11/1994		Monterey	CA	Brewer's Blackbird	1	EIIS: I003351-032		Carbofuran	Unknown	Unknown		
854	11/3/1994		Monterey	CA	Finch	1	EIIS: I004665-010	CADFG1: P-1768A	Carbofuran	Unknown	Vineyard		
					Mourning Dove	1							
					Yellow-rumped Warbler	3							
1744	1/25/1995	1/25/1995	Bollinger	MO	Red-tailed Hawk	2	FWSLE: 7072AQ		Carbofuran	Abuse			
869	1/30/1995		Orange	NY	Blue Jay	3	EIIS: I003908-025		Carbofuran	Abuse	Unknown		
					Dark-eyed Junco	5							
					European Starling	29							
					White-throated Sparrow	2							
871	2/6/1995		Orange	NY	Blue Jay	1	EIIS: I003076-001		Carbofuran	Abuse	Non-Agricultural		Residential Turf
					Dark-eyed Junco	2							
					European Starling	24							
878	2/22/1995		Pickett	TN	Eagle	1	EIIS: I003966-002	TN: 13435	Carbofuran	Unknown	Shoreline		
882	3/11/1995		Hawkins	TN	Eagle	1	EIIS: I003966-003	TN: 13473,001	Carbofuran	Unknown	Lake		
900	5/26/1995		Unknown	CA	Mallard	3	EIIS: I003930-003	CADFG1: L-192-39	Carbofuran	Legal (Label)	Crop - Rice		
922	8/17/1995		Prince George	MD	Bald Eagle	2	EIIS: I003401-001		Carbofuran	Misuse	Agricultural Area		
923	8/18/1995	8/23/1995	Prince George	MD	Canada Goose	11	EIIS: I003401-002		Carbofuran	Misuse	Unknown		
					Northern Cardinal	1							
929	9/19/1995		Unknown	CA	Brewer's Blackbird	1	EIIS: I004665-008		Carbofuran	Unknown	Unknown		
1743	1/23/1996	1/23/1996	Dickenson	VA	Red-tailed Hawk	1	FWSLE: 4928AR		Carbofuran	Abuse			
1747	6/5/1996	6/5/1996	Modoc	CA	Canada Goose	5	FWSLE: 6886AR		Carbofuran	Misuse	Wildlife Refuge		
989	6/6/1996		Modoc	CA	Canada Goose	7	EIIS: I004852-026	CA: 501707	Carbofuran	Misuse	Field		
1024	10/25/1996		New York	NY	Rock Pigeon	3	EIIS: I006702-001	NYDEC: 97-55-23	Carbofuran	Abuse	Non-Agricultural		
1029	11/16/1996		Unknown	NY	Herring Gull	12	EIIS: I004874-001	NYDEC: 96-36-13	Carbofuran	Abuse	Non-Agricultural		Landfill
1040	1/23/1997	1/28/1997	Simpson	KY	Red-tailed Hawk	1	EIIS: I005095-002	KYDW: LTR 03/19/97	Carbofuran	Unknown	Unknown		
1042	1/30/1997		Unknown	KY	Hawk	1	EIIS: I005543-021	KY: 520907	Carbofuran	Abuse	Agricultural Area		
1056	4/27/1997	4/28/1997	Snohomish	WA	American Robin	2	EIIS: I007651-001	WADA: 7V-1997	Carbofuran	Legal (Label)	Crop - Spinach		
					Bald Eagle	4							
					Dunlin	200							
					Northern Harrier	2							
1065	6/5/1997	6/12/1997	Loudoun	VA	Canada Goose	6	EIIS: I006641-001	VA: 94-97	Carbofuran	Misuse	Crop - Alfalfa		
							EIIS: I013332-006						
1067	6/12/1997		Loudoun	VA	Canada Goose	7	EIIS: I005566-001	SCWDS: 94-97	Carbofuran	Unknown	Non-Agricultural		Industrial
1071	6/27/1997		Berks	PA	Goose	1	EIIS: I007546-078		Carbofuran	Unknown	Non-Agricultural		
1088	7/24/1997		Berks	PA	Canada Goose	30	EIIS: I007371-023	PA: 28	Carbofuran	Misuse	Crop - Corn		
1106	9/5/1997		Chenango	NY	European Starling	2	EIIS: I006646-001	CEETV: 65003	Carbofuran	Unknown	Unknown		
								NYDEC: 97-50-28					
1109	9/12/1997	9/12/1997	New York	NY	Rock Pigeon	1	EIIS: I006701-001	NYDEC: 97-52-15	Carbofuran	Abuse	Non-Agricultural		
1116	10/3/1997		New York	NY	Rock Pigeon	2	EIIS: I006652-001	NYDEC: 97-52-16	Carbofuran	Abuse	Non-Agricultural		
1117	10/5/1997		New York	NY	House Sparrow	4	EIIS: I006693-001	NYDEC: 97-52-	Carbofuran	Unknown	Non-Agricultural		
								30A,B					
1118	10/5/1997	10/5/1997	New York	NY	Rock Pigeon	1	EIIS: I006700-001	NYDEC: 97-52-29	Carbofuran	Abuse	Non-Agricultural		

Event I	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
1120	10/14/1997		New York	NY	Red-tailed Hawk	1	EIIS: I006670-001	CEETV: 60582	Carbofuran	Abuse	Non-Agricultural		
1123	10/24/1997	11/14/1997	Colusa	CA	Duck	58	EIIS: I005568-001	NYDEC: 97-52-11 CADFG: LAB # P-1192	Carbofuran	Legal (Label)	Crop - Rice		
1124	10/24/1997		New York	NY	Rock Pigeon	1	EIIS: I006654-001	NYDEC: 97-56-20	Carbofuran	Abuse	Unknown		
1125	10/24/1997	10/24/1997	New York	NY	Rock Pigeon	1	EIIS: I006676-001	NYDEC: 97-56-24	Carbofuran	Abuse	Unknown		
1126	10/24/1997	2/13/1998	New York	NY	Rock Pigeon	1	EIIS: I006797-001	ASPCA: 97-60-18 CEETV: 60811	Carbofuran	Abuse	Non-Agricultural		
2	10/25/1997	10/26/1997	New York	NY	Rock Pigeon	6	EIIS: I006651-001	NYDEC: 97-53-33	Carbofuran	Abuse	Non-Agricultural		
1130	10/31/1997		New York	NY	Rock Pigeon	1	EIIS: I006697-001	NYDEC: 97-56-18	Carbofuran	Abuse	Non-Agricultural		
1131	10/31/1997		New York	NY	Rock Pigeon	6	EIIS: I006706-001	NYDEC: 97-56-17	Carbofuran	Abuse	Non-Agricultural		
1132	11/1/1997		New York	NY	Rock Pigeon	17	EIIS: I006667-001	NYDEC: 97-56-27	Carbofuran	Abuse	Non-Agricultural		
1133	11/3/1997	11/3/1997	New York	NY	Rock Pigeon	8	EIIS: I006688-001	NYDEC: 97-60-19	Carbofuran	Abuse	Unknown		
1134	11/6/1997		New York	NY	Rock Pigeon	1	EIIS: I006696-001	NYDEC: 97-60-22	Carbofuran	Abuse	Non-Agricultural		
1135	11/20/1997		New York	NY	Rock Pigeon	3	EIIS: I006689-001	NYDEC: 97-62-21	Carbofuran	Unknown	Unknown		
1136	11/23/1997	11/23/1997	New York	NY	Rock Pigeon	3	EIIS: I006669-001	NYDEC: 97-62-22	Carbofuran	Abuse	Unknown		
1137	11/25/1997		New York	NY	Rock Pigeon	7	EIIS: I006647-001	NYDEC: 7-57-02	Carbofuran	Abuse	Non-Agricultural		
1157	3/26/1998		Kent	DE	Grackle	3	EIIS: I007372-005		Carbofuran	Unknown	Agricultural Area		
1169	5/15/1998		Northampton	PA	Grackle	2	EIIS: I007963-001	PA: 98-7-STD-I	Carbofuran	Legal (Label)	Crop - Corn		
1170	5/15/1998	5/18/1998	Northampton	PA	Grackle	12	EIIS: I009141-001		Carbofuran	Legal (Label)	Crop - Corn		
1177	6/3/1998		Unknown	MN	Goose	28	EIIS: I007545-034	MN: 521059	Carbofuran	Unknown	Crop - Corn		Lake
1193	7/14/1998	7/15/1998	New York	NY	Sparrow	46	EIIS: I007820-001	NYDEC: 98-32-25	Carbofuran	Abuse	Non-Agricultural		
1194	7/14/1998		New York	NY	Rock Pigeon	1	EIIS: I008136-001	NYDEC: 98-32-26	Carbofuran	Unknown	Non-Agricultural		
1206	8/1/1998		New York	NY	Rock Pigeon	8	EIIS: I007801-002	NYDEC: 98-37-26A H	Carbofuran	Abuse	Commercial		
1207	8/1/1998		New York	NY	Rock Pigeon	1	EIIS: I007821-005	NYDEC: 98-36-28	Carbofuran	Unknown	Non-Agricultural		
1209	8/2/1998		New York	NY	Rock Pigeon	1	EIIS: I007821-006	NYDEC: 98-36-29	Carbofuran	Abuse	Non-Agricultural		
1210	8/3/1998		New York	NY	Rock Pigeon	4	EIIS: I007801-003	NYDEC: 98-37-25ABC	Carbofuran	Abuse	Non-Agricultural		
1213	8/16/1998		New York	NY	House Sparrow	1	EIIS: I006144-002		Carbofuran	Abuse	Non-Agricultural		
1214	8/16/1998		New York	NY	Peregrine Falcon	1	EIIS: I007801-001	NYDEC: 98-40-30	Carbofuran	Abuse	Non-Agricultural		
					Red-tailed Hawk	1							
					Rock Pigeon	hundreds							
1215	8/16/1998		New York	NY	Rock Pigeon	1	EIIS: I008144-001	NYDEC: 98-40-24	Carbofuran	Abuse	Non-Agricultural		
1216	8/16/1998		New York	NY	House Sparrow	1	EIIS: I008144-002		Carbofuran	Abuse	Non-Agricultural		
1251	12/30/1998		Gallatin	MT	Common Raven	5	EIIS: I011320-001		Carbofuran	Abuse	National Park		
1289	3/14/1999		San Bernardino	CA	American Wigeon	40	EIIS: I010884-001	CA: L-116-99	Carbofuran	Unknown	Non-Agricultural		Lake
1324	9/1/1999		Unknown	FL	Quail	1	EIIS: I009211-001		Carbofuran	Abuse	Forest		
1325	9/2/1999		Unknown	FL	Bald Eagle	1	EIIS: I009970-003	FL: LTR 3/20/00	Carbofuran	Abuse	Poultry Farm		
					Hawk	1							
1326	9/21/1999		Unknown	GA	Hawk	1	EIIS: I009970-002	GA: LTR 3/20/00	Carbofuran	Abuse	Poultry Farm		
1333	10/21/1999		St Clair	IL	Brown-headed Cowbird	Unknown	EIIS: I009970-001	IL: LTR 3/20/00	Carbofuran	Abuse	Crop - Wheat		
					European Starling	Unknown							
					Grackle	Unknown							
					Horned Lark	Unknown							
					Red-winged Blackbird	20,000							
1334	10/21/1999		St Clair	IL	Blackbird	thousands	EIIS: I010885-001		Carbofuran	Abuse	Agricultural Area		
					Brown-headed Cowbird	hundreds							
					Grackle	hundreds							
					Horned Lark	hundreds							
1351	1/15/2000		Macon	TN	Black Vulture	4	EIIS: I009840-001	TN: 14-00	Carbofuran	Abuse	Unknown		
1357	2/1/2000	2/28/2000	Columbia	WI	Red-tailed Hawk	1	EIIS: I010387-002	WAHL: 769469 WIDNR: 2000-99	Carbofuran	Unknown	Unknown		
					DE: LTR 03/21/00								
1371	3/9/2000		Unknown	DE	Bald Eagle	1	EIIS: I009971-002		Carbofuran	Abuse	Ranch		
					Hawk	4							
					Unknown Bird	3							
1372	3/12/2000		Chaves	NM	Duck	3	EIIS: I010162-001	NMDA: 00-9	Carbofuran	Legal (Label)	Crop - Alfalfa		
					Snow Goose	800							
1373	3/13/2000		Lawrence	MS	Mourning Dove	hundreds	EIIS: I009971-004	MS: LTR 03/21/00	Carbofuran	Abuse	Crop - Corn		
					Red-tailed Hawk	4							
					Wild Turkey	3							

Event I	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
1379	3/22/2000	3/22/2000	New York	NY	Red-tailed Hawk	2	EIIS: I010327-001	ILDADL: 2000012282 ILDADL: 2000012283 ILDADL: 2000012284 ILDADL: 2000012285 ILDADL: 2000012286 ILDADL: 2000012287	Brodifacou m Carbofuran	Unknown	Unknown		
1384	4/6/2000	4/6/2000	Queens	NY	European Starling	2	EIIS: I010141-001	NYDEC: 00-20-11 ILDADL: 2000012729 ILDADL: 2000012730 ILDADL: 2000012731 ILDADL: 2000012732 NYDEC: 00-22-26	Carbofuran	Abuse	Unknown		
1407	7/1/2000		Hancock	MS	Vulture	1	EIIS: I010439-002		Carbofuran	Abuse	Poultry Farm		
1413	7/6/2000	7/6/2000	Columbia	NY	American Crow	1	EIIS: I011519-001	ILDADL: 2001000720 ILDADL: 2001007405 NYDEC: C0L000098	Carbofuran Diazinon	Unknown	Unknown		
1437	8/4/2000		Cortland	NY	Ring-billed Gull	100	EIIS: I011010-001	ILDADL: 2001002881 ILDADL: 2001002882 ILDADL: 2001002883 ILDADL: 2001002885 ILDADL: 2001002886 ILDADL: 2001002887 NYDEC: 00-43-14	Carbofuran	Abuse	Non-Agricultural	Landfill	
1449	9/1/2000	9/1/2000	Cortland	NY	Ring-billed Gull	1	EIIS: I011565-001	ILDADL: 2001007406 ILDADL: 2001007407 NYDEC: C0R000126	Carbofuran	Abuse	Non-Agricultural	Landfill	
1512	3/19/2001		Bergen	NJ	Grackle	6	EIIS: I012549-005		Carbofuran	Abuse	Unknown		
1536	6/7/2001		Washington	AL	Hawk	5	EIIS: I011855-001		Carbofuran	Abuse	Unknown		
1582	8/17/2001	8/18/2001	Ulster	NY	American Crow	2	EIIS: I012437-001 CEETV: 61058	ILDADL: 2002003910 ILDADL: 2002003911 ILDADL: 2002003912 NYDEC: ULS010031 NYDEC: ULS010032	Carbofuran	Abuse	Esopous		
1650	6/14/2002		Powhatan	VA	Wild Turkey	1	EIIS: I013244-001	VA: CC132-02	Carbofuran	Unknown	Unknown		
1656	9/16/2002		Talbot	MD	Eagle	1	EIIS: I013498-011		Carbofuran	Unknown	Unknown		

Event I	Start Date	End Date	County	State	Species	#	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
2464	5/21/2003		utah	UT	brewer's blackbird brown-headed cowbird european starling house sparrow red-tailed hawk red-winged blackbird	Impacted 238 84 81 12 2 580	EIIS: I014119		carbofuran		Ranch		
	0/00/1972			CA	Goose	19	EPA FOIA request		Carbofuran		Crop - Alfalfa	not mentioned specifically	Pesticide applied to field and geese were seen feeding in the area w/n 24 hrs of application.
	00/00/71			WI	Bird Kill	1	EPA FOIA request		Carbofuran				In an agricultural incident carbofuran was suspected factor in an undescribed bird kill. No conclusions about pesticide involvement were drawn from the investigation. One owl was suspected of containing residues; laboratory results were not reported.
	00/00/75			OK	Birds		EPA FOIA request		Carbofuran		Pine Seedlings	not mentioned specifically	Planting Procedures of a lumber company were suspected of resulting in the dog deaths, bird and wildlife kills. Routinely, pesticide is put into the hole for each pine seedling being planted. Water samples from the area were to be tested also; results were not reported. Four hog deaths were suspected to have resulted from contaminated creek water.
	00/00/77			CA	Geese	18-19 Affected; 12-15 Dead	EPA FOIA request		Carbofuran		Crop - Alfalfa		Geese were found to be feeding in the same alfalfa field within 24 hours of application. Two dead birds were retained for analysis of a chemical company; results were not reported
2417			Unknown	KS	Bald Eagle	30	CWS: CWS93-11		carbofuran				
1676	6/19/1997		Unknown	OR	Canada Goose	60	EIIS: I003605-001		Carbofuran	Unknown	Stream/River		
1677			Imperial	CA	Canada Goose	35	EIIS: I004631-001		Carbofuran	Unknown	Unknown		
1681			Colusa	CA	Waterfowl	1	EIIS: I005205-001		Carbofuran	Legal (Label)	Crop - Rice		
1682			Unknown	KY	Red-tailed Hawk	1	EIIS: I005205-002		Carbofuran	Abuse	Crop - Marijuana		
1683			Unknown	CA	American Robin European Starling Red-tailed Hawk	1 1 9	EIIS: I005416-007		Carbofuran	Misuse	Vineyard		
1685			Colusa	CA	Mallard	1	EIIS: I005421-002	CA: P-949	Carbofuran	Unknown	Unknown		
1686			Unknown	CA	Waterfowl	50	EIIS: I005421-003	CA: P-950	Carbofuran	Unknown	Ranch		
1689			Unknown	GA	Egret	19	EIIS: I005506-002		Carbofuran	Unknown	Unknown		
1690			Unknown	UN	Goose	1	EIIS: I005507-002	NA: LTR 01/18/89	Carbofuran	Unknown	Crop - Rapeseed		
1691			Unknown	VA	Red-tailed Hawk	hundreds	EIIS: I005510-001	VDGIF: D-12537	Carbofuran	Unknown	Unknown		
1692			Unknown	CA	Duck	67	EIIS: I005524-001		Carbofuran	Abuse	Crop - Rice		
185	4/14/1984		Rensselaer	NY	Red-tailed Hawk	1	EIIS: I005559-002		Carbofuran	Unknown	Unknown		
1693			Unknown	UN	Savannah Sparrow	1	EIIS: I005573-001	NA: D-6661	Carbofuran	Legal (Label)	Agricultural Area		
1694			Bladen	NC	Red-tailed Hawk	1	EIIS: I005631-001	NC: 30000/47A	Carbofuran	Misuse	Crop - Corn		
1696			Lassen	CA	Canada Goose	13	EIIS: I005754-001	CA: 1734	Carbofuran	Legal (Label)	Crop - Alfalfa		

CEETV: USGS Contaminants Exposure and Effects Terrestrial Vertebrates Database
 FWSLE: Fish and Wildlife Service Law Enforcement

ABC DEATH INFORMATION

Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
1157	3/26/1998		Kent	DE	Grackle	3	EIIS: I007372-		Carbofuran	Unknown	Agricultural Area		
1169	5/15/1998		Northampton	PA	Grackle	2	EIIS: I007963-	PA: 98-7-STD-I	Carbofuran	Legal	Crop - Corn		
1170	5/15/1998	5/18/1998	Northampton	PA	Grackle	12	EIIS: I009141-		Carbofuran	Legal	Crop - Corn		
1177	6/3/1998		Unknown	MN	Goose	28	EIIS: I007545-	MN: 521059	Carbofuran	Unknown	Crop - Corn		Lake
1193	7/14/1998	7/15/1998	New York	NY	Sparrow	46	EIIS: I007820-	NYDEC: 98-32-25	Carbofuran	Abuse	Non-Agricultural		
1194	7/14/1998		New York	NY	Rock Pigeon	1	EIIS: I008136-	NYDEC: 98-32-26	Carbofuran	Unknown	Non-Agricultural		
1206	8/1/1998		New York	NY	Rock Pigeon	8	EIIS: I007801-002	NYDEC: 98-37-26A-H	Carbofuran	Abuse	Non-Agricultural		Commercial
1207	8/1/1998		New York	NY	Rock Pigeon	1	EIIS: I007821-	NYDEC: 98-36-28	Carbofuran	Unknown	Non-Agricultural		
1209	8/2/1998		New York	NY	Rock Pigeon	1	EIIS: I007821-	NYDEC: 98-36-29	Carbofuran	Abuse	Non-Agricultural		
1210	8/3/1998		New York	NY	Rock Pigeon	4	EIIS: I007801-003	NYDEC: 98-37-25ABC	Carbofuran	Abuse	Non-Agricultural		
1213	8/16/1998		New York	NY	House Sparrow	1	EIIS: I008144-		Carbofuran	Abuse	Non-Agricultural		
1214	8/16/1998		New York	NY	Peregrine Falcon	1	EIIS: I007801-001	NYDEC: 98-40-30	Carbofuran	Abuse	Non-Agricultural		
					Red-tailed Hawk	1							
					Rock Pigeon	hundred							
1215	8/16/1998		New York	NY	Rock Pigeon	1	EIIS: I008144-	NYDEC: 98-40-24	Carbofuran	Abuse	Non-Agricultural		
1216	8/16/1998		New York	NY	House Sparrow	1	EIIS: I008144-		Carbofuran	Abuse	Non-Agricultural		
1251	12/30/1998		Gallatin	MT	Common Raven	5	EIIS: I011320-		Carbofuran	Abuse	National Park		
1289	3/14/1999		San Bernardino	CA	American Wigeon	40	EIIS: I010884-001	CA: L-116-99	Carbofuran	Unknown	Lake		
1324	9/1/1999		Unknown	FL	Quail	1	EIIS: I009211-		Carbofuran	Abuse	Forest		
1325	9/2/1999		Unknown	FL	Bald Eagle	1	EIIS: I009970-003	FL: LTR 3/20/00	Carbofuran	Abuse	Poultry Farm		
					Hawk	1							
1326	9/21/1999		Unknown	GA	Hawk	1	EIIS: I009970-	GA: LTR 3/20/00	Carbofuran	Abuse	Poultry Farm		
1333	10/21/1999		St Clair	IL	Brown-headed Cowbird	Unknown	EIIS: I009970-001	IL: LTR 3/20/00	Carbofuran	Abuse	Crop - Wheat		
					European Starling	Unknown							
					Grackle	Unknown							
					Horned Lark	Unknown							
1334	10/21/1999		St Clair	IL	Red-winged Blackbird	Unknown	EIIS: I010885-001		Carbofuran	Abuse	Agricultural Area		
					Blackbird	thousands							
					Brown-headed Cowbird	thousands							
					Grackle	hundreds							
					Horned Lark	hundreds							
1351	1/15/2000		Macon	TN	Black Vulture	4	EIIS: I009840-	TN: 14-00	Carbofuran	Abuse	Unknown		
1357	2/1/2000	2/28/2000	Columbia	WI	Red-tailed Hawk	1	EIIS: I010387-002	WAHL: 769469 WIDNR: 2000-99	Carbofuran	Unknown	Unknown		
1371	3/9/2000		Unknown	DE	Bald Eagle	1	EIIS: I009971-002	DE: LTR 03/21/00	Carbofuran	Abuse	Grazing Land		
					Hawk	4							
					Unknown Bird	3							
1372	3/12/2000		Chaves	NM	Duck	3	EIIS: I010162-001	NMDA: 00-9	Carbofuran	Legal (Label)	Crop - Alfalfa		
					Snow Goose	800							
1373	3/13/2000		Lawrence	MS	Mourning Dove	hundreds	EIIS: I009971-004	MS: LTR 03/21/00	Carbofuran	Abuse	Crop - Corn		
					Red-tailed Hawk	s							
					Wild Turkey	4							

Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
1379	3/22/2000	3/22/2000	New York	NY	Red-tailed Hawk	2	EIIS: I010327-001	ILDADL: 2000012282 ILDADL: 2000012283 ILDADL: 2000012284 ILDADL: 2000012285 ILDADL: 2000012286 ILDADL: 2000012287 NYDEC: 00-20-11	Brodifacou m Carbofuran	Unknown	Unknown		
1384	4/6/2000	4/6/2000	Queens	NY	European Starling	2	EIIS: I010141-001	ILDADL: 2000012729 ILDADL: 2000012730 ILDADL: 2000012731 ILDADL: 2000012732 NYDEC: 00-22-26	Carbofuran	Abuse	Unknown		
1407	7/1/2000		Hancock	MS	Vulture	1	EIIS: I010439-		Carbofuran	Abuse	Poultry Farm		
1413	7/6/2000	7/6/2000	Columbia	NY	American Crow	1	EIIS: I011519-001	ILDADL: 2001000720 ILDADL: 2001007405 NYDEC: C0L000098	Carbofuran Diazinon	Unknown	Unknown		
1437	8/4/2000		Cortland	NY	Ring-billed Gull	100	EIIS: I011010-001	ILDADL: 2001002881 ILDADL: 2001002882 ILDADL: 2001002883 ILDADL: 2001002885 ILDADL: 2001002886 ILDADL: 2001002887 NYDEC: 00-43-14	Carbofuran	Abuse	Landfill		
1449	9/1/2000	9/1/2000	Cortland	NY	Ring-billed Gull	1	EIIS: I011565-001	ILDADL: 2001007406 ILDADL: 2001007407	Carbofuran	Abuse	Landfill		
1512	3/19/2001		Bergen	NJ	Grackle	6	EIIS: I012549-		Carbofuran	Abuse	Unknown		
1536	6/7/2001		Washington	AL	Hawk	5	EIIS: I011855-		Carbofuran	Abuse	Unknown		
1582	8/17/2001	8/18/2001	Ulster	NY	American Crow	2	EIIS: I012437-001 CEETV: 61058	ILDADL: 2002003910 ILDADL: 2002003911 ILDADL: 2002003912 NYDEC: ULS010031 NYDEC: ULS010032	Carbofuran	Abuse	Esopous		

Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Granular or Flowable	Notes
1650	6/14/2002		Powhatan	VA	Wild Turkey	1	EIS: I013244-	VA: CC132-02	Carbofuran	Unknown	Unknown		
1656	9/16/2002		Talbot	MD	Eagle	1	EIS: I013498-		Carbofuran	Unknown	Unknown		
2464	5/21/2003		utah	UT	brewer's blackbird	238	EIS: I014119		carbofuran		Livestock		
					brown-headed cowbird	84							
					european starling	81							
					house sparrow	12							
					red-tailed hawk	2							
					red-winged blackbird	580							

CEETV:
 USGS
 Contaminants
 Exposure and Effects
 Terrestrial Vertebrates
 Database
 FWSLE:
 Fish and Wildlife Service
 Law Enforcement

FOIA RESPONSE

Avian Incidents Received by FOIA Request

Privileged Confidential
Attorney Work Product

Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Formula	Notes	
FOIA-0001	5/15/1972		Lassen	CA	Canada Goose	13	EIIS: I005754-001	CADFG: 1734	Carbofuran	Use	Crop - Alfalfa		Application in field within one mile of pond resulted in geese kills within 24 hours; probably illegal in later years	
FUA01	FOIA-0002	3/14/1974	Modoc, Lassen	CA	Widgeon ducks	2500		CADFA: D-10911, D-10912	Carbofuran	Use	Crop - Alfalfa	Flowable	4F applied in vicinity of nesting sites, ducks killed day after application; led to CADFG screening future use of Furadan	
FUA02	FOIA-0003	2/27/1976		OK	Canada Goose	500	EIIS: I005570-001	OK: D-10073	Carbofuran	Use	Crop - Alfalfa	Flowable	Canada goose dead in yards surrounding treated alfalfa field; farmer applied 4F legally for crop containing heavy alfalfa infestation; usually applied in march when geese have left area but had to be done in february due to high temperatures; farmer tried to scare off geese with gun blanks	
	FOIA-0004	3/11/1976	Riverside	CA	American Wigeon	5	EIIS: I005569-001	CADFG1: P-74	Carbofuran	Use	Crop - Alfalfa		Waterfowl loss in San Jacinto Reservoir area, birds consumed treated alfalfa (not sure of label terms at this time)	
FMA01	FOIA-0005	4/5/1976	4/11/1976	Harvey	KS	Ballplate ducks	750		D-12452	Carbofuran	Misuse	Crop - Alfalfa	Flowable	4F sprayed adjacent to lake where ducks would feed, farmer spoke with officials before application and thought ducks had left; 79 coots killed in similar circumstances previous year
	FOIA-0006	1/1/1977	12/31/1977		GA	Widgeon ducks Chipping Sparrow		EIIS: I005506-001	GDNR: D-10601	Carbofuran	Use	Agricultural Area		3/21/89 GA-DNR letter in support of canceling CF registration mentions that incident took place some time in 1977
FMA02	FOIA-0007	3/29/1977	3/29/1977	Glenn	CA	American Wigeon	1000+	EIIS: I004665-001	CADFG: P-157	Carbofuran	Misuse	Crop - Alfalfa	Flowable	Birds dying within one hour of application, must be misuse if that many birds were around
	FOIA-0008	1/1/1980	12/31/1980		GA	Egret	19	EIIS: I005506-002	GDNR: D-10601	Carbofuran	Use	Agricultural Area		3/21/89 GA-DNR letter in support of canceling CF registration mentions that incident took place some time in 1980
FMR01	FOIA-0009	6/30/1983		Austin	TX	Black-bellied Whistling-duck	200+	EIIS: I005703-001	FWSLE?: MEMO/D-10933	Carbofuran	Abuse	Crop - Rice	Flowable	Intentional poisoning; farmer was unable to remove ducks from rice field using normals means, resorted to
FMA03	FOIA-0010	4/2/1985	5/17/1985	Stevens	OK	Widgeon ducks	154-159		OKDA: D-10925, D-10926, D-10927, D-10928, D-10929	Carbofuran	Misuse	Crop - Alfalfa	Flowable	Helicopter application of 4F to alfalfa proximate to a lake, Helicopter company uncertain of 4F registration status
	FOIA-0011	5/15/1985		Richmond City	VA	Geese Bald Eagle	10 1	EIIS: I005650-001	VA: 5592-001	Carbofuran	Abuse	Non-Agricultural		Scientific analysis, eagle had eaten pigeon, possible secondary poisoning
	FOIA-0012	9/23/1985	12/21/1985	Colusa	CA	Waterfowl Coot	67 5	EIIS: I005421-001	CADFA: D-9673	Carbofuran		Ranch		Birds found at Knowles Ranch with CF intoxication, no further detail
	FOIA-0013	9/23/1985	12/21/1985	Colusa	CA	Waterfowl: American widgeon duck Mallard duck Green-winged teal	35-50	EIIS: I005421-002	CADFA: D-9673	Carbofuran		Ranch		Birds found at Cota Ranch with CF intoxication, no further detail
	FOIA-0014	9/23/1985	12/21/1985	Colusa	CA	Waterfowl: Shoveler duck Mallard duck Pintail duck Snow goose	40-50 1	EIIS: I005421-003	CADFA: D-9673	Carbofuran		Ranch		Birds found at Southam Ranch with CF intoxication, no further detail
	FOIA-0015	10/1/1985	11/30/1995	Colusa	CA	Duck	67	EIIS: I005524-001		Carbofuran	Abuse	Crop - Rice		"illegal use suspected"; appears to be same location as I005421-001
	FOIA-0016	1/1/1986	1/5/1987	Imperial	CA	Canada Goose	35	EIIS: I004631-001		Carbofuran		Granular		Chart for 1986, details not provided;
	FOIA-0017	2/9/1986		Lancaster	PA	Crow	1	EIIS: I005671-001	NYDEC: 86-72-23	Carbofuran		Crop - Corn		Birds found along treeline separating harvested corn fields from a nursery, had likely ingested poisoned birds
						European Starling	2		NYDEC: 86-72-24					

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FUA03	FOIA-0018	2/10/1986	Imperial	CA	Red-tailed Hawk	1	EIS: I004665-002	CADFG	Carbofuran Dimethoate	Use	Crop - Alfalfa	Flowable	Birds found foaming and dying in field one day after treatment	
					Geese	2								
					Canadian hookers	25								
FUA04	FOIA-0019	2/10/1986	Imperial	CA	Canada Goose	25	EIS: I005524-004		Carbofuran	Use	Crop - Alfalfa	Flowable	Label violation - PCA allegedly didn't scout the field properly and the pilot allegedly applied the mix even after he saw geese on the field	
	FOIA-0020	2/16/1986	Lancaster	PA	Red-tailed Hawk	1	EIS: I005671-002	PA: LETR/10/20/86	Dimethoate Carbofuran		Crop - Corn		Similar to -001, bird found with fluid in mouth; both rehabilitated, falconer says it was the first winter he'd witnessed apparent poisonings	
	FOIA-0021	2/23/1986	Colusa	CA	Duck	35	EIS: I005524-002		Carbofuran		Ranch		"illegal use suspected", appears to be same location as I005421-002	
	FOIA-0022	2/23/1986	Colusa	CA	Duck	40	EIS: I005524-003		Carbofuran		Ranch		"illegal use suspected"; appears to be same location as I005421-003	
	FOIA-0023	3/1/1986	6/1/1986	Glenn	CA	Duck	1	EIS: I004631-002	CADFG: P-975	Carbofuran		Granular	Chart, details not provided	
	FOIA-0024	3/1/1986	6/1/1986	Glenn	CA	Duck	1	EIS: I004631-003	CADFG: P-987	Carbofuran		Granular	Chart, details not provided	
	FOIA-0025	3/1/1986	6/1/1986	Glenn	CA	Cinnamon Teal	1	EIS: I004631-004	CADFG: P-1025	Carbofuran		Granular	Chart, details not provided	
						Mallard	1							
						Waterfowl	20							
	FOIA-0026	3/1/1986	6/1/1986	Sutter	CA	Duck	4	EIS: I004631-005	CADFG: P-977	Carbofuran		Granular	Chart, details not provided	
	FOIA-0027	3/1/1986		Sutter	CA	Mallard	1	EIS: I004631-006	CADFG: P-1031	Carbofuran		Granular	Chart, details not provided	
	FOIA-0028	4/1/1986	5/4/1986	Colusa	CA	Duck	20	EIS: I004631-007	CADFG: P-985	Carbofuran		Granular	Chart, details not provided	
						Mallard	2							
						Shorebird	1							
						Teal	1							
	FOIA-0029	4/23/1986	4/23/1986	Hanover	VA	American Goldfinch	80	EIS: I004169-011	VDGIF: 2-86	Carbofuran		Crop - Corn	Corn and tomatoes grown; 50-100 birds killed, undocumented source says 80; further details not provided	
	FOIA-0030	4/23/1986	4/23/1986	Essex	VA	Bald Eagle	1	EIS: I005653-001	VA: PR-3292	Carbofuran		Crop - Corn	Bird found dead near raccoon carcass in recently treated corn field	
	FOIA-0031	5/26/1986		City of Richmond	VA	Red-tailed Hawk	1	EIS: I005659-001	VA: D-11958	Carbofuran		Non-Agricultural	Poisoned bird found dying in tree area, had been roosting on ground for several days	
	FOIA-0032	6/2/1986		Erie	NY	Passerine	20	EIS: I005524-005		Carbofuran		Crop - Potato	Granular	Birds found after planting potato field-ends and using 15G
FU?01	FOIA-0033	6/20/1986		SASK		California gulls	46	EIS: I005303-001	Univ. of Saskatchewan, D-1619A	Carbofuran	Use	Field	Flowable	Birds found with grasshoppers in mouths
	FOIA-0034	7/29/1986		SASK		Herring Gull	30	EIS: I005702-001	CWS: D-6599A	Carbofuran	Use	Agricultural Area		Sudden death of gulls, all had ingested
	FOIA-0035	8/5/1986		CA		Ducks (a)	3	EIS: I005524-007		Carbofuran		Crop - Rice	Granular	Birds found following application of 5G during spring of 1986
			Glenn			Ducks (b)	20							
			Colusa			Ducks (c)	5							
	FOIA-0036	9/1/1986		Glenn	CA	American Wigeon	3	EIS: I004631-009		Carbofuran			Granular	Chart, details not provided
						Mallard	150							
						Red-tailed Hawk	2							
	FOIA-0037	9/1/1986	12/1/1986	Colusa	CA	Mallard	50	EIS: I004631-010		Carbofuran			Granular	Chart, details not provided
						Northern Pintail	5							
	FOIA-0038	10/23/1986	11/29/1986	Glenn	CA	Duck	179	EIS: I005531-001	CADFG: D-9676	Carbofuran	Abuse	Ranch		Reported by duck club members on ranch; "probable recent, non-registered use"
						Red-tailed Hawk	2							
	FOIA-0039	12/18/1986		Lake	CA	American Robin	3	EIS: I005526-001	CADFG: D-9925	Carbofuran	Use	Vineyard		Furadan tilled in and irrigated at Sutter Home vineyards to control fungus in soil; several birds, two hawks and raccoon found in fields; inon-detailed incident in prior year attributed to Furadan
						Cooper's Hawk	2							
						European Starling	3							

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	FOIA-0040	12/23/1986		British Columbia	CAN	Savannah Sparrow	1	EIIS: I005573-001	D-6661	Carbofuran	Use	Agricultural Area	Granular	First year of 10G since withdrawal 1976; granules found in soil - "Savannah Sparrow" kill
	FOIA-0041	12/23/1986		British Columbia	CAN	Gull	1	EIIS: I005573-002	D-6661	Carbofuran	Use	Agricultural Area		"OP" allegedly involved but birds still killed
F?R01	FOIA-0042	2/1/1987	2/28/1987	Glenn	CA	Owls	2+	EIIS: I005524-010	FMC: D-7745	Carbofuran		Crop - Rice	Flowable	Furadan had an apparently acutely toxic effect on owl species resulting in reduced numbers of fledglings
	FOIA-0043	3/1/1987			MD	Bald Eagle	1	EIIS: I005660-001	MD: CN-5270	Carbofuran				Bird found dead under nest, scientific analysis shows CF; no further details
F?R02	FOIA-0044	4/20/1987		Glenn	CA	bird	1	EIIS: I005524-008	FMC: D-7745	Carbofuran		Crop - Rice	Flowable	Birds found in rice field after application
F?R03	FOIA-0045	4/23/1987		Glenn	CA	Mallard duck	4	EIIS: I005298-001	CADFG: D-8013	Carbofuran		Crop - Rice	Flowable	CF-Intoxicated birds found in rice field, details unknown
F?R04	FOIA-0046	4/27/1987		Glenn	CA	Ducks	2	EIIS: I005524-009	FMC: D-7745	Carbofuran		Crop - Rice	Flowable	Birds found in rice field after application
	FOIA-0047	9/29/1987	10/12/1987		VA	Great Horned Owl Bird	1	EIIS: I004169-015	VA: 2-87	Carbofuran		Non-Agricultural		Secondary poisoning suspected; bird picked up on side of road
	FOIA-0048	11/10/1987		Malheur	OR	Canadian Geese	10		D-12460, D-12461, D-12462	Carbofuran	Abuse			Suspected poisoning, no further info
	FOIA-0049	12/1/1987		Newton	GA	Northern Cardinal Song Sparrow White-throated Sparrow	1 2 1	EIIS: I005561-001	GA: 189-87	Carbofuran	Abuse	Field		Birds found convulsing in private field; small bag of wheat submitted by GANDR, smelled of chemical
	FOIA-0050	1/1/1988			CA	Waterfowl		EIIS: I003930-001		Carbofuran	Use	Crop - Rice	Granular	Document surveys local history with regards to implementation of stewardship program; legal use assumed
	FOIA-0051	1/7/1988	1/7/1988	Colusa	CA	Raptors Duck	50	EIIS: I003948-001	CADFG: P-1105	Carbofuran				Chart, detail not provided
	FOIA-0052	2/28/1988	2/28/1988	Kent	DE	Bald Eagle	1	EIIS: I005662-001	DE: 6432	Carbofuran		Non-Agricultural		Eagle found floating in creek,
	FOIA-0053	3/8/1988	5/17/1992	Dorchester	MD	Bald Eagle Golden Eagle	6 4	EIIS: I000916-001	MDNR	Carbofuran				List of incidents, no details
	FOIA-0054	3/16/1988		Montgomery	VA	Shrike	1	EIIS: I003177-001	VDGIF: 2-88	Carbofuran DDT Diazinon Mirex				Bird hit by car on roadway, source unknown
FMA04	FOIA-0055	5/1/1988			ID	Canada Goose	200+	EIIS: I005751-001	letter	Carbofuran	Misuse	Crop - Alfalfa	Flowable	Snake river region between ID and OR; criminal investigation for misuse on island (in Idaho) for which geese frequent; defendant appealed and case was overturned; FWS appeals unsuccessful
FMC01	FOIA-0056	5/17/1988		Avoyelle Parish	LA	Cattle egrets	200		LADWF: D-9350, D-9948	Carbofuran	Misuse	Crop - Corn	Flowable	Applied into seed trench as seed treatment, not licensed soil treatment
	FOIA-0057	5/17/1988		Worcester	MD	Bald Eagle	8	EIIS: I005663-001	MD: 30000/47A	Carbofuran	Use	Crop - Corn	Granular	Eagle and raccoons found at farm, granular CF found at end of some turnrows; field planted with No Till corn; registered growers expressed sorrow
FMA05	FOIA-0058	5/22/1988		Westlake Island	ID/OR	Canada Goose	150	EIIS: I005572-003	FMC	Carbofuran	Misuse	Crop - Alfalfa	Flowable	Area surrounding Snake River (between states); farmer applied 4F plus Disyston plus Cygon to seed alfalfa; grower charged by USFWS for lawfully taking migratory birds [EPA docs suggested 3 geese, USFWS docs contain FMC Call Center report of 150+]
	FOIA-0059	10/25/1988		Colusa	CA	Duck	70	EIIS: I003948-009	CADFG: P-1192-94	Carbofuran				Chart, detail not provided
	FOIA-0060	10/30/1988		Colusa	CA	Duck	79	EIIS: I005558-001	FMC: D-9976	Carbofuran		Crop - Rice		Duck hunting site, field used for rice
	FOIA-0061	11/16/1988		Marquette	WI	Dark-eyed Junco European Starling Hawk Red-tailed Hawk	7 1 1 2	EIIS: I005704-001	FWS: 1310	Carbofuran	Abuse	Apple Orchard	Flowable	Bait poisoning to kill wildlife eating grower's apples
FM?01														

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FM?02	FOIA-0062	1/20/1989	3/15/1990	New Castle	DE	Red-tailed Hawk	43	EIIS: I005749-001	DEDFG: INV 9184AI	Carbofuran	Abuse	Ranch	Flowable	Intentional poisonings; full criminal investigation, defendants convicted
	FOIA-0063	1/27/1989		New Castle	DE	Crow	1	EIIS: I000116-008		Carbofuran	Abuse	Agricultural Area	Flowable	Illegal baiting
FM?03						Owl	1							
						Red-tailed Hawk	1							
						Vulture	1							
	FOIA-0064	3/1/1989	4/5/1990	Pennington	SD	Ferruginous Hawk	1	EIIS: I000923-001	SD: CR90-50053-0	Carbofuran	Abuse	Ranch		Formal investigation, bait poisoning
						Golden Eagle	2							
FM?04	FOIA-0065	4/11/1989	4/20/1989		SD	Bald Eagle	2	EIIS: I005503-001		Carbofuran	Abuse	Ranch	Flowable	Bait poisoning of calf and sheep
FM?05	FOIA-0066	4/20/1989		Meade	SD	Bald Eagle	2	EIIS: I000805-001		Carbofuran	Abuse	Ranch	Flowable	Bait poisoning
						Crow	1							
	FOIA-0067	5/7/1989	5/18/1989	New Castle	DE	Common Grackle	3	EIIS: I001599-001		Carbofuran	Legal (Label)	Crop - Corn		Scientific analysis, details unknown
						Mallard	1							
	FOIA-0068	5/26/1989		Sutter	CA	American goldfinches	20	EIIS: I005417-002	CADFG: D12448	Carbofuran		Non-Agricultural		Birds reported dead and dying by fisherman near pumping plant
														Bird (which lived) found in area where
	FOIA-0069	6/19/1989	6/19/1989	Dorchester	MD	Bald Eagle	1	EIIS: I005664-001	USFWS: D-11983	Carbofuran		Swamp		Birds found at airport, cause unknown
FU?02	FOIA-0070	8/26/1989		Deuel	SD	Canada Goose	6	EIIS: I000805-008	SD: 89P19	Carbofuran	Use	Non-Agricultural	Flowable	
						Gull	1			Carbofuran				
						Parathion	1							
FM?06	FOIA-0071	10/1/1989	3/24/1993	Garfield	MT	Black-billed Magpie	1	EIIS: I001606-007	USFWSLE6: 4506AO	Carbofuran	Abuse	Ranch	Flowable	Bait poisoning
						Golden Eagle	1							
						Raptor	22							
	FOIA-0072	10/11/1989	10/22/1989		CA	Ducks	1700	EIIS: I005417-007	CADFG	Carbofuran		Duck club		Three duck clubs flooded for hunting, sample analysis shows CF poisoning
	FOIA-0073	11/9/1989			CA	Ducks	17	EIIS: I005417-006	CADFG	Carbofuran	Use	Crop - Rice		Field was harvested and then flooded for hunting
														Large amount of bread found near ducks at country club, possible intentional poisoning, relates to I005419 004
	FOIA-0074	11/15/1989		San Bernadino	CA	Ducks	12	EIIS: I005417-008	CADFG	Carbofuran	Abuse	Golf course		
	FOIA-0075	11/15/1989		San Bernadino	CA	Pintail ducks	6	EIIS: I005417-009	CADFG	Carbofuran		Duck club		Duck club near marsh flooded, recently treated with chlorpyrifos but birds also contained CF
														Apparent intentional poisoning, relates to I005417-008 (p-1270)
	FOIA-0076	11/15/1989		San Bernadino	CA	Ducks	12	EIIS: I005419-004	FMC: D-11655	Carbofuran	Misuse	Golf course		Possible bait poisoning, coyote also found poisoned; adjacent landowners deny use of CF
	FOIA-0077	11/20/1989		Charles Mix	SD	Bald Eagle	1	EIIS: I005504-001	SD: D11853	Carbofuran	Abuse			
	FOIA-0078	1/19/1990		Sacramento	CA	Waterfowl	150-158	EIIS: I005419-001	FMC: D-11655	Carbofuran	Misuse	Ranch	Granular	Flooded for duck hunting, 10G was
FM?07	FOIA-0079	1/25/1990		Haakon	SD	Eagle	2	EIIS: I005505-001		Carbofuran	Abuse	Non-Agricultural Area	Flowable	Bait poisoning with deer meat
						Hawk	2							
FM?08	FOIA-0080	1/30/1990		Union	NM	Bald Eagle	1	EIIS: I001606-006	FWS: 5543AK	Carbofuran	Abuse		Flowable	Bait poisoning
						Black-billed Magpie	3							
						Golden Eagle	6							
FM?09	FOIA-0081	1/30/1990		Albuquerque	NM	Golden eagle	6	EIIS: I005419-002	FMC: D-11655	Carbofuran	Abuse	Field	Flowable	Bait poisoning, repackaged 4F injected into calf carcass as bait
						Bald eagle	1							
	FOIA-0082	3/15/1990	4/1/1991	Kent	DE	Gull	1	EIIS: I005752-001	lab	Carbofuran	Use	Crop - Corn		Scientific analysis, no details provided
						Mallard	2							
						Snow Goose	15							
	FOIA-0083	3/30/1990		Wellstone	MT	Golden eagle	2	EIIS: I005419-003	FMC: D-11655	Carbofuran	Abuse	Field		CF used to bait and kill foxes
						Bald eagle	1							
	FOIA-0084	4/11/1990		Bennett	SD	Ferruginous Hawk	1	EIIS: I000923-002	SD: 90-051 M	Carbofuran	Abuse	Ranch		Formal investigation, bait poisoning
						Golden Eagle	2							
						Hawk	2							
						Bird	1							
FUV01	FOIA-0085	4/27/1990		San Joaquin	CA	Finch	1000	EIIS: I004665-004	CADFG: P-1288	Carbofuran	Use	Vineyard	Flowable	Birds died in vineyard, 4F applied through drip irrigation system
														Dying bird found in hay field, adjacent to corn field and dairy farm
	FOIA-0086	5/19/1990		Wythe	VA	Red-tailed Hawk	1	EIIS: I005510-003	VDGIF: 4-90	Carbofuran		Agricultural Area		
	FOIA-0087	7/21/1990		Essex	VA	Red-tailed Hawk	2	EIIS: I005510-004	VDGIF: 5-90	Carbofuran		Crop - Soybeans	Flowable	Dying bird spotted in landowner yard for a week "crying out"; landowner reported that a nearby soybean field had been sprayed with a liquid
F?S01														

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FOIA-0088	9/19/1990			BC	Bald Eagle	12	EIIS: I005666-001	CWS: D-12162	Carbofuran	Use	Crop - Turnips	Granular	Richmond-Ladner area in lower mainland of BC has experienced kills from granular in the past, acidic soil in area means granular has long half-life, pattern of bird loss
FOIA-0089	10/26/1990		Colusa	CA	Red-tailed Hawk	4							
FOIA-0090	10/26/1990		Napa	CA	Ducks	24-30	EIIS: I005416-001	FMC	Carbofuran	Misuse	Crop - Rice	Granular	Flooded for hunting use 6 months after
					Dark-eye juncos	11	EIIS: I005416-008	FMC	Carbofuran	Misuse	Vineyard	Flowable	4F puddle observed with birds and squirrels around it
					House sparrows	9							
					Yellow-rumped warblers	7							
					Lesser goldfinches	6							
					Hermit thrush	4							
					House finches	3							
					White-breasted	1							
					Robin	1							
					Acorn woodpecker	1							
					Western bluebird	1							
					Cedar waxwing	1							
					White-crowned sparrow	1							
					Chipping sparrow	1							
					bushitit	1							
FMV01													
FMV02	FOIA-0091	11/2/1990	Napa	CA	Lesser goldfish, flicker, robin	10	EIIS: I005416-009	FMC	Carbofuran	Misuse	Vineyard	Flowable	Legal application except one hose left uncapped, birds found in this area
	FOIA-0092	11/29/1990	Westmoreland	VA	Bald Eagle	1	EIIS: I004169-037	VA: 8 - 90	Carbofuran				Scientific analysis, details not provided but noted that lead and CF detected
	FOIA-0093	11/30/1990	Napa	CA	Robins, starlings, finches, cedar waxwing,	20-Oct	EIIS: I005416-006	FMC	Carbofuran	Misuse	Vineyard	Granular	15G applied but not fully incorporated, left at the end of rows
	FOIA-0094	12/10/1990	Napa	CA	Robins, starlings, finches	15	EIIS: I005416-003	FMC	Carbofuran	Use	Vineyard	Granular	15G applied properly 5 days prior
	FOIA-0095	12/10/1990	Napa	CA	Robins, starlings, finches	25	EIIS: I005416-004	FMC	Carbofuran	Misuse	Vineyard	Granular	Narrative suggests spillage on roadways
	FOIA-0096	12/11/1990	Colusa	CA	Ducks	12	EIIS: I005416-002	FMC	Carbofuran	Use	Crop - Rice	Granular	5G applied in December for Spring rice crop; no mortalities at adjacent field that was also treated
	FOIA-0097	12/20/1990	Napa	CA	Robins, starlings,	30	EIIS: I005416-005	FMC	Carbofuran	Use	Vineyard	Granular	15G applied 15 days prior, raptors
	FOIA-0098	1/7/1991	Napa	CA	Songbirds, starlings	9	EIIS: I005416-007	FMC	Carbofuran	Misuse	Vineyard	Granular	15G applied in buried bags
	FOIA-0099	1/9/1991	Napa	CA	Raptors	25	EIIS: I004665-005	CADFG: P-1347	Carbofuran	Use	Vineyard	Granular	Birds found in vineyard, 15G applied
	FOIA-0100	4/1/1991	5/1/1991	Caroline	European Starling	1	EIIS: I000504-035	SCWDS: 98-91	Carbofuran		Crop - Corn		Birds found in treated field
					American Kestrel	1							
					Cedar Waxwing	1							
					Chipping Sparrow	2							
					Swamp Sparrow	1							
	FOIA-0101	4/5/1991	4/6/1991	Isle of Wight	American Robin	3	EIIS: I000504-026	SCWDS: 69-91	Carbofuran		Crop - Corn		Scientific analysis, details unknown
					Eastern Bluebird	1	EIIS: I000504-027	SCWDS: 70-91	DDT				
							EIIS: I000504-028	SCWDS: 71-91	Dieldrin				
							EIIS: I000504-029	SCWDS: 72-91	Phorate				
	FM?10	FOIA-0102	4/8/1991	Sheridan	Golden Eagle	6	EIIS: I001606-001	USFWSLE6:	Carbofuran	Abuse		Flowable	Bait poisoning
	F?C03	FOIA-0103	4/11/1991	4/12/1991	King George	VA	EIIS: I000504-033	NYDEC: 8-91	Carbofuran		Crop - Corn		Birds found adjacent to treated corn field
					Ovenbird	1		SCWDS: 97-91					Found in corn field, details not provided
	F?C04	FOIA-0104	4/17/1991	Madison	VA	Bald Eagle	1	EIIS: I004169-043	VDGIF: 7-91	Carbofuran		Crop - Corn	
					Red-tailed Hawk	2							
					Vulture	2							
	FMC02	FOIA-0105	4/18/1991	Madison	VA	Bald Eagle	1	EIIS: I001601-001	ORDFWS	Carbofuran	Abuse	Crop - Corn	Birds found arranged in a triangle...
					Red-tailed Hawk	1							
					Turkey Vulture	1							
	F?C05	FOIA-0106	5/1/1991	Amelia	VA	Eastern Bluebird	2	EIIS: I000504-036	VA: 100-91	Carbofuran		Crop - Corn	Scientific analysis, details unknown
		FOIA-0107	5/15/1991	Amelia	VA	American Crow	1	EIIS: I000504-037	VA: 117-91	Carbofuran		Agricultural Area	Scientific analysis, details unknown
					American Kestrel	1							
					American Robin	1							
					Blue Grosbeak	1							
					Boat-tailed Grackle	1							
	F??01				Carolina Wren	1							
					Chipping Sparrow	1							
					European Starling	1							

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					Grasshopper Sparrow	1								
					Mourning Dove	1								
					Northern Bobwhite	1								
F?C06	FOIA-0108	6/1/1991	6/7/1991	King George	VA	Summer Tanager	1	EIIS: 1000504-038	SCWDS: 136-91	Carbofuran	Crop - Corn		Scientific analysis, details unknown	
F?V01	FOIA-0109	9/20/1991		San Joaquin	CA	Songbird	30	EIIS: 1005525-004	CA: D-13524	Carbofuran	Vineyard	Flowable	Chart, no detail provided	
	FOIA-0110	11/1/1991		San Joaquin	CA	European Starling	4	EIIS: 1000599-008	CADFG1: P-1429/1431	Carbofuran	Misuse	Vineyard	Flowable	Birds deaths in creek are in addition to 3000 fish, 4000 crayfish and frogs, 5000 invertebrates
FMV03					Great Egret	2								
					Great Heron	1								
					Bird	200								
FUR01	FOIA-0111	11/1/1991		Colusa	CA	Duck	40	EIIS: 1001602-001	CADFG: P-1436	Carbofuran	Use	Crop - Rice		Seasonally-treated field flooded for hunting
					Red-tailed Hawk	1								
F?V02	FOIA-0112	11/11/1991		Mendocino	CA	Songbird	40	EIIS: 1005525-005	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V03	FOIA-0113	11/12/1991		Sonoma	CA	European Starling	6	EIIS: 1005525-007	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V04	FOIA-0114	11/21/1991		Napa	CA	Finch	36	EIIS: 1005525-008	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V05	FOIA-0115	12/3/1991		Napa	CA	American Robin	9	EIIS: 1005525-009	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V06	FOIA-0116	12/3/1991		Napa	CA	Songbird	44	EIIS: 1005525-010	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V07	FOIA-0117	12/3/1991		Napa	CA	Songbird	20	EIIS: 1005525-011	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V08	FOIA-0118	12/3/1991		Napa	CA	American Robin	2	EIIS: 1005525-012	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V09	FOIA-0119	12/11/1991		Napa	CA	Red-tailed Hawk	1	EIIS: 1005525-013	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
F?V10	FOIA-0120	12/30/1991		Napa	CA	Red-tailed Hawk	1	EIIS: 1005525-014	CA: D-13524	Carbofuran		Vineyard	Flowable	Chart, no detail provided
FU?03	FOIA-0121	1/1/1992		Sonoma	CA	Hawk	1	EIIS: 1000599-009	CA: P-1449	Carbofuran	Use		Secondary CF poisoning	
FU?04	FOIA-0122	1/9/1992		Sonoma	CA	Hawk	1	EIIS: 1000599-010	CA: P-1450	Carbofuran	Use		Secondary CF poisoning	
FM?11	FOIA-0123	2/1/1992		Fergus	MT	Golden Eagle	3	EIIS: 1001606-002	LE6: 3890AN	Carbofuran	Misuse		Flowable	(handwritten chart) "misuse"
FUR02	FOIA-0124	2/4/1992		Yuba	CA	Eagle	1	EIIS: 1002682-001	CA: D9200385	Carbofuran	Use	Crop - Rice		Birds ate poisoned rodent follows
	FOIA-0125	3/1/1992		Stanislaus	CA	Northern Harrier	1	EIIS: 1000599-007	CADFG1: P-1455	Carbofuran	Use	Crop - Alfalfa	Flowable	Birds found adjacent to treated alfalfa field
FUA05					Songbird	1								
					White-tailed Kite	1								
F??02	FOIA-0126	4/1/1992		Caroline	VA	Common Grackle	2	EIIS: 1000137-002	SCWDS: 60-92	Carbofuran		Field		Scientific analysis, details unknown
					Mourning Dove	4								
	FOIA-0127	4/16/1992	4/21/1992	Caroline	VA	American Crow	2	EIIS: 1004169-065	VA: 4-92	Carbofuran	Misuse	Agricultural Area	Flowable	Found in mud puddle in dirt road adjacent to alfalfa field
FM?12					Common Grackle	2								
					Eastern Bluebird	3								
					Mourning Dove	5								
FM?13	FOIA-0128	5/5/1992		Sheridan	MT	Bald Eagle	5	EIIS: 1001606-004	LE6: 5927AN	Carbofuran	Misuse		Flowable	(handwritten chart) "misuse"
					Golden Eagle	2								
FM?14	FOIA-0129	5/15/1992		Grand	CO	Common Raven	3	EIIS: 1001606-005	LE6: 6189AN	Carbofuran	Abuse			Bait poisoning
					Golden Eagle	1								
FM?15	FOIA-0130	5/28/1992	6/21/1992	Yuma	AZ	Mourning Dove	3	EIIS: 1001596-001	NMLE: 6696AN	Carbofuran	Abuse	Non-Agricultural	Flowable	Bait poisoning to control pigeons at airport
	FOIA-0131	5/30/1992		Yadkin	NC	Sparrow	12							
					Blackbird	1	EIIS: 1000799-007	NC: IR92-72	Carbofuran	Abuse	Crop - Corn	Flowable	Formal investigation, bait poisoning	
					Blue Jay	1								
					Crow	2								
FMC03					European Starling	3								
					Great-tailed Grackle	3								
					Mourning Dove	1								
					Northern Cardinal	1								
					Red-tailed Hawk	1								
F??03	FOIA-0132	6/7/1992		Hanover	VA	American Crow	2	EIIS: 1000504-017	SCWDS: 100-92	Carbofuran		Agricultural Area		Found alive in vicinity of corn pile, dead one hour later
F??04	FOIA-0133	6/7/1992	6/7/1992	Hanover	VA	American Crow	2	EIIS: 1004169-066	VA: 9-92	Carbofuran		Non-Agricultural		Found on road, details not provided
FUV02	FOIA-0134	9/15/1992	11/6/1992	Monterey	CA	Bird	12	EIIS: 1000444-022		Carbofuran	Use	Vineyard	Flowable	FMC summary of results on application on grapes in Monterey County
F??05	FOIA-0135	10/12/1992		Pocahontas	WV	Canada Goose	9	EIIS: 1000446-001		Carbofuran		Non-Agricultural		Scientific analysis, details unknown
F??06	FOIA-0136	10/19/1992	10/20/1992	Pocahontas	WV	Canada Goose	9	EIIS: 1000504-021		Carbofuran		Non-Agricultural		Birds found near pond proximate to numerous corn fields
FUV03	FOIA-0137	10/23/1992		Monterey	CA	Lawrence's Goldfinch	1	EIIS: 1000599-004	CADFG1: P-1515	Carbofuran	Use	Vineyard	Flowable	Birds found in chemigated vineyard, no physical trauma
FUV04	FOIA-0138	11/1/1992		Kern	CA	American Robin	1	EIIS: 1000599-002	CADFG1: P-1517	Carbofuran	Use	Vineyard	Flowable	Birds found in chemigated vineyard, no physical trauma
	FOIA-0139	11/1/1992		Monterey	CA	Yellow-rumped Warbler	1	EIIS: 1000599-005	CADFG1: P-1514	Carbofuran	Use	Vineyard	Flowable	Birds found in chemigated vineyard, 20% survey taken, no signs of physical trauma
FUV05					Dark-eyed Junco	1								
					House Finch	1								
					Mourning Dove	1								
					Yellow-rumped Warbler	1								
FUV06	FOIA-0140	11/1/1992		Monterey	CA	House Finch	1	EIIS: 1000599-006	CADFG1: P-1513	Carbofuran	Use	Vineyard	Flowable	Birds found in chemigated vineyard, no signs of physical trauma
					Savannah Sparrow	1								
					Songbird	1								

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FM??16	FOIA-0141	1/1/1993	1/1/1994	Crosby	TX	Great Horned Owl	1	EIIS: I001596-002	NMLE: 6461AP	Carbofuran		Agricultural Area	Flowable	Bait poisoning
F??07	FOIA-0142	2/2/1993	2/19/1993	Charles City	VA	Cedar Waxwing	160	EIIS: I004169-080	VDGIF: 4-93	Carbofuran	Abuse	Agricultural Area		Found in crop field, details not provided
F??08	FOIA-0143	2/13/1993		Screven	GA	Dark-eyed Junco	2	EIIS: I000504-007	SCWDS: 26-93	Carbofuran		Non-Agricultural		Found in residential backyard
						Red-shouldered Hawk	1							
FM??17	FOIA-0144	2/27/1993		Hutchinson	SD	Songbird	3	EIIS: I001606-014	LE6: 7817AP	Carbofuran	Abuse		Flowable	Bait poisoning
FUA06	FOIA-0145	3/1/1993		San Joaquin	CA	House Finch	15	EIIS: I000599-003		Carbofuran	Use	Crop - Alfalfa	Flowable	Wildlife found at residence adjacent to sprayed alfalfa field, no sign of trauma
						House Sparrow	1							
FM??18	FOIA-0146	3/1/1993		Burnett	WI	Bald Eagle	3	EIIS: I001605-002		Carbofuran	Abuse	Lake		Scientific analysis, details unknown;
F??09	FOIA-0147	3/22/1993		San Joaquin	CA	House Finch	15	EIIS: I004632-002		Carbofuran				Chart, details not provided
						House Sparrow	1							
FUV07	FOIA-0148	4/1/1993		Kern	CA	House Finch	3	EIIS: I000599-001		Carbofuran	Use	Vineyard		Birds found in chemigated vineyard, no physical trauma
FM??19	FOIA-0149	4/1/1993		Prairie	AR	Owl	1	EIIS: I000912-001		Carbofuran	Abuse	Non-Agricultural	Flowable	Intentional poisoning of waterway
FM??20	FOIA-0150	4/15/1993		Rosebud	MT	Black-billed Magpie	4	EIIS: I001606-008	LE6: 7180-AO	Carbofuran	Abuse		Flowable	Bait poisoning
						Golden Eagle	2							
						Owl	1							
	FOIA-0151	4/23/1993	4/27/1993	Monterey	CA	American Robin	2	EIIS: I004632-004	CADFG1: P-1555-1-9	Carbofuran				Chart, details not provided
F??10						Brewer's Blackbird	5							
						Bronzed Cowbird	1							
						House Finch	10							
						Oregon Junco	2							
F??11	FOIA-0152	4/26/1993		Kern	CA	House Finch	3	EIIS: I004632-003		Carbofuran				Chart, details not provided
	FOIA-0153	5/7/1993	5/18/1993	Kent	DE	Common Grackle	1	EIIS: I001599-002		Carbofuran	Legal (Label)	Crop - Corn		Scientific analysis, details unknown
						European Starling	1							
FUC01						Red-winged Blackbird	1							
						Rock Pigeon	1							
						Tree Swallow	2							
F?A01	FOIA-0154	6/10/1993		Canyon	ID	Canada Goose	40	EIIS: I000920-001	IDFG: 93056	Carbofuran		Crop - Alfalfa	Flowable	Scientific analysis, details unknown
F??12	FOIA-0155	8/16/1993		Monterey	CA	Red-winged Blackbird	5	EIIS: I004632-008		Carbofuran				Chart, details not provided
	FOIA-0156	9/1/1993		Glenn	CA	Mallard	12	EIIS: I003930-002		Carbofuran	Use	Crop - Rice	Granular	Document surveys local history with
	FOIA-0157	9/22/1993		Monterey	CA	Lark Sparrow	3	EIIS: I004632-010		Carbofuran				Chart, details not provided
F??13						Purple Finch	1							
						Savannah Sparrow	1							
F??14	FOIA-0158	10/1/1993		Monterey	CA	House Finch	9	EIIS: I004632-009		Carbofuran				Chart, details not provided
						House Sparrow	1							
						Yellow-rumped Warbler	5							
F??15	FOIA-0159	10/11/1993		Monterey	CA	Northern Flicker	1	EIIS: I004632-007	CADFG1: P-1598	Carbofuran				Chart, details not provided
						Yellow-rumped Warbler	3							
F??16	FOIA-0160	10/11/1993		Monterey	CA	House Finch	1	EIIS: I004632-011		Carbofuran				Chart, details not provided
F??17	FOIA-0161	10/12/1993		Monterey	CA	Yellow-rumped Warbler	1	EIIS: I004632-012	CADFG1: P-1603	Carbofuran				Chart, details not provided
FM??21	FOIA-0162	10/18/1993		Butte	SD	Bald Eagle	1	EIIS: I001606-010	LE6: 2281AP	Carbofuran	Abuse		Flowable	Bait poisoning
	FOIA-0163	10/20/1993		Monterey	CA	House Finch	4	EIIS: I004632-014	CADFG1: P-1695	Carbofuran				Chart, details not provided
F??18						Western Meadowlark	1							
						Yellow-rumped Warbler	2							
F??19	FOIA-0164	10/21/1993		Monterey	CA	Lark Sparrow	3	EIIS: I004632-013		Carbofuran				Chart, details not provided
F??20	FOIA-0165	10/21/1993		Monterey	CA	House Finch	2	EIIS: I004632-015		Carbofuran				Chart, details not provided
						Yellow-rumped Warbler	2							
	FOIA-0166	10/21/1993		Monterey	CA	Brewer's Blackbird	2	EIIS: I004632-024		Carbofuran				Chart, details not provided
F??21						House Finch	2							
						Lawrence's Goldfinch	1							
						Yellow-rumped Warbler	19							
F??22	FOIA-0167	10/25/1993		Monterey	CA	Brewer's Blackbird	1	EIIS: I004632-023	CADFG1: P-1626	Carbofuran				Chart, details not provided
						House Finch	1							
						Yellow-rumped Warbler	6							
F??23	FOIA-0168	10/26/1993		Monterey	CA	Mourning Dove	1	EIIS: I004632-021	CADFG1: P-1624	Carbofuran				Chart, details not provided
F??24	FOIA-0169	10/27/1993		Monterey	CA	Mourning Dove	1	EIIS: I004632-022	CA: P-1625	Carbofuran				Chart, details not provided
						Yellow-rumped Warbler	7							

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F??25	FOIA-0170	10/28/1993	Monterey	CA	Horned Lark	4	EIS: I004632-017	CADFG1: P-1616	Carbofuran				Chart, details not provided
					House Finch	10							
					Lark Sparrow	3							
					Lawrence's Goldfinch	19							
					Mourning Dove	10							
					Northern Flicker	1							
					Sparrow	16							
					Western Bluebird	4							
					Yellow-rumped Warbler	120							
F??26	FOIA-0171	10/29/1993	Monterey	CA	House Finch	1	EIS: I004632-018	CADFG1: P-1617	Carbofuran				Chart, details not provided
					Mourning Dove	4							
					Northern Flicker	5							
					Oregon Junco	1							
					Western Bluebird	5							
F??27	FOIA-0172	10/29/1993	Monterey	CA	California Quail	1	EIS: I004632-028	CADFG1: P-1632	Carbofuran				Chart, details not provided
					Hermit Thrush	1							
					House Finch	3							
					Lark Sparrow	1							
					Mourning Dove	7							
					Song Sparrow	2							
					Western Bluebird	3							
F??28	FOIA-0173	10/30/1993	Monterey	CA	Yellow-rumped Warbler	29	EIS: I004632-019	CADFG1: P-1618	Carbofuran				Chart, details not provided
					Lawrence's Goldfinch	16							
					Mourning Dove	2							
F??29	FOIA-0174	10/31/1993	Monterey	CA	Yellow-rumped Warbler	3	EIS: I004632-020	CADFG1: P-1619	Carbofuran				Chart, details not provided
					Mourning Dove	6							
					Northern Flicker	16							
					Sharp-shinned Hawk	1							
F??30	FOIA-0175	11/1/1993	Monterey	CA	Yellow-rumped Warbler	4	EIS: I004632-031		Carbofuran				Chart, details not provided
F??31	FOIA-0176	11/2/1993	Monterey	CA	Brewer's Blackbird	1	EIS: I004632-026	CADFG1: P-1630	Carbofuran				Chart, details not provided
F??32	FOIA-0177	11/3/1993	Monterey	CA	Mourning Dove	1	EIS: I004632-030	CADFG1: P-1635	Carbofuran				Chart, details not provided
					Yellow-rumped Warbler	2							
					California Quail	1							
					House Finch	1							
					Lawrence's Goldfinch	1							
					Mourning Dove	13							
					Northern Flicker	1							
					Song Sparrow	1							
					Western Meadowlark	1							
					Yellow-rumped Warbler	11							
F??33	FOIA-0178	11/5/1993	Monterey	CA	Yellow-rumped Warbler	7	EIS: I004632-032	CADFG1: P-1637	Carbofuran				Chart, details not provided
F??34	FOIA-0179	11/7/1993	Glenn	CA	Mallard	12	EIS: I004632-016		Carbofuran				Chart, details not provided
FUR03	FOIA-0180	11/7/1993	Glenn	CA	Mallard	12	EIS: I004665-007		Carbofuran	Use	Crop - Rice		Newly-flooded rice field was being used by a duck club; birds probably located a spill on field; Knowles Ranch again
F??35	FOIA-0181	11/8/1993	Monterey	CA	House Finch	1	EIS: I004632-025	CADFG1: P-1629	Carbofuran		Duck club		Chart, details not provided
F??36	FOIA-0182	11/8/1993	Monterey	CA	Yellow-rumped Warbler	11							
F??37	FOIA-0183	11/13/1993	Monterey	CA	Song Sparrow	1	EIS: I004632-027	CADFG1: P-1631	Carbofuran				Chart, details not provided
FM?22	FOIA-0184	1/21/1994	Wheatland	MT	Yellow-rumped Warbler	1	EIS: I004632-029	CADFG1: P-1633	Carbofuran				Chart, details not provided
FM?23	FOIA-0184	1/21/1994	Taswell	VA	Bald Eagle	1	EIS: I001606-012	FWSLE6: 8285AP	Carbofuran	Abuse			Bait poisoning
	FOIA-0185	2/21/1994	2/23/1994	Taswell	VA	Golden Eagle	1	EIS: I001604-001	VA: 12617-001-	Carbofuran	Misuse		Scientific analysis, details unknown
					Red-tailed Hawk	2							
					Bird	2							
	FOIA-0186	3/23/1994	Pondera	MT	Bald Eagle	1	EIS: I001606-011	LE6: 7900AP	Carbofuran	Abuse		Flowable	Bait poisoning

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FM?24					Golden Eagle	2								
FOIA-0187	4/1/1994	4/24/1994	Burnett	WI	Bald Eagle	17	EIIS: I001603-001		Carbofuran	Abuse	Crop - Corn		Partially-legible article discusses possibility of bait poisoning or normal use; both granular and flowable banned at this time?	
FMC04					Common Raven	1								
FM?25	FOIA-0188	4/6/1994	Burnett	WI	Bald Eagle	6	EIIS: I001605-001		Carbofuran	Abuse	Lake		Poisoning suspected; scientific	
FOIA-0189	4/8/1994	4/14/1994	Burnett	WI	Bald Eagle	4	EIIS: I001605-003		Carbofuran		Lake		Scientific analysis, details unknown	
F??38					Common Raven	1								
					Crow	1								
FM?26	FOIA-0190	4/10/1994	Moody	SD	Hawk	1	EIIS: I001606-013	LE6: 8896AP	Carbofuran	Abuse		Flowable	Bait poisoning	
FOIA-0191	8/12/1994		Genesee	NY	American Goldfinch	12	EIIS: I003908-012		Carbofuran		Crop - Corn		Chart - details not legible	
					Baltimore Oriole	1								
					Brown-headed Cowbird	2								
					House Finch	2								
F?C07					House Sparrow	4								
					Mourning Dove	3								
					Red-tailed Hawk	1								
					Red-winged Blackbird	51								
					Rock Pigeon	1								
					Sparrow	7								
FOIA-0192	8/17/1994		Chautauqua	NY	Crow	1	EIIS: I003908-013		Carbofuran				Chart - details not legible	
F??39					Gull	1								
					Ring-billed Gull	62								
F??40	FOIA-0193	9/2/1994	Imperial	CA	Cliff Swallow	13	EIIS: I003351-025		Carbofuran			Flowable	Chart - no details provided	
F??41	FOIA-0194	9/2/1994	Imperial	CA	Cliff Swallow	230	EIIS: I004665-009		Carbofuran		Non-Agricultural		Birds had reportedly been closed in	
FOIA-0195	9/13/1994		Sheridan	MT	Crow	1	EIIS: I001606-009	LE6: 930529	Carbofuran	Abuse		Flowable	Bait poisoning	
FM?27					Golden Eagle	3								
					Red-tailed Hawk	1								
FOIA-0196	11/3/1994		Monterey	CA	Finch	1	EIIS: I004665-010	CADFG: P-1768A	Carbofuran	Use	Vineyard		Birds found in post-application mortality survey, Sleepy Hollow Vineyard	
FMV04					Mourning Dove	1								
					Yellow-rumped Warbler	3								
FOIA-0197	2/6/1995		Orange	NY	Blue Jay	1	EIIS: I003076-001		Carbofuran	Abuse	Non-Agricultural		Resident found several birds in yard, opposite beef cattle farm; intentional poisoning suspected	
FM?28					Dark-eyed Junco	2								
					European Starling	24								
FOIA-0198	2/22/1995		Pickett	TN	Eagle	1	EIIS: I003966-002	TN: 13435	Carbofuran				Bird found washed up on the shore of lake	
F??42														
FOIA-0199	3/11/1995		Hawkins	TN	Eagle	1	EIIS: I003966-003	TN: 13473,001	Carbofuran					
FOIA-0200	5/26/1995			CA	Mallard	3	EIIS: I003930-003	CADFG1: L-192-39	Carbofuran	Use	Crop - Rice	Granular	Document surveys local history with regards to implementation of stewardship program; legal use assumed	
FU?05	FOIA-0201	9/19/1995		CA	Brewer's Blackbird	1	EIIS: I004665-008		Carbofuran	Use			Birds found in post-application mortality survey, Fall 1994	
FOIA-0202	6/6/1996		Modoc	CA	Canada Goose	7	EIIS: I004852-026	FMC: 501707	Carbofuran	Misuse	Field	Flowable	Applicator treated wrong field near national wildlife refuge; fined by CA authorities	
FM?29														
FOIA-0203	10/25/1996		New York	NY	Rock Pigeon	3	EIIS: I006702-001	NYDEC: 97-55-23	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely	
FM?31	FOIA-0204	11/16/1996	New York	NY	Herring Gull	12	EIIS: I004874-001	NYDEC: 96-36-13	Carbofuran	Abuse	Non-Agricultural		Birds found at landfill	
FM?32	FOIA-0205	1/30/1997		KY	Hawk	1	EIIS: I005543-021	KY: 520907	Carbofuran	Abuse	Agricultural Area	Flowable	Bait poisoning	
FMA06	FOIA-0206	6/5/1997	6/12/1997	Loudoun	VA	Several other birds	6	EIIS: I006641-001	VA: 94-97	Carbofuran	Misuse	Crop - Alfalfa	Flowable	4F applied adjacent to water reservoir, grower fined for misuse
FOIA-0207	6/12/1997		Loudoun	VA	Canada Goose	7	EIIS: I005566-001	SCWDS: 94-97	Carbofuran		Non-Agricultural		Birds found dead adjacent to town water supply; scientific analysis reports CF toxicosis, no further details	
F??44														
FOIA-0208	7/15/1997	7/21/1997	Grant	WA	Bees		EIIS: I013883-018	WADH 1998 Pesticide Incident Reporting & Tracking Review Panel	Carbofuran	Use	Crop - Potato	Flowable	Bee kill, \$10,000 damage	
FUP?									Methamtophos					
FUC02	FOIA-0209	7/24/1997	Berks	PA	Canada Goose	30	EIIS: I007371-023	PA: 28	Dimethoate Carbofuran	Use	Crop - Corn	Flowable	Birds fed on treated plants, applicator certified	

Avian Incidents Received by FOIA Request

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	Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Formula	Notes
FM733	FOIA-0210	9/5/1997		Chenango	NY	European Starling	2	EIIS: I006646-001	NYDEC: 97-50-28	Carbofuran	Abuse	Non-Agricultural		Birds found dead in lawn all summer, possible intentional poisoning
FM734	FOIA-0211	9/12/1997	9/12/1997	New York	NY	Rock Pigeon	1	EIIS: I006701-001	NYDEC: 97-52-15	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM735	FOIA-0212	10/3/1997		New York	NY	Rock Pigeon	2	EIIS: I006652-001	NYDEC: 97-52-16	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM736	FOIA-0213	10/5/1997		New York	NY	House Sparrow	4	EIIS: I006693-001	NYDEC: 97-52-30A,B	Carbofuran		Non-Agricultural		NYC case, intentional poisoning likely
FM737	FOIA-0214	10/14/1997		New York	NY	Red-tailed Hawk	1	EIIS: I006670-001	NYDEC: 97-52-11	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FUR04	FOIA-0215	10/24/1997	11/14/1997	Colusa	CA	Duck	58	EIIS: I005568-001	CADFG: P-1192	Carbofuran	Use	Crop - Rice	Flowable	Birds found in fallow field flooded for hunting use
FM738	FOIA-0216	10/24/1997		New York	NY	Rock Pigeon	1	EIIS: I006654-001	NYDEC: 97-56-20	Carbofuran	Abuse			NYC case, intentional poisoning likely
FM739	FOIA-0217	10/24/1997	10/24/1997	New York	NY	Rock Pigeon	1	EIIS: I006676-001	NYDEC: 97-56-24	Carbofuran	Abuse			NYC case, intentional poisoning likely
FM740	FOIA-0218	10/24/1997	2/13/1998	New York	NY	Rock Pigeon	1	EIIS: I006797-002	ASPCA: 97-60-18	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely; interesting that Avitrol also present
FM741	FOIA-0219	10/25/1997	10/26/1997	New York	NY	Rock Pigeon	6	EIIS: I006651-001	NYDEC: 97-53-33	Carbofuran Avitrol	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM742	FOIA-0220	10/31/1997		New York	NY	Rock Pigeon	1	EIIS: I006697-001	NYDEC: 97-56-18	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM743	FOIA-0221	10/31/1997		New York	NY	Rock Pigeon	6	EIIS: I006706-001	NYDEC: 97-56-17	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM744	FOIA-0222	11/3/1997	11/3/1997	New York	NY	Rock Pigeon	8	EIIS: I006688-001	NYDEC: 97-60-19	Carbofuran	Abuse			NYC case, intentional poisoning likely
FM745	FOIA-0223	11/6/1997		New York	NY	Rock Pigeon	1	EIIS: I006696-001	NYDEC: 97-60-22	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM746	FOIA-0224	11/20/1997		New York	NY	Rock Pigeon	3	EIIS: I006689-001	NYDEC: 97-62-21	Carbofuran				NYC case, intentional poisoning likely
FM747	FOIA-0225	11/23/1997	11/23/1997	New York	NY	Rock Pigeon	3	EIIS: I006669-001	NYDEC: 97-62-22	Carbofuran	Abuse			NYC case, intentional poisoning likely
FM748	FOIA-0226	11/25/1997		New York	NY	Rock Pigeon	7	EIIS: I006647-001	NYDEC: 7-57-02	Carbofuran	Abuse	Non-Agricultural		NYC case - bird ingested large quantity of millet, small amount of bread, natural food materials; likely intentional poisoning
FM749	FOIA-0227	2/17/1998		New York	NY	Rock doves	17	EIIS: I006667-001	NYDEC: 97-56-27	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
F??45	FOIA-0228	3/26/1998		Kent	DE	Grackle	3	EIIS: I007372-005		Carbofuran		Agricultural Area		Ingestion by grackles/unknown source
FUC03	FOIA-0229	5/15/1998	5/18/1998	Northampton	PA	Grackle	2	EIIS: I007963-001	PA: 98-7-STD-I	Carbofuran	Use	Crop - Corn	Flowable	Evidently corn field was treated according to label instructions
FMC05	FOIA-0230	6/3/1998			MN	Goose	28	EIIS: I007545-034	MN: 521059	Carbofuran	Misuse	Crop - Corn	Flowable	Birds found near pond within 40ft of a treated corn field; MNDNR investigation
FM750	FOIA-0231	7/14/1998	7/15/1998	New York	NY	Sparrow	46	EIIS: I007820-001	NYDEC: 98-32-25	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM751	FOIA-0232	7/14/1998		New York	NY	Rock Pigeon	1	EIIS: I008136-001	NYDEC: 98-32-26	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM752	FOIA-0233	8/1/1998		New York	NY	Rock Pigeon	8	EIIS: I007801-002	NYDEC: 98-37-26A-H	Carbofuran	Abuse	Commercial		NYC case, intentional poisoning likely
FM753	FOIA-0234	8/1/1998		New York	NY	Rock Pigeon	1	EIIS: I007821-005	NYDEC: 98-36-28	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM754	FOIA-0235	8/2/1998		New York	NY	Rock Pigeon	1	EIIS: I007821-006	NYDEC: 98-36-29	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM755	FOIA-0236	8/3/1998		New York	NY	Rock Pigeon	4	EIIS: I007801-003	NYDEC: 98-37-25ABC	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM756	FOIA-0237	8/16/1998		New York	NY	Peregrine Falcon	1	EIIS: I007801-001	NYDEC: 98-40-30	Carbofuran	Abuse	Non-Agricultural		NYC case; birdseed found on ground near lamp in Central Park; a source for the 8/16/1998 kill; one person may be responsible for all of the NYC bird poisonings
						Red-tailed Hawk	1							
						Rock Pigeon	200+							

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	Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Formula	Notes
FM?57	FOIA-0238	8/16/1998		New York	NY	Rock dove	1	EIIS: I008144-001	NYDEC: 98-40-24		Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM?58	FOIA-0239	8/16/1998		New York	NY	House sparrow	1	EIIS: I008144-002	NYDEC: 98-40-26A		Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM?59	FOIA-0240	12/30/1998		Gallatin	MT	Common Raven	5	EIIS: I011320-001		Carbofuran	Abuse	National Park	Flowable	Intentional poisoning, then illegal dumped
FM?60	FOIA-0241	9/1/1999			FL	Quail	1	EIIS: I009211-001		Carbofuran	Abuse	Forest	Flowable	Bait poisoning in forest/woods area
FM?61	FOIA-0242	9/2/1999			FL	Bald Eagle	1	EIIS: I009970-003	FL: LTR 3/20/00	Carbofuran	Abuse	Poultry Farm	Flowable	Bait poisoning
FM?62	FOIA-0243	9/21/1999			GA	Hawk	1	EIIS: I009970-002	GA: LTR 3/20/00	Carbofuran	Abuse	Poultry Farm	Flowable	Bait poisoning
	FOIA-0244	10/21/1999		St Clair	IL	Total:	27,000	EIIS: I009211-001	FMC:	Carbofuran	Abuse	Crop - Wheat	Flowable	Intentional and illegal baiting of a wheat field (see I010885-001)
FMW01						Blackbird								
						Brown-headed Cowbird								
						Grackle								
						Horned Lark								
	FOIA-0245	10/21/1999		St Clair	IL	Total:	27,000	EIIS: I010885-001	FMC:	Carbofuran	Abuse	Crop - Wheat	Flowable	Massive intentional poisoning to kill "nuisance" birds; Also see I009388-001
FMW02						Blackbird								
						Brown-headed Cowbird								
						Grackle								
						Horned Lark								
F??46	FOIA-0246	2/1/2000	2/28/2000	Columbia	WI	Red-tailed Hawk	1	EIIS: I010387-002	WIDNR: 2000-99	Carbofuran Brodicificum				Liver contains brodifacoum and CF, no further details
	FOIA-0247	3/9/2000			DE	Bald Eagle	1	EIIS: I009971-003	DE: LTR 03/21/00	Carbofuran	Abuse	Ranch	Flowable	Bait poisoning
FM?63						Hawk	4							
						Bird	3							
FUA07	FOIA-0248	3/12/2000		Chaves	NM	Duck	3	EIIS: I010162-001	NMDA: 00-9	Carbofuran	Legal (Label)	Crop - Alfalfa	Flowable	No violation suspected, birds were migratory (bad timing?)
						Snow Goose	800							
	FOIA-0249	3/13/2000		Lawrence	MS	Mourning Dove	200+	EIIS: I009971-004	MS: LTR 03/21/00	Carbofuran	Abuse	Crop - Corn	Flowable	Corn grain bait poisoning
FMC06						Red-tailed Hawk	4							
						Wild Turkey	3							
FM?64	FOIA-0250	3/22/2000	3/22/2000	New York	NY	Red-tailed Hawk	2	EIIS: I010327-001	NYDEC: 00-20-11	Brodifacoum Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
FM?65	FOIA-0251	4/6/2000	4/6/2000	New York	NY	European Starling	2	EIIS: I010141-001	NYDEC: 00-22-26	Carbofuran	Abuse	Non-Agricultural		NYC case, intentional poisoning likely
	FOIA-0252	7/1/2000		Hancock	MS	Vulture	1	EIIS: I010439-002		Carbofuran Aldicarb	Abuse	Poultry Farm	Granular	Bait poisoning
FM?66	FOIA-0253	7/6/2000	7/6/2000	Columbia	NY	American Crow	1	EIIS: I011519-001	NYDEC	Carbofuran Diazinon		Non-Agricultural		Bird found 300ft from nearest road; scientific analysis, no detail provided
FM?67	FOIA-0254	8/4/2000		Cortland	NY	Ring-billed Gull	100	EIIS: I011010-001	NYDEC: 00-43-14	Carbofuran	Abuse	Non-Agricultural		Intentional poisoning suspected near landfill
	FOIA-0255	9/1/2000	9/1/2000	Cortland	NY	Ring-billed Gull	1	EIIS: I011565-001	NYDEC: COR000126	Carbofuran	Abuse	Non-Agricultural		Landfill; "someone does not like the gulls that frequent the Cortland County Dump"
FM?68														
FM?69	FOIA-0256	3/19/2001		Bergen	NJ	Grackle	6	EIIS: I012549-005		Carbofuran	Abuse			Chart, detail not provided
FM?70	FOIA-0257	6/7/2001		Washington	AL	Hawk	5	EIIS: I011855-001		Carbofuran	Abuse	Non-Agricultural	Flowable	Bait poisoning
FM?71	FOIA-0258	8/17/2001	8/18/2001	Ulster	NY	American Crow	2	EIIS: I012437-001	NYDEC:	Carbofuran	Abuse	Non-Agricultural		Bait poisoning
	FOIA-0259	6/14/2002		Powhatan	VA	Wild Turkey	1	EIIS: I013244-001	VA: CC-13202	Carbofuran		Non-Agricultural		Intoxicated turkey found in field by private citizen
F??47														
	FOIA-0260	9/16/2002		Queene Anne	MD	Eagle	1	EIIS: I013498-011	FMC:	Carbofuran	Abuse		Flowable	Dead eagle found near poisoned foxes, details unknown but foxes suggests bait poisoning; [submission date assigned as start ate for sorting]
FM?72														
						Foxes			EPA: 279-2876					
	FOIA-0261	2/27/2003		Stutsman	ND	Horned larks	78	EIIS: I016059-002	NDFWS	Carbofuran	Abuse	Non-Agricultural	Granular	Barley seed treated with CF to intentionally kill pigeons
						Snow bunnings								
						Hungarian partridges	6							
						Total: migratory birds	200							
FM?73	FOIA-0262	4/23/2003	4/30/2003	Golden	ND	Bald eagle	1	EIIS: I016059-001	NDFWS	Carbofuran	Abuse	Non-Agricultural	Flowable	Bait poisoning to attract skunks
						Golden eagle	3							
	FOIA-0263	5/21/2003		Utah County	UT	Redwing blackbird	580	EIIS: I014119-005	FMC: CF035211	Carbofuran	Abuse	Crop - Corn	Flowable	Bait poisoning with treated cracked corn
						Brewers blackbird	238		EPA: 279-2876					
FMC07						Cowbird	84							
						Starlings	81							
						English sparrows	12							

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Event ID	Start Date	End Date	County	State	Species	# Impacted	Federal Source	State Source	Pesticide(s)	Mis/Ab/Use	Site/Land Use	Formula	Notes	
FM774	FOIA-0264	4/2/2004	Madison	KY	Red-tailed hawks	2	EIS: I017036-001	Press	Carbofuran	Abuse	Non-Agricultural		Dog ingested poisoned bird carcasses	
					Hawks	2								
					Crow	1								
FM775	FOIA-0265	5/1/2006	5/31/2006	Aberdeenshire	UK	Mammals	1	EIS: I017535-001	Press	Carbofuran	Abuse	Non-Agricultural	Intentional poisoning, CF banned in the UK	
FMS01	FOIA-0266	6/1/2006	6/30/2006	(eastern)	CO	Morning doves Harned larks	1700-2100	EIS: I017576-001	USFWS (CO)	Carbofuran	Misuse	Crop - Sunflowers	Flowable Applied as broadcast application, not in-furrow application as label directs for at-plant applications; discusses USFWS incident database; under legal investigation as of summer 2006	
FM776	FOIA-0267	1/20/2007	MD/DE state line	DE	Bald eagle	4	Examiner.com newspaper clip (NOT FOIA)	Press clip (NOT FOIA)	Carbofuran	Abuse	Agricultural Area		Bait poisoning of chicken; poison-laced chicken picked up from MD farm and carried over state line by bird	
FMK01	FOIA-0268	8/16/1995	8/23/1995	Prince George	MD	Owl	1	EIS: I003401-001	USFWS	Carbofuran	Misuse	Crop - Kale	Flowable	4F not permitted on Kale; 4F incorporated with seeds at planting; 6-8 empty drums and 3-4 full drums of 4F found near birds; farmer said birds were in vicinity of wheat field throughout summer but did not know of label instructions to avoid use near waterfowl; also confusion about licensed applicators
					MD	Eagle	2							
FMK-S01	FOIA-0269	8/16/1995	8/23/1995	Prince George	MD	Canada Goose Cardinal	11 1	EIS: I003401-002	USFWS	Captan 400 Thuram Benomyl Carbofuran Captan 400 Thuram Benomyl	Misuse	Crop - Squash & Kale	Flowable	Same farmer as FOIA-0268, field was 4 miles away; 4F not permitted on kale; 4F incorporated with seeds at planting;
FMC08	FOIA-0270	5/2/1993	5/11/1993	Kent	DE	Common grackles	3	EIS: I002047	NWHRC: 5020028	Carbofuran	--	Crop - Corn	Flowable	Laboratory test for birds found in DE finds carbofuran toxicosis; samples taken as part of law enforcement investigation
						Red-winged blackbird	1							
						Starling	1							
						Tree Swallow	1							
						Mallard duck	1							
FM777	FOIA-0271	1/1/1990	2/28/1990	McKenzie	ND	Rock dove Bald eagle	1 1	EIS: I000915-001	NDFGD: 726-2-90	Carbofuran	Abuse	Non-Agricultural	Flowable Bait poisoning incident; prosecuted under NDCC 4-36.; also killed two raccoons, one fox	
FM778	FOIA-0272	1/7/1993	1/14/1993	Republic	KS	Bald eagle Red-tailed eagle	3 1	EIS: I000463-001	KS Board of Ag: 93003	Carbofuran	Abuse	Agricultural Area	Flowable Bait poisoning to kill coyotes harming sheep herb led to 4 bald eagle deaths; 34 eagles were seen feeding on bait; federal investigation	
FM779	FOIA-0273	12/23/1992		Dewey	SD	Hawks Golden Eagles	1 2	EIS: I000463-002	Newspaper article	Carbofuran	Abuse		Bait poisoning; \$50,000 settlement	

AV SUM

Flowable	Type	Crop	# Events	# Impacted	
All Flowable			200		
Flowable	Use		27		
Flowable	Misuse/Abuse		103		
Flowable	Not Categorized		70		
Flowable	Use	?	5	55	
Flowable	Misuse/Abuse	?	79	405	<p>*This includes the NYC events regardless of whether those events were categorized as misuse/abuse.</p> <p>I think you want some of this in the vineyard category based on location (Monterey). Am I correct? If yes, then let me know and I'll be happy to re-categorize.</p>
Flowable	Not Categorized	?	47	559	
Flowable	Use	Alfa-alfa	7	3046	
Flowable	Misuse/Abuse	Alfa-alfa	6	2260-2265+	
Flowable	Not Categorized	Alfa-alfa	1	40	
Flowable	Use	Vineyard	7	1019	
Flowable	Misuse/Abuse	Vineyard	4	26	
Flowable	Not Categorized	Vineyard	10	189	
Flowable	Use	Rice	4	111	
Flowable	Misuse/Abuse	Rice	1	200+	
Flowable	Not Categorized	Rice	5	9+	
Flowable	Use	Corn	3	33	
Flowable	Misuse/Abuse	Corn	8	930+	
Flowable	Not Categorized	Corn	7	21	
Flowable	Use	Soybeans			
Flowable	Misuse/Abuse	Soybeans			

Flowable	Type	Crop	# Events	# Impacted
Flowable	Not Categorized	Soybeans	1	2
Flowable	Use	Sumflowers		
Flowable	Misuse/Abuse	Sumflowers	1	1700-2100
Flowable	Not Categorized	Sumflowers		
Flowable	Use	Kale		
Flowable	Misuse/Abuse	Kale	1	2
Flowable	Not Categorized	Kale		
Flowable	Use	Kale		
Flowable	Misuse/Abuse	Kale & Squash	1	11
Flowable	Not Categorized	Kale		
Flowable	Use	Wheat		
Flowable	Misuse/Abuse	Wheat	2	54,000
Flowable	Not Categorized	Wheat		

OTHER KILLERS

Killer	Amount/year	Date on Site	Source
Power Lines	thousands		http://www.santacruzsentinel.com/archive/2002/May/22/local/stories/04local.htm
Transmission and Distribution lines	150,000,000	5/16/2006	http://blogcritics.org/archives/2006/05/15/183357.php
Buildings	300,000,000	5/16/2006	http://blogcritics.org/archives/2006/05/15/183357.php
Free Roving Cats	200,000,000	5/16/2006	http://blogcritics.org/archives/2006/05/15/183357.php
Trucks and Autos	70,000,000	5/16/2006	http://blogcritics.org/archives/2006/05/15/183357.php
Pesticides	60,000,000	5/16/2006	http://blogcritics.org/archives/2006/05/15/183357.php
Communication Towers	50,000,000	5/16/2006	http://blogcritics.org/archives/2006/05/15/183357.php
Wind Turbines?			
Fumes from Non-Stick Manufacturing Facility	80-100 (one time)	1997	http://www.ewg.org/reports/toxicdeflon/diaries_wildbirds.php
Communication Towers	5,000,000 - 40,000,000		As per USFWS 4-5 mil; but could be as high as 40 million http://www.abcbirds.org/policy/towerkillweb.pdf
Pesticides	~ 65 mil	according to :	USFWS
Cats			USFWS
Communication Towers			USFWS
Power lines / High voltage wires			USFWS
Lighted Structures and Windows			USFWS
Open oil pits, industrial pits, or chemical spills			USFWS
Aquatic Trash			USFWS
Transmission and Distribution lines	130 to 174 million	2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Trucks and Autos	60 and 80 million	2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Windows	100 million and a staggering 1 billion	2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Lighted communication towers	40 to 50 million	2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Agricultural pesticides	67 million	2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Cats, both feral and housecats	39 million (in Wisconsin alone)	2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Jet Engines		2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Smoke Stacks		2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Bridges		2003	http://www.awea.org/faq/sagrillo/swbirds.html#1
Wind Turbines		2003	http://www.awea.org/faq/sagrillo/swbirds.html#1

USFWS says they do not chart this info statistically and that we should

J

STATEMENT

Of

EDWARD KIKTA, Ph.D.

Fellow of the American Institute of Chemists
Former Chairman of the American Society of Testing Materials Committee on
Chromatography
FMC Research Fellow

Thin layer chromatography (TLC) can be a very simple useful tool for the screening of relatively controlled well understood or limited systems. The utility TLC has been recognized in a number of areas, as an example, the screening of synthetic reaction mixtures. It has also effectively been used as a preparative chromatographic technique to isolate a substance or for the collection of substances for further analysis by more resolved techniques or for spectroscopic identification.

What thin layer chromatography is not is a reliable tool, on its own, for the definitive identification of a substance based on retention characteristics. The inherent low resolution of thin layer chromatography lends itself to interferences and false positives in all but the most controlled and well understood systems. This certainly would be the case for most pesticide analyses. This is quite evident when one reviews the CIPAC Handbooks. The overwhelming vast majority of methods for quantitative analysis are either High Performance Liquid Chromatography (HPLC) or Gas Chromatography (GC). These methods provide the resolution required for the quantitative analysis and preliminary identification of a pesticide in a formulation or its technical form. For definitive identity determinations a spectroscopic procedure or procedures are often specified. These are often used in conjunction with a higher resolution chromatographic technique to ensure that the quantitative results and qualitative identification made using either HPLC or GC are truly related to the compound of interest. This holds true for analyses ranging from technical analysis, to formulations analysis, and residue analysis.

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REPUBLIC OF KENYA

GOVERNMENT CHEMIST'S DEPARTMENT

P.O. Box 20753-00202 Telephone: 2725806/07: Fax: 2717567, NAIROBI

CERTIFICATE OF ANALYSIS

Report Reference No: P/Vet/ Vol. 1/(10)

Sender:

Lab. Sample No: VT 8/08

Mara Conservancy
P.O. Box 70739
NAIROBI

Sender's Reference: -

Description of Sample: Liver, Spleen, heart and stomach contents of a lion.

Date Received:
10/4/08 (April 10, 2008)

Examination Required: Toxicology

Analytical Report:

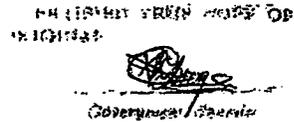
Carbofuran (furan), carbamate pesticide was detected in the stomach contents of the lion.
Carbamate pesticides are poisonous to animals when ingested.

Date: 11th April 2008

E. W. NJOGU

FOR: GOVERNMENT CHEMIST

EWN/twg



REPUBLIC OF KENYA

GOVERNMENT CHEMIST'S DEPARTMENT

P.O. Box 20753-00202 Telephone: 2725806/07: Fax: 2717567, NAIROBI

CERTIFICATE OF ANALYSIS

Report Reference No: P/Vet/ Vol. I/08/(19)

Sender:

Lab. Sample No: VT 9/08

Mara Conservancy
P.O. Box 70739-00400
NAIROBI

Sender's Reference: -

Description of Sample: Water at river 1
Water at river 2
Water at river 3
Soil from staff village
Soil from spraying point
Soil near car wash

Date Received:
10/4/08

Examination Required: Toxicology

Analytical Report:

Carbofuran (furadan), a carbamate pesticide was in the soil samples from the staff village and spraying point. Carbamate pesticides are poisonous and may be harmful to animals when ingested.

No other chemically toxic substances were detected in the soil and water samples.

Date: 11th April 2008

E. W. NJOGU

FOR: GOVERNMENT CHEMIST

EWN/twg

MINISTRY OF HEALTH



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[Signature]
Governor, Nairobi

REPUBLIC OF KENYA

GOVERNMENT CHEMIST'S DEPARTMENT

P.O. Box 20753-00202 Telephone: 2725806/07: Fax: 2717567, NAIROBI

CERTIFICATE OF ANALYSIS

Report Reference No: P/Vet/ Vol. I/08/(11)

Sender:

Lab. Sample No: VT 10/08

Mara Conservancy
P.O. Box 70739-00400
NAIROBI

Sender's Reference: -

Description of Sample: Stomach content, liver, intestines
and its content of a lion

Date Received:
15/4/2008

Examination Required: Toxicology

Analytical Report:

The specimens of the lion were examined for chemically toxic substances with negative results.

Date: 18th April 2008

SGN/twg

[Signature]

S. G. NJOROGE

FOR: GOVERNMENT CHEMIST

MINISTRY OF HEALTH



MAKIMBA MITHI KATIKA
ORIGINA

Government Chemist

REPUBLIC OF KENYA

GOVERNMENT CHEMIST'S DEPARTMENT

P.O. Box 20753-00202 Telephone: 2725806/07: Fax: 2717567, NAIROBI

CERTIFICATE OF ANALYSIS

Report Reference No: P/Vet/ Vol. I/08/(12)	Sender:
Lab. Sample No: VT 11/08	Mara Conservancy P.O. Box 70739-00400 NAIROBI
Sender's Reference: -	
Description of Sample: Soil and glass from eight different sites and the ninth sample of stomach content of hippo all in plastic containers.	Date Received: 16/4/2008
Examination Required: Toxicology	

Analytical Report:

Carbofuran (furadan), a carbamate pesticide was detected in the stomach content of the hippo. Carbamate pesticides are poisonous to animals when ingested. No other chemically toxic substances were detected in the specimens.

Date: 18th April 2008

SGN/twg


S. G. NJOROGE

FOR: GOVERNMENT CHEMIST

30Jul08														
Samples Analyzed for Carbofuran in Maasai Mara Reserve / Kenya														
Sample	Sample ID	Location	Sampler	Date of Sampling	Analyst	Lab Code	Date Samples Received for Analysis	Date of Analysis	Method of Analysis	Report No.	Report Date	Results	Comments	
MARA CONSERVANCY SAMPLES:														
Euthanized Lion's Liver, Spleen & Stomach Contents	NA	Mara Reserve?	KWS Vet	04Apr08	Govt Chemist	VT 8/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.1(10)	11Apr08	Trace in stomach contents	TLC method did not use matrix blanks	
Water	NA	Mara River	Mara Conservancy	Between 31Mar08 and 10Apr08	Govt Chemist	VT 9/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.I/08(19)	11Apr08	No CF detected	"	
Water	NA	"	Mara Conservancy	Between 31Mar08 and 10Apr08	Govt Chemist	VT 9/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.I/08(19)	11Apr08	No CF detected	"	
Water	NA	"	Mara Conservancy	Between 31Mar08 and 10Apr08	Govt Chemist	VT 9/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.I/08(19)	11Apr08	No CF detected	"	
Soil	NA	Staff village	Mara Conservancy	Between 31Mar08 and 10Apr08	Govt Chemist	VT 9/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.I/08(19)	11Apr08	Trace	"	
Soil	NA	Staff garden	Mara Conservancy	Between 31Mar08 and 10Apr08	Govt Chemist	VT 9/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.I/08(19)	11Apr08	Trace	"	
Soil	NA	Near car wash on bank of Mara River	Mara Conservancy	Between 31Mar08 and 10Apr08	Govt Chemist	VT 9/08	10Apr08	10-11Apr08	TLC	P/Vet/Vol.I/08(19)	11Apr08	No CF detected	"	
Killed Lion's Liver, Intestines & Stomach Contents	NA	Mara Reserve?	KWS Vet or Mara Conservancy	mid Apr08	Govt Chemist	VT 10/08	15Apr08	15-18Apr08	TLC	P/Vet/Vol. I/08(11)	18Apr08	No CF detected	TLC method did not use matrix blanks	
Soil & Grass - 8 sites; hippo stomach contents	NA	Mara Reserve?	KWS Vet or Mara Conservancy	mid Apr08	Govt Chemist	VT 11/08	16Apr08	16-18Apr08	TLC	P/Vet/Vol. I/08(12)	18Apr08	Trace in hippo stomach contents; other samples negative	"	
PEST CONTROL PRODUCT BOARD SAMPLES:														
Soil	A13/08 (1A)	Behind Mara staff residence within lodge perimeter	PCPB/Dr Njiru	08May08	KEPHIS	AE0835	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm	
Soil	A14/08 (1B)	"	PCPB/Dr Njiru	08May08	KEPHIS	AE0836	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm	
Soil	A15/08 (1C)	"	PCPB/Dr Njiru	08May08	KEPHIS	AE0837	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm	
Soil	A16/08 (1D)	"	PCPB/Dr Njiru	08May08	KEPHIS	AE0837	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm	
Soil	A08/08 (2A)	Staff sukuma garden by Mara River	PCPB/Dr Njiru	08May08	KEPHIS	AE0838	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm	

30Jul08													
Samples Analyzed for Carbofuran in Maasai Mara Reserve / Kenya													
Sample	Sample ID	Location	Sampler	Date of Sampling	Analyst	Lab Code	Date Samples Received for Analysis	Date of Analysis	Method of Analysis	Report No.	Report Date	Results	Comments
Soil	A09/08 (2B)	"	PCPB/Dr Njiru	08May08	KEPHIS	AEO840	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm
Soil	A10/08 (2C)	"	PCPB/Dr Njiru	08May08	KEPHIS	AEO841	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm
Soil	A11/08 (2D)	River bank next to garden	PCPB/Dr Njiru	08May08	KEPHIS	AEO842	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm
Plant leaves	A12/08 (2E)	Sukuma plant	PCPB/Dr Njiru	08May08	KEPHIS	AEO839	13May08	22May08	HPLC	PESD/AE075	12Jun08	<LOD	LOD = 0.356 ppm

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Pesticide residues and maximum residue levels (mg/kg)

(*) Indicates lower limit of analytical determination

Pesticides - Web Version - EU MRLs (File created on 23/12/2010 08:10)		
Code number	Groups and examples of individual products to which the MRLs apply (a)	Carbofuran (sum of carbofuran and 3-hydroxy-carbofuran expressed as carbofuran)
100000	1. FRUIT FRESH OR FROZEN; NUTS	
110000	(i) Citrus fruit	0,3
110010	Grapefruit (Shaddocks, pomelos, sweeties, tangelo (except mineola), ugli and other hybrids)	0,3
110020	Oranges (Bergamot, bitter orange, chinotto and other hybrids)	0,3
110030	Lemons (Citron, lemon)	0,3
110040	Limes	0,3
110050	Mandarins (Clementine, tangerine, mineola and other hybrids)	0,3
110990	Others	0,3
120000	(ii) Tree nuts (shelled or unshelled)	0,02*
120010	Almonds	0,02*
120020	Brazil nuts	0,02*
120030	Cashew nuts	0,02*
120040	Chestnuts	0,02*
120050	Coconuts	0,02*
120060	Hazelnuts (Filbert)	0,02*
120070	Macadamia	0,02*
120080	Pecans	0,02*
120090	Pine nuts	0,02*
120100	Pistachios	0,02*
120110	Walnuts	0,02*
120990	Others	0,02*
130000	(iii) Pome fruit	0,02*
130010	Apples (Crab apple)	0,02*
130020	Pears (Oriental pear)	0,02*
130030	Quinces	0,02*
130040	Medlar	0,02*
130050	Loquat	0,02*
130990	Others	0,02*
140000	(iv) Stone fruit	0,02*
140010	Apricots	0,02*
140020	Cherries (sweet cherries, sour cherries)	0,02*
140030	Peaches (Nectarines and similar hybrids)	0,02*

140040	Plums (Damson, greengage, mirabelle, sloe)	0,02*
140990	Others	0,02*
150000	(v) Berries & small fruit	0,02*
151000	(a) Table and wine grapes	0,02*
151010	Table grapes	0,02*
151020	Wine grapes	0,02*
152000	(b) Strawberries	0,02*
153000	(c) Cane fruit	0,02*
153010	Blackberries	0,02*
153020	Dewberries (Loganberries, boysenberries, and cloudberrries)	0,02*
153030	Raspberries (Wineberries, arctic bramble/raspberry, (<i>Rubus arcticus</i>), nectar raspberries (<i>Rubus arcticus x idaeus</i>))	0,02*
153990	Others	0,02*
154000	(d) Other small fruit & berries	0,02*
154010	Blueberries (Bilberries)	0,02*
154020	Cranberries (Cowberries (red bilberries))	0,02*
154030	Currants (red, black and white)	0,02*
154040	Gooseberries (Including hybrids with other ribes species)	0,02*
154050	Rose hips	0,02*
154060	Mulberries (arbutus berry)	0,02*
154070	Azarole (mediteranean medlar) (Kiwiberry (<i>Actinidia arguta</i>))	0,02*
154080	Elderberries (Black chokeberry (appleberry), mountain ash, buckthorn (sea sallowthorn), hawthorn, service berries, and other treeberries)	0,02*
154990	Others	0,02*
160000	(vi) Miscellaneous fruit	0,02*
161000	(a) Edible peel	0,02*
161010	Dates	0,02*
161020	Figs	0,02*
161030	Table olives	0,02*
161040	Kumquats (Marumi kumquats, nagami kumquats, limequats (<i>Citrus aurantifolia x Fortunella spp.</i>))	0,02*
161050	Carambola (Bilimbi)	0,02*
161060	Persimmon	0,02*

	Jambolan (java plum) (Java apple (water apple), pomerac, rose apple, Brazilian cherry	
161070	Surinam cherry (grumichama <i>Eugenia uniflora</i>),)	0,02*
161990	Others	0,02*
162000	(b) Inedible peel, small	0,02*
162010	Kiwi	0,02*
162020	Lychee (Litchi) (Pulasan, rambutan (hairy litchi), mangosteen)	0,02*
162030	Passion fruit	0,02*
162040	Prickly pear (cactus fruit)	0,02*
162050	Star apple	0,02*
162060	American persimmon (Virginia kaki) (Black sapote, white sapote, green sapote, canistel (yellow sapote), and mammey sapote)	0,02*
162990	Others	0,02*
163000	(c) Inedible peel, large	0,02*
163010	Avocados	0,02*
163020	Bananas (Dwarf banana, plantain, apple banana)	0,02*
163030	Mangoes	0,02*
163040	Papaya	0,02*
163050	Pomegranate	0,02*
163060	Cherimoya (Custard apple, sugar apple (sweetsop), llama and other medium sized Annonaceae)	0,02*
163070	Guava (Red pitaya or dragon fruit (<i>Hylocereus undatus</i>)	0,02*
163080	Pineapples	0,02*
163090	Bread fruit (Jackfruit)	0,02*
163100	Durian	0,02*
163110	Soursop (guanabana)	0,02*
163990	Others	0,02*
200000	2. VEGETABLES FRESH OR FROZEN	0,02*
210000	(i) Root and tuber vegetables	0,02*
211000	(a) Potatoes	0,02*
212000	(b) Tropical root and tuber vegetables	0,02*
212010	Cassava (Dasheen, eddoe (Japanese taro), tannia)	0,02*
212020	Sweet potatoes	0,02*
212030	Yams (Potato bean (yam bean), Mexican yam bean)	0,02*
212040	Arrowroot	0,02*
212990	Others	0,02*

213000	(c) Other root and tuber vegetables except sugar beet	0,02*
213010	Beetroot	0,02*
213020	Carrots	0,02*
213030	Celeriac	0,02*
213040	Horseradish (Angelica roots, lovage roots, gentiana roots,)	0,02*
213050	Jerusalem artichokes	0,02*
213060	Parsnips	0,02*
213070	Parsley root	0,02*
213080	Radishes (Black radish, Japanese radish, small radish and similar varieties, tiger nut (Cyperus esculentus))	0,02*
213090	Salsify (Scorzonera, Spanish salsify (Spanish oysterplant))	0,02*
213100	Swedes	0,02*
213110	Turnips	0,02*
213990	Others	0,02*
220000	(ii) Bulb vegetables	0,02*
220010	Garlic	0,02*
220020	Onions (Silverskin onions)	0,02*
220030	Shallots	0,02*
220040	Spring onions (Welsh onion and similar varieties)	0,02*
220990	Others	0,02*
230000	(iii) Fruiting vegetables	0,02*
231000	(a) Solanacea	0,02*
231010	Tomatoes (Cherry tomatoes, tree tomato, Physalis, gojiberry, wolfberry (Lycium barbarum and L. chinense))	0,02*
231020	Peppers (Chilli peppers)	0,02*
231030	Aubergines (egg plants) (Pepino)	0,02*
231040	Okra, lady's fingers	0,02*
231990	Others	0,02*
232000	(b) Cucurbits - edible peel	0,02*
232010	Cucumbers	0,02*
232020	Gherkins	0,02*
232030	Courgettes (Summer squash, marrow (patisson))	0,02*
232990	Others	0,02*
233000	(c) Cucurbits-inedible peel	0,02*
233010	Melons (Kiwano)	0,02*
233020	Pumpkins (Winter squash)	0,02*
233030	Watermelons	0,02*
233990	Others	0,02*

234000	(d) Sweet corn	0,02*
239000	(e) Other fruiting vegetables	0,02*
240000	(iv) Brassica vegetables	0,02*
241000	(a) Flowering brassica	0,02*
241010	Broccoli (Calabrese, Chinese broccoli, broccoli raab)	0,02*
241020	Cauliflower	0,02*
241990	Others	0,02*
242000	(b) Head brassica	0,02*
242010	Brussels sprouts	0,02*
242020	Head cabbage (Pointed head cabbage, red cabbage, savoy cabbage, white cabbage)	0,02*
242990	Others	0,02*
243000	(c) Leafy brassica	0,02*
243010	Chinese cabbage (Indian (Chinese) mustard, pak choi, Chinese flat cabbage (tai goo choi), choi sum, peking cabbage (pe-tsai),)	0,02*
243020	Kale (Borecole (curly kale), collards, Portuguese Kale, Portuguese cabbage, cow cabbage)	0,02*
243990	Others	0,02*
244000	(d) Kohlrabi	0,02*
250000	(v) Leaf vegetables & fresh herbs	0,02*
251000	(a) Lettuce and other salad plants including Brassicacea	0,02*
251010	Lamb's lettuce (Italian cornsalad)	0,02*
251020	Lettuce (Head lettuce, lollo rosso (cutting lettuce), iceberg lettuce, romaine (cos) lettuce)	0,02*
251030	Scarole (broad-leaf endive) (Wild chicory, red-leaved chicory, radicchio, curld leave endive, sugar loaf)	0,02*
251040	Cress	0,02*
251050	Land cress	0,02*
251060	Rocket, Rucola (Wild rocket)	0,02*
251070	Red mustard	0,02*
251080	Leaves and sprouts of Brassica spp (Mizuna, leaves of peas and radish and other babyleaf brassica crops (crops harvested up to 8 true leaf stage))	0,02*
251990	Others	0,02*
252000	(b) Spinach & similar (leaves)	0,02*
252010	Spinach (New Zealand spinach, amaranthus spinach)	0,02*

252020	Purslane (Winter purslane (miner's lettuce), garden purslane, common purslane, sorrel, glassworth, Agretti (Salsola soda))	0,02*
252030	Beet leaves (chard) (Leaves of beetroot)	0,02*
252990	Others	0,02*
253000	(c) Vine leaves (grape leaves)	0,02*
254000	(d) Water cress	0,02*
255000	(e) Witloof	0,02*
256000	(f) Herbs	0,02*
256010	Chervil	0,02*
256020	Chives	0,02*
256030	Celery leaves (Fennel leaves, Coriander leaves, dill leaves, Caraway leaves, lovage, angelica, sweet cicely and other <i>Apiacea</i> leaves)	0,02*
256040	Parsley	0,02*
256050	Sage (Winter savory, summer savory,)	0,02*
256060	Rosemary	0,02*
256070	Thyme (Marjoram, oregano)	0,02*
256080	Basil (Balm leaves, mint, peppermint)	0,02*
256090	Bay leaves (laurel)	0,02*
256100	Tarragon (Hyssop)	0,02*
256990	Others (Edible flowers)	0,02*
260000	(vi) Legume vegetables (fresh)	0,02*
260010	Beans (with pods) (Green bean (french beans, snap beans), scarlet runner bean, slicing bean, yardlong beans)	0,02*
260020	Beans (without pods) (Broad beans, Flageolets, jack bean, lima bean, cowpea)	0,02*
260030	Peas (with pods) (Mangetout (sugar peas, snow peas))	0,02*
260040	Peas (without pods) (Garden pea, green pea, chickpea)	0,02*
260050	Lentils	0,02*
260990	Others	0,02*
270000	(vii) Stem vegetables (fresh)	0,02*
270010	Asparagus	0,02*
270020	Cardoons	0,02*
270030	Celery	0,02*
270040	Fennel	0,02*
270050	Globe artichokes	0,02*
270060	Leek	0,02*
270070	Rhubarb	0,02*
270080	Bamboo shoots	0,02*

270090	Palm hearts	0,02*
270990	Others	0,02*
280000	(viii) Fungi	0,02*
280010	Cultivated (Common mushroom, Oyster mushroom, Shi-take)	0,02*
280020	Wild (Chanterelle, Truffle, Morel, Cep)	0,02*
280990	Others	0,02*
290000	(ix) Sea weeds	0,02*
300000	3. PULSES, DRY	0,02*
300010	Beans (Broad beans, navy beans, flageolets, jack beans, lima beans, field beans, cowpeas)	0,02*
300020	Lentils	0,02*
300030	Peas (Chickpeas, field peas, chickling vetch)	0,02*
300040	Lupins	0,02*
300990	Others	0,02*
400000	4. OILSEEDS AND OILFRUITS	
401000	(i) Oilseeds	0,1
401010	Linseed	0,1
401020	Peanuts	0,1
401030	Poppy seed	0,1
401040	Sesame seed	0,1
401050	Sunflower seed	0,1
401060	Rape seed (Bird rapeseed, turnip rape)	0,1
401070	Soya bean	0,1
401080	Mustard seed	0,1
401090	Cotton seed	0,1
401100	Pumpkin seeds (Other seeds of cucurbitacea)	0,1
401110	Safflower	0,1
401120	Borage	0,1
401130	Gold of pleasure	0,1
401140	Hempseed	0,1
401150	Castor bean	0,1
401990	Others	0,1
402000	(ii) Oilfruits	
402010	Olives for oil production	0,02*
402020	Palm nuts (palmoil kernels)	0,05*
402030	Palmfruit	0,05*
402040	Kapok	0,05*
402990	Others	0,05*
500000	5. CEREALS	0,02*
500010	Barley	0,02*

500020	Buckwheat (Amaranthus, quinoa)	0,02*
500030	Maize	0,02*
500040	Millet (Foxtail millet, teff)	0,02*
500050	Oats	0,02*
500060	Rice	0,02*
500070	Rye	0,02*
500080	Sorghum	0,02*
500090	Wheat (Spelt, triticale)	0,02*
500990	Others	0,02*
600000	6. TEA, COFFEE, HERBAL INFUSIONS AND COCOA	0,05*
610000	(i) Tea (dried leaves and stalks, fermented or otherwise of <i>Camellia sinensis</i>)	0,05*
620000	(ii) Coffee beans	0,05*
630000	(iii) Herbal infusions (dried)	0,05*
631000	(a) Flowers	0,05*
631010	Camomille flowers	0,05*
631020	Hybiscus flowers	0,05*
631030	Rose petals	0,05*
631040	Jasmine flowers (Elderflowers (<i>Sambucus nigra</i>))	0,05*
631050	Lime (linden)	0,05*
631990	Others	0,05*
632000	(b) Leaves	0,05*
632010	Strawberry leaves	0,05*
632020	Rooibos leaves (Ginkgo leaves)	0,05*
632030	Maté	0,05*
632990	Others	0,05*
633000	(c) Roots	0,05*
633010	Valerian root	0,05*
633020	Ginseng root	0,05*
633990	Others	0,05*
639000	(d) Other herbal infusions	0,05*
640000	(iv) Cocoa (fermented beans)	0,05*
650000	(v) Carob (st johns bread)	0,05*
700000	7. HOPS (dried) , including hop pellets and unconcentrated powder	0,05*
800000	8. SPICES	0,05*
810000	(i) Seeds	0,05*
810010	Anise	0,05*
810020	Black caraway	0,05*
810030	Celery seed (Lovage seed)	0,05*
810040	Coriander seed	0,05*
810050	Cumin seed	0,05*

810060	Dill seed	0,05*
810070	Fennel seed	0,05*
810080	Fenugreek	0,05*
810090	Nutmeg	0,05*
810990	Others	0,05*
820000	(ii) Fruits and berries	0,05*
820010	Allspice	0,05*
820020	Anise pepper (Japan pepper)	0,05*
820030	Caraway	0,05*
820040	Cardamom	0,05*
820050	Juniper berries	0,05*
820060	Pepper, black and white (Long pepper, pink pepper)	0,05*
820070	Vanilla pods	0,05*
820080	Tamarind	0,05*
820990	Others	0,05*
830000	(iii) Bark	0,05*
830010	Cinnamon (Cassia)	0,05*
830990	Others	0,05*
840000	(iv) Roots or rhizome	0,05*
840010	Liquorice	0,05*
840020	Ginger	0,05*
840030	Turmeric (Curcuma)	0,05*
840040	Horseradish	0,05*
840990	Others	0,05*
850000	(v) Buds	0,05*
850010	Cloves	0,05*
850020	Capers	0,05*
850990	Others	0,05*
860000	(vi) Flower stigma	0,05*
860010	Saffron	0,05*
860990	Others	0,05*
870000	(vii) Aril	0,05*
870010	Mace	0,05*
870990	Others	0,05*
900000	9. SUGAR PLANTS	
900010	Sugar beet (root)	0,2
900020	Sugar cane	0,1
900030	Chicory roots	0,02*
900990	Others	0,02*
1000000	10. PRODUCTS OF ANIMAL ORIGIN-TERRESTRIAL ANIMALS	

1010000	(i) Meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these	0,1*
1011000	(a) Swine	0,1*
1011010	Meat	0,1*
1011020	Fat free of lean meat	0,1*
1011030	Liver	0,1*
1011040	Kidney	0,1*
1011050	Edible offal	0,1*
1011990	Others	0,1*
1012000	(b) Bovine	0,1*
1012010	Meat	0,1*
1012020	Fat	0,1*
1012030	Liver	0,1*
1012040	Kidney	0,1*
1012050	Edible offal	0,1*
1012990	Others	0,1*
1013000	(c) Sheep	0,1*
1013010	Meat	0,1*
1013020	Fat	0,1*
1013030	Liver	0,1*
1013040	Kidney	0,1*
1013050	Edible offal	0,1*
1013990	Others	0,1*
1014000	(d) Goat	0,1*
1014010	Meat	0,1*
1014020	Fat	0,1*
1014030	Liver	0,1*
1014040	Kidney	0,1*
1014050	Edible offal	0,1*
1014990	Others	0,1*
1015000	(e) Horses, asses, mules or hinnies	0,1*
1015010	Meat	0,1*
1015020	Fat	0,1*
1015030	Liver	0,1*
1015040	Kidney	0,1*
1015050	Edible offal	0,1*
1015990	Others	0,1*
1016000	(f) Poultry -chicken, geese, duck, turkey and Guinea fowl-, ostrich, pigeon	0,1*
1016010	Meat	0,1*

1016020	Fat	0,1*
1016030	Liver	0,1*
1016040	Kidney	0,1*
1016050	Edible offal	0,1*
1016990	Others	0,1*
1017000	(g) Other farm animals (Rabbit, Kangaroo)	0,1*
1017010	Meat	0,1*
1017020	Fat	0,1*
1017030	Liver	0,1*
1017040	Kidney	0,1*
1017050	Edible offal	0,1*
1017990	Others	0,1*
1020000	(ii) Milk and cream, not concentrated, nor containing added sugar or sweetening matter, butter and other fats derived from milk, cheese and curd	0,1*
1020010	Cattle	0,1*
1020020	Sheep	0,1*
1020030	Goat	0,1*
1020040	Horse	0,1*
1020990	Others	0,1*
1030000	(iii) Birds' eggs, fresh preserved or cooked Shelled eggs and egg yolks fresh, dried, cooked by steaming or boiling in water, moulded, frozen or otherwise preserved whether or not containing added sugar or sweetening matter	0,1*
1030010	Chicken	0,1*
1030020	Duck	0,1*
1030030	Goose	0,1*
1030040	Quail	0,1*
1030990	Others	0,1*
1040000	(iv) Honey (Royal jelly, pollen)	
1050000	(v) Amphibians and reptiles (Frog legs, crocodiles)	
1060000	(vi) Snails	
1070000	(vii) Other terrestrial animal products	

Substance	Legislation	Entry in to force
Carbofuran (sum of carbofuran and 3-hydroxy-carbofuran expressed as carbofuran)		
	Reg.(EC) N°149/2008	1/9/2008