Docket No. 161467410P1

IN THE PROVINCIAL COURT OF ALBERTA

CRIMINAL DIVISION

BETWEEN:

HER MAJESTY THE QUEEN

- and –

ORKIN CANADA CORPORATION

STATEMENT OF AGREED FACTS

This Statement of Agreed Facts contains facts admitted pursuant to s. 655 of the *Criminal Code of Canada* for the purpose of dispensing with formal proof thereof.

ORKIN CANADA CORPORATION ("Orkin") stands charged that:

Count 2
On or between the 23rd day of January 2015 and the 26th day of January 2015, at or near the City of Calgary, in the Province of Alberta, being a person who releases or causes or permits the release of a substance into the environment that may cause, is causing or has caused an adverse effect, did fail to report that release to the Director as soon as that person knew or ought to have known of the release contrary to section 110(1) of the Environmental Protection and Enhancement Act and did thereby commit an offence contrary to s. 227(j) of the Environmental Protection and Enhancement Act.

Count 6
On or between the 23rd day of January 2015 and the 26th day of January 2015, at or near the City of Calgary, in the Province of Alberta, did handle, store, transport use or dispose of a registered pest control product in a way that was inconsistent with the directions on the label recorded in the Register, contrary to section 6(5)(b) of the Pest Control Products Act (Canada) and did thereby commit an offence contrary to section 6(9) of the Pest Control Products Act (Canada).

1. Orkin is a federally registered Canadian corporation extra provincially registered in Alberta. It is a subsidiary of Rollins Inc., a large multinational pest control corporation headquartered in the United States. In 2016 Rollins publicly reported total assets of $916 million with net income of about $167 million.

2. Magtoxin Prepac Spot Fumigant ("Magtoxin") is a pesticide labeled for use in "spot treatment" of pests in food and feed processing machinery and equipment. Spot fumigation is the short term treatment of food processing machinery with toxic gas to destroy insect pests.

3. The Magtoxin consists of solid magnesium phosphide pellets packaged in gas permeable blisters. Magtoxin strips contain 33 blisters with each blister containing 2 pellets of magnesium phosphide. Five strips (prepacs) are sealed in impermeable foil pouches and packed in covered metal pails with 12 pouches or 60 prepacs (or 1980 blisters) per pail.

4. When a foil pouch is opened, atmospheric moisture penetrates each blister and reacts with the magnesium phosphide to release hydrogen phosphide gas, also known as phosphine. The reaction also liberates ammonia and carbon dioxide which act as inerting and warning agents.

5. The rate of phosphine release initially increases over time as the magnesium phosphide reacts with moisture however eventually the rate of release slows and the blister becomes partially "spent" to the point where the rate of phosphine release is relatively low and the blisters can be handled. At this point there is still some unreacted magnesium phosphide contained in the blisters, however once the area which was fumigated is ventilated to remove the gas, the blisters can be collected by hand.

6. To completely deactivate spent blisters they are either immersed in water in a well- ventilated location for 6 hours (wet method) or left outdoors in a protected location until the blisters are completely spent.

7. The *Pest Control Products Act (Canada)* requires most pesticides, including Magtoxin, to be registered. Registration includes submission by the manufacturer to Health Canada of the label to be associated and distributed with the registered pesticide. A database of registered labels is maintained by Health Canada.

8. The registered label describes hydrogen phosphide gas as "a highly toxic systemic poison and a severe respiratory tract irritant". The magnesium phosphide from the pellets is noted to be "fatal if swallowed". The label also notes that hydrogen phosphide may ignite spontaneously and warns against confining spent or partially spent fumigants because the slow release of hydrogen phosphide could result in an explosive atmosphere

9. The label for Magtoxin includes the following directions:

- A "Notice to User" that the product should only be used in accordance with the label and that it is an offence to use it in a way that is inconsistent with the label

- A direction that "Under no circumstances shall any processed food, feed or bagged commodity come into direct contact with Magtoxin Prepac Spot fumigant or a raw agricultural commodity that will be used directly as a food without further processing"

10. The label also incorporates a document entitled "Applicator's Manual" for Magtoxin. The Manual includes the following directions:

- A direction that "The spent Magtoxin Prepac must not be allowed to contaminate processed food or feed. Therefore, it must be retrieved after fumigation prior to starting up the processing line unless the spot fumigant has been applied to a fumiport or in some other fashion as to ensure that it is retained and will not enter the food or feed stream."

- Recommendations for spot fumigation including:
    - Marking points of application to facilitate recovery
    - No processed food to come into contact with prepacs
    - Collection of all or partially spent prepacs from treated equipment

- Disposal instructions including a warning that confinement of partially spent prepacs in plastic bags may result in a fire hazard

11. In 2014, Orkin was retained by a flour milling company (the Client) to conduct a spot fumigation to destroy insects in a flour mill located in Calgary, Alberta. The mill is a 10 storey building in an industrial area of the city and produced different kinds of flour intended for human consumption.

12. On Friday January 23, 2017, Orkin employees met with representatives from the Client to do a walkthrough of the mill and confirm locations for placement of the Magtoxin.

13. To allow for the fumigation, the mill was shut down and turned over to Orkin on Saturday Jan 24, 2015. Orkin employees then began deploying solid blister packs of Magtoxin in flour milling machinery and other locations starting on the top floor and moving down. A fumigation plan describing the locations for the Magtoxin blisters and number in each location had been prepared. To facilitate recovery of spent blister packs, Orkin employees attempted to post a list near the

elevator on each floor showing the number of blister packs actually deployed on that floor.

14. During the deployment, however, the fumigation plan was annotated by hand to the point where it it was no longer possible to determine from the plan the number and location of all deployed blisters. No steps were taken to mark the specific machinery where blisters were deployed and the plan to post a list near the elevators was abandoned after a few floors.

15. On Sunday January 25, 2015 the mill was ventilated to remove any phosphine and Orkin employees began removing the partially spent Magtoxin blisters by hand from the flour mill. The removal team consisted of employees from the local Orkin office in Calgary however it did not include the two employees who led the fumigation because they had returned to Ontario.

16. The retrieval operation was hampered by the lack of a clear record of the number of Magtoxin blisters deployed on each floor and specific deployment locations. There was no effective system or method used to ensure all blisters deployed were collected except trying to search all potential locations in the mill. By the time the removal was concluded, the Orkin employees did not believe they had collected all of the deployed Magtoxin blisters.

17. The mill was inspected by Orkin and Client representatives using a phosphine detector on the morning of Monday January 26 to ensure phosphine gas concentrations were sufficiently low so that Client staff could re-enter to restart the mill. When Client staff re-entered and began preparations to restart the mill, they found partially spent Magtoxin blisters in mill machinery. These blisters should have been removed by Orkin on January 25.

18. The mill employees gave the blisters they found to their manager who in turn collected blisters and called Orkin who sent several employees back to the mill to retrieve the collected blisters and look for others that may not have been retrieved on January 25. The found blisters were unwittingly stored in closed plastic bags by two of the Client's managers. This created a potential fire and explosion hazard. When the bags were opened, thereby eliminating the potential hazard, the managers noticed a "garlic" odour (indicating the presence of phosphine) and were therefore exposed to an unknown concentrations of phosphine. As a precaution the managers went to a hospital to be examined. There is no evidence that either person suffered any harm from the phosphine exposure.

19. Orkin was unable to account for all of the Magtoxin blisters deployed. Mill managers decided to run the mill to flush any remaining pesticide and discard the flour produced as waste in case it contained any Magtoxin. On Tuesday January 27, after the first flush, mill staff found another 33 spent blisters and the mill was flushed again with the produced flour again being discarded as waste. A total of

120 abandoned Magtoxin blisters were found on January 26 and 27. This represented approximately 1.4% of the total blisters used during the fumigation of the mill.

20. The mill began to produce flour for sale after managers were satisfied all remaining pesticide had been removed.

21. At no point did Orkin report the incident to Alberta Environment and Parks. Orkin employees said they were not aware of an obligation to report this type of incident.

22. There is no evidence that any flour contaminated with pesticide was sold to consumers or that any person was harmed by the Magtoxin.

AGREED TO THIS 31st DAY OF August, 2017

Alex MacWilliam, Counsel for ORKIN CANADA CORPORATION

Peter Roginski, Crown Prosecutor