

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

WildlifeDirect offices, Nairobi, Kenya

April 15, 2009

10.30 am

Present:

Oliver Nasirwa – Wetlands Int'l, Bird life Int'l, National Museums of Kenya
Darcy Ogada – National Museums of Kenya, Member of bird committee
Alayne Cotteril – Living with Lions, Laikipia
Samuel Maina – WLD, Communications
Masumi Gudka – WLD, Partnerships
Martin Odino – National Museums of Kenya, Member of bird committee
Sartaj Singh – FMC, commercial manager for East Africa and India
David Mead – Kerr and Downey Safaris
Paula Kahumbu – WLD, Executive Director
Michael Morelli – FMC, director of global regulatory affairs and compliance
Linda Froelich – FMC, global product stewardship manager for agricultural products
Angela Mwandia – WWF, Environmental Hazards

Dr. Kahumbu 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 Misaim 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.

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 for 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 wildlife 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 stated that they follow national rules on labeling. However, this language could be added to the label if the product is re-introduced at a future date.
- **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.
- **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.
- **History of pesticide products** – 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.

- **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 (2,500 lbs active ingredient annually) to minimize risk to birds and to switch most uses to the liquid formulation. 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. The remaining registered crops are corn, pine seedlings, potatoes, pumpkins, spinach grown for seed, and sunflowers. 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. FMC stated that they would share their conditions for re-introduction of Furadan, if this were to ever come about.

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. 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 Agroviet 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 (Linda)
2. Collect information at one location and submit official reports to PCPB on a quarterly basis with a copy to FMC (Paula/Martin).
3. Send data on Furadan availability in Agroviet stores to Juanco and Linda (Paula)
4. Send previous reports on misuse to Sartaj and Linda (Paula)
5. Confirm that Peter's report can be shared with Linda and send it to her (Darcy)
6. Consider having another tripartite meeting in near future to bring together all the partners (discuss with all stakeholders)
7. Inform Richard Leakey about the meeting (Mike)
8. Circulate minutes for review (Paula)

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.