



Oregon

Theodore R. Kulongoski, Governor



February 2009

2005 - 2006 Pesticide Analytical and Response Center Legislative Report

Please find enclosed a copy of the 2005 - 2006 Legislative Report of the Pesticide Analytical and Response Center (PARC). This report covers the period July 1, 2005 through June 30, 2006.

Authority for PARC is contained in Oregon Revised Statutes - Chapter 634, specifically in ORS 634.550. PARC coordinates the response of eight state agencies to pesticide related incidents, and utilizes expertise from two additional agencies to evaluate these incidents.

The previous annual report for PARC was for calendar year 2001. Funding for PARC during the 2001 - 2003 biennium was withdrawn due to the financial situation of Oregon government. Also for financial reasons, no funding for PARC was provided for the 2003 - 2005 biennium. Funding was restored to PARC for the 2005 - 2007 biennium and continued for the 2007 - 2009 biennium. Reorganization of PARC began in July 2005, and has included development of a database and standardized procedures for the collection, evaluation and reporting of pesticide incident information.

Reports for 2006-2007 and for 2007-2008 are currently being drafted. These reports are expected to be completed before July 2009.

Any questions you may have regarding PARC or this report may be directed to me, or to the PARC Coordinator, Ms. Kathleen Harvey. Ms. Harvey's direct telephone is 503-986-6470.

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**PESTICIDE ANALYTICAL
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**JULY 2005 – JUNE 2006
LEGISLATIVE REPORT**



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Acronym Definitions

CROET	Center for Research on Occupational and Environmental Toxicology
DEQ	Department of Environmental Quality
DHS	Department of Human Services
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
MSDS	Material Safety Data Sheet
NIOSH	National Institute of Occupational Safety and Health
NPIC	National Pesticide Information Center
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OPHD	Oregon Public Health Division, DHS
OERS	Oregon Emergency Response System
OHSU	Oregon Health and Sciences University
OPC	Oregon Poison Center
OR-OSHA	Oregon Occupational Safety and Health Division
ORS	Oregon Revised Statutes
OSFM	Oregon State Fire Marshal
OSDP	Oregon State Department of Police
OSU	Oregon State University
PARC	Pesticide Analytical and Response Center
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

Executive Summary

The Pesticide Analytical and Response Center (PARC) is mandated to coordinate the response of eight state agencies to pesticide related incidents. It also has a responsibility to collect incident information, report investigation results, and evaluate mitigation measures or trends that may affect public health. This legislative report is a description of PARC activities from July 2005 through June 2006.

PARC lacked state funding for several years preceding July 2005; although the Oregon Department of Human Services, Public Health Division (OPHD) answered calls and helped people with pesticide related illnesses, it did not have funding to collect and track PARC cases or to develop annual reports. The last PARC legislative report was produced for fiscal year 2000-2001. In July 2005, funding for PARC was provided to the Department of Agriculture, which included funding to establish a part-time staff person to coordinate investigations and collect incident and case information. In September 2005 staffing was accomplished and development of new case criteria and investigative coordination achieved.

The PARC coordinator was immediately tasked to develop new criteria for classification of cases, develop a PARC specific database, and establish relationships with each of the investigative partners and PARC Board consultants. While the new case criteria were being developed, incidents were logged and investigated with the Board classifying only a few cases before the criteria was complete.

In 2007 and 2008, the Board began identifying and classifying cases according to the PARC criteria developed in 2006. All calls referred to PARC are considered incidents and reviewed according to the criteria. Incidents that occurred from July 2005 through June 2006 were determined to be cases based upon review and information available from each investigation.

During fiscal year 2005-2006, eighty-four (84) incidents were tracked by PARC. Thirty-five (35) of these incidents met the PARC case definition and were given certainty and severity indices by the Board.

For FY 2005-2006, the 35 incidents were identified as cases based upon the information available. Of these 35 cases, the PARC Board was unable to classify six according to the criteria due to insufficient information about symptoms experienced. According to the criteria, illness symptoms are used to identify consistency with exposure to a named pesticide.

Cases that involved people are divided into two designations. These are non-occupational, meaning that the person or persons were not working as employees when the event occurred and occupational, meaning that the person

or persons were conducting work activities as employees when the event occurred. There were eighteen non-occupational cases investigated and nine occupational cases investigated.

There were seven cases that involved environmental effects. These are any events where pesticides may have had an effect on wild animals, water or watersheds, soil or plants. Domestic animal information is collected and investigated, as well. In this fiscal period one case involved a pet.

Cases involving humans, domestic animals or the environment are classified by the following designations:

- ◆ Definite means that there are measured concentrations and a highly plausible exposure pathway with specific health effects, consistent with exposure to identifiable active ingredients;
- ◆ Probable means there is a highly probable and documented exposure pathway with health effects that are consistent with exposure to the known active ingredient(s);
- ◆ Possible means that there is uncertainty with respect to any likelihood of exposure, the circumstances or the consistency of the reported symptoms with relationship to the reported active ingredient(s);
- ◆ Unlikely means that the complaint or the majority of the reported symptom(s) is not consistent with the toxicology of the active ingredient(s) OR the time between exposure and onset or duration of symptoms is not consistent with the toxicology of the active ingredient(s) OR there is no plausible exposure pathway.
- ◆ Unrelated means not pesticide related; and,
- ◆ Exposure, no symptoms, means that there is verifiable exposure, but no symptoms exhibited.

Of the twenty-seven cases classified that involved people, there were no cases that were classified as definite, five cases classified as probable, seven classified as possible and one case classified as unrelated to pesticide exposure.

Of the same twenty-seven cases one was a death (unrelated), two were classified as a high severity illnesses, four were classified as moderate severity illnesses, ten were classified as low severity illnesses and one had no symptoms reported.

Of the seven environmental cases, five cases involved the confirmed death of over 40 Canada geese (various species) by the rodenticide, zinc phosphide. Coordinated investigations by the U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife, and Oregon Department of Agriculture did not find either a type of use or a particular crop where the geese received lethal doses of the pesticide.

Members of the PARC Board worked with state and federal agencies to develop required changes to the application of zinc phosphide to mitigate the impact of

agricultural applications to geese. These changes bar certain uses of the rodenticide at certain times of the year in specific crops. These application criteria are being tracked and evaluated by PARC for efficacy and possible further change.

In this report, charts are used to compare the last four reporting years' data, 1998-2002, with the 2005-2006 data. The charts allow the reader to compare information, however, it should be noted that data collection and tracking in 2005-2006 cannot always be directly compared to previous years' data.

The most important change to data collection in 2005-2006 is the development of the classification system. This system creates a systematic review of reported suspected pesticide effects. In prior years every report became a case, while in 2005-2006, a case is identified when certain specific information is available, adding depth to classification of pesticide effects reporting.

PARC Accomplishments for 2005–2006 include reorganization of the administrative program functions from the Oregon Department of Human Services to the Oregon Department of Agriculture; Memoranda of Understanding between agencies and contractual agreements with experts; website development and deployment; database development and the development and adoption of PARC case and incident definitions. The Board conducted multi-agency review of specific agency guidance and directives that had statewide impact when adopted.

Recommendations for follow up by the Board include timely reporting by state agencies, development of training programs for the public and health care providers and continued development of a statewide database. Further plans for PARC include accomplishing increased health care provider reporting.

ON JULY 1, 2005, THE PRIMARY RESPONSIBILITY FOR THE ADMINISTRATIVE FUNCTIONS OF THE PESTICIDE ANALYTICAL AND RESPONSE CENTER (PARC) WAS UNDERTAKEN BY THE OREGON DEPARTMENT OF AGRICULTURE. THE LEGISLATURE HAD SUSPENDED FUNDING FOR THIS PROGRAM FOR THE PREVIOUS TWO YEARS (JANUARY 2003-JUNE 2005).

THIS REPORT IS INTENDED TO MAKE PARC TRANSPARENT TO THE CITIZENS OF OREGON; HOW IT GATHERS INFORMATION, DETERMINES CASES AND IDENTIFIES WHETHER PESTICIDES HAVE ADVERSELY AFFECTED HUMAN BEINGS, PETS, WILDLIFE OR THE ENVIRONMENT, HOPEFULLY WITH THE RESULT THAT MORE REPORTING WILL HELP CREATE A SAFER PLACE FOR CITIZENS TO LIVE. THE FOLLOWING REPORT MEETS THE LEGISLATIVE REQUIREMENT AS STATED IN OAR 634.550.

THIS REPORT ADDRESSES INCIDENTS AND CASES FROM JULY 1, 2005 TO JUNE 30, 2006.

How The Pesticide Analytical and Response Center Functions

AUTHORIZATION, MEMBERSHIP, AND FUNDING

AUTHORIZATION

PARC was created by executive order in 1978. Senate Bill 740 was passed in 1991, reauthorizing the program into the Oregon Department of Agriculture (ODA) as OAR 634.550. Funds (General Funds) for operation of PARC were added to the ODA budget beginning with fiscal 2005.

MEMBERSHIP

Membership of the governing board consists of representatives of eight state agencies and one citizen of the state at large appointed jointly by the Director of Agriculture and the Director of Human Services.

The eight state agencies are:

- ❖ Department of Agriculture (ODA)
- ❖ Department of Human Services (DHS), Oregon Public Health Division (OPHD), Office of Environmental Public Health (OEPH)
- ❖ Department of Environmental Quality (DEQ)
- ❖ Department of Fish and Wildlife (ODFW)
- ❖ Department of Forestry (ODF)
- ❖ Oregon Occupational Safety and Health Administration (OR-OSHA)
- ❖ Oregon Poison Center (OPC)
- ❖ Oregon Office of State Fire Marshal (OSFM)

Several organizations provide expertise to the PARC Board as contracted consultants:

- ❖ The Center for Research on Occupational and Environmental Toxicology (CROET)
- ❖ The Environmental and Molecular Toxicology Department from Oregon State University (OSU)
- ❖ Oregon Department of Transportation (ODOT)

Representatives from ODA and OPHD alternate as PARC Board chair each calendar year, with ODA conducting chairperson activities during odd years and OPHD during even years. The Board meets every other month, beginning each year with a January meeting, to discuss incidents, cases and pesticide related topics.

FUNDING

For fiscal year 2005 – 2006, funding for PARC came from the General Fund to the Oregon Department of Agriculture.

- ❖ A 2005 interagency agreement between ODA and DHS authorizes 0.5 program staff person to be hired by DHS for the biennium. This staff is responsible for collecting medical records and interview people who are concerned about pesticides and/or possible pesticide illness or affects.
- ❖ One-half staff person is assigned by ODA to PARC as the program coordinator. This staff is responsible for database development, tracking incidents and cases, investigation coordination and tracking, Board meetings and Board reports.

Details of the 2005-2007 budget approved for PARC include:

ODA			
	Personnel	\$116,228	
	Services/Supplies	<u>37,121</u>	
	Sub-total	153,349	
OPHD		\$ 93,385	
OSU		50,681	
	Total		\$297,415

FUNCTIONS AND RESPONSIBILITIES

MANDATES

PARC is mandated by statute to perform the following activities when pesticide-related incidents result in suspected health or environmental effects:

- Collect incident information
- Mobilize expertise for investigations
- Identify trends and patterns of problems
- Develop policy or other recommendations for action
- Report results of investigations
- Prepare activity reports for legislative sessions

INVESTIGATION COORDINATION

The primary statutory function of PARC is to coordinate investigations and to collect and analyze information about reported incidents of health or environmental effects from possible pesticide exposure. PARC does not have regulatory or investigative authority. PARC cases address suspected pesticide effects to humans, pets, wildlife and the general environment as incidents to be tracked and investigated for possible pesticide involvement and for necessary changes to policies or interpretations of law.

PARC member agencies conduct most of the investigations and take necessary enforcement actions [Appendix IV – agency jurisdictions].

Investigation coordination includes:

- Collecting information from callers and distributing the information to member or interested agencies.
- Assigning a numerical incident tracking number for possible pesticide incidents where adverse health or environmental effects are claimed;
- Requesting investigation or collaboration by member or interested agencies;
- Assigning a numerical case number if the incident meets specific case criteria;
- Coordinating health information with OPHD;
- Consulting with a medical toxicologist from Oregon State University (OSU), if a case has a human impact;
- Collecting investigative reports and enforcement actions from other agencies.

Participants in incident or case investigations may include other government agencies that are not specifically mentioned in the PARC mandate. Some examples of those agencies are:

- Oregon State University Extension Service
- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- Oregon Department of Transportation

Cases investigated by other agencies are included in PARC review and evaluations for classification.

CLASSIFICATION OF CASES

When an incident is reported to PARC, an incident number is assigned. This incident number is used to track the incident from start to finish. Each incident is entered into a data management system and summarized for presentation to the PARC Board at each bimonthly meeting. All issues related to pesticide incidents are evaluated by the Board to meet the legislative mandate to identify trends, issues, and problems related to the use, handling, or application methods of pesticides.

If the incident meets specific criteria, it is issued a case number. The PARC Board classifies each case when the investigation(s) is complete. Each case is classified based on the probability that the case was pesticide related. A set of criteria has been developed to classify each case as to causality (see Appendix II).

Member agencies submit final case investigation reports to the PARC coordinator. These reports include any violations and/or enforcement actions and are routinely shared among agencies and with the PARC Board when classification of cases takes place.

The data developed from incidents and case investigations are analyzed and presented to the Oregon Legislature. Information collected by PARC is used to:

- 1) Identify the appropriate agencies to gain assistance during crisis;
- 2) Conduct training of other agencies to assure that critical information collection is accomplished;
- 3) Develop educational materials aimed at reducing exposures, and
- 4) Make recommendations to state and federal agencies regarding products and application practices with the aim of reducing acute pesticide poisonings.

Education of the public and other agencies is identified as key to collecting and substantiating exposure scenarios. Reporting delay inhibits the ability of PARC and individual agencies to gather adequate information, identify rule violations, and evaluate the relationship between reported exposures or environmental impacts.

Information collected by the PARC program is available and provided to the public, other agencies, and business interests, provided to the U. S. Environmental Protection Agency and the U. S. Fish and Wildlife Service when appropriate. These federal agencies combine PARC data with information from other states to identify possible national trends regarding pesticide products or uses. Upon request, pesticide product manufacturers, industry organizations, and public interest groups are also provided the information developed by PARC agencies and any conclusions that PARC has drawn from that information.

Information is disseminated to targeted groups through Power Point presentations at training seminars and meetings and through pesticide safety literature. The PARC program anticipates larger scale public and professional educational efforts as the program moves forward.

Analysis of 2005-2006 Data

INCIDENT REPORTS

During fiscal year 2005-2006, PARC recorded eighty-four (84) incidents that involved possible human health, pet or wildlife illnesses or environmental damage by pesticides.

Incidents are reported to PARC in a variety of ways. These may include reporting by the Oregon Poison Center, Oregon Department of Agriculture, Oregon Emergency Response System, Oregon Public Health Division, and other public agencies. Some other resources for reporting incidents are print and video media and interested members of the public as well as those parties who have been affected. PARC follows up on any allegations to confirm which agency should take the lead in the investigation and which agencies should be involved or notified.

Incident reports represent urban (indoor and outdoor), agricultural and forestry pesticide applications, pesticide spills, accidents, odor complaints, homeowner applications, and neighbor complaints. Included are incidents that cannot be substantiated, anonymous calls and odor concerns that may or may not have been associated with pesticides.

The following chart shows the breakdown of calls tracked by PARC as incidents from July 2005 through June 2006.

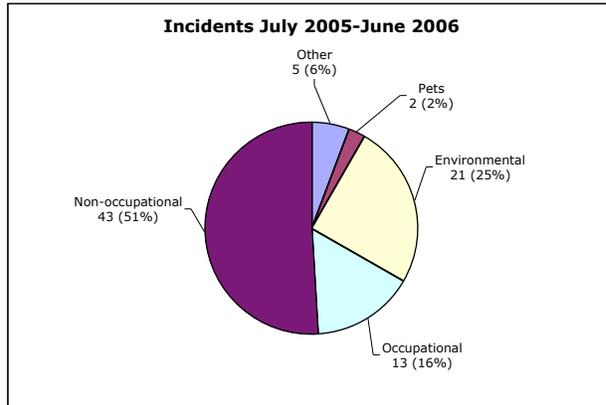


Figure 1: Incidents July 2005-June 2006

Incidents tracked in the category “other” are calls or events that cannot be classified into any specific category. An example of this is an event reported in the media of schoolgirls who intentionally put rat pellets in another girl’s milk at school. The intended victim did not ingest the pesticide. The Board was interested in tracking this incident over time, so it was added to the incident list but not assigned a case number or classified as a case.

In some incidents, further information cannot be collected for a variety of reasons. Some of these reasons are:

- Caller does not return calls from investigators
- No pesticides can be determined to be involved
- Other causes are found for symptoms or issues of the caller
- No cause can be determined
- Caller is reporting an incident from months or years prior to call

CASE REPORTS

Thirty-five incidents (40%) of a total of 84 incidents were issued case numbers:

- Seven cases were environmental
- One case was a pet dog
- Twenty-seven cases involved people. Of these, eight cases could not be classified due to lack of information.

Human Cases:

Twenty-seven cases (77%) were reported as human illnesses. Sixty people were the focus of these twenty-seven cases. Nine cases (30%) were occupational,

with a total of forty people involved or affected. Nineteen cases were non-occupational, with a total of twenty persons involved or affected.

Forty people total were involved in the eight case investigations that were job related. Twenty-one employees were involved in just one of these. No employees were working as applicators in any of these cases.

Eight cases could not be classified due to insufficient information regarding symptoms.

Environmental Cases:

There were seven environmental cases investigated and classified during July 2005- January 2006.

Five of these cases were related to the deaths of Canada Geese (*brantus Canadensis sp.*), caused by the rodenticide zinc phosphide. These geese are a protected species under the Federal Migratory Bird Treaty Act. The Oregon Department of Agriculture, the U.S. Fish and Wildlife Service, and the Oregon Department of Fish and Wildlife investigated the legal and possible illegal uses of zinc phosphide in the Willamette Valley. Although no definitive answers were found to determine how pesticide was being applied, several changes to the rules for application of zinc phosphide in agricultural areas of the state were made. These changes are expected to reduce the numbers of affected geese. PARC continues to watch this carefully.

An herbicide drift from a commercial application caused the death of endangered plants on the William L. Finley National Wildlife Refuge. Investigation and sampling found drift had occurred and led to the company conducting restoration as required by the U.S. Fish and Wildlife Service and fines levied by the Oregon Department of Agriculture.

An environmental case involving a pond where all of the fish were found dead was investigated for impacts of nearby pesticide applications to those fish. An application of pesticides near the pond, pesticides leaching from nearby fields and, the pesticide that was directly applied to the pond were all ruled out as the cause of the fish dying. The most likely cause was a lack of dissolved oxygen.

2005-2006 Classification

Case classification is a conclusion based upon investigation by authorized agencies and toxicological determinations of the correlation between known pesticides and symptoms exhibited by people or domestic animals or the wildlife/environmental effects. Classification includes two parameters 1) the certainty index and 2) the severity index.

- a. The certainty index is a gauge used to measure how closely symptoms and exposure scenario match the expected symptoms or effects of exposure to the known pesticide symptoms.
- b. The severity index is a gauge for measurement of the severity reported illness or environmental effects.

Appendix II, found on page 28, contains the incident and case criteria upon which the following classifications are based.

All Cases:

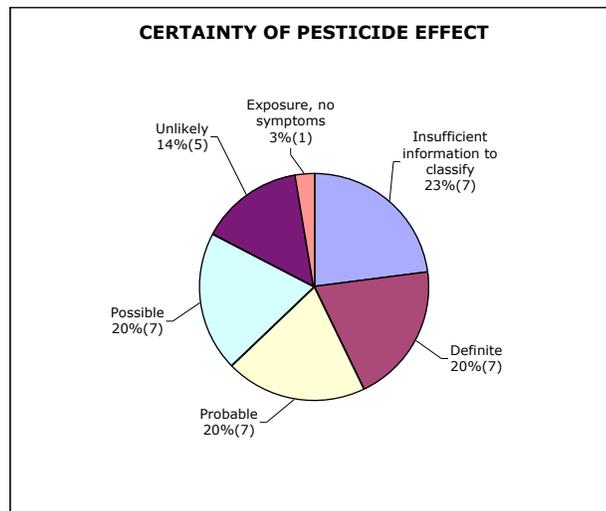


Figure 2: All Cases- Certainty

There was insufficient information to classify the certainty of eight (23%) of the 35 cases. Of these 35, seven (20%) of the cases were classified with a definite certainty of pesticide exposure. All seven of these were environmental cases, with measured concentrations of specific pesticide(s), a highly plausible exposure pathway and specific effects consistent with exposure to the active ingredients. Seven cases (20%) were classified with probable certainty of pesticide exposure leading to specific effects, with seven cases (20%) classified as a possible certainty of pesticide exposure leading to specific effects, five cases (14%) classified with a certainty of unlikely to have been caused by pesticides, and one case (3%) was classified as unrelated to pesticides.

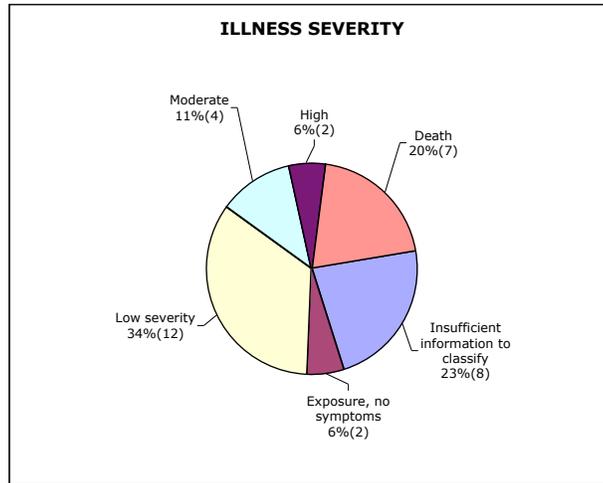


Figure 3: All Cases - Severity

Of these 35, eight cases (23%) were not classified as there was insufficient information to classify the severity of the illnesses, two cases (6%) had no symptoms exhibited after exposure, twelve cases (34%) were classified as low severity symptoms, four cases (11%) were classified as moderate severity symptoms, two cases (6%) were classified as high severity, and seven cases (20%) were classified as they resulted in death. Of the seven cases that resulted in death, six were confirmed pesticide related environmental cases; one was a human death that was found to be unrelated to pesticides.

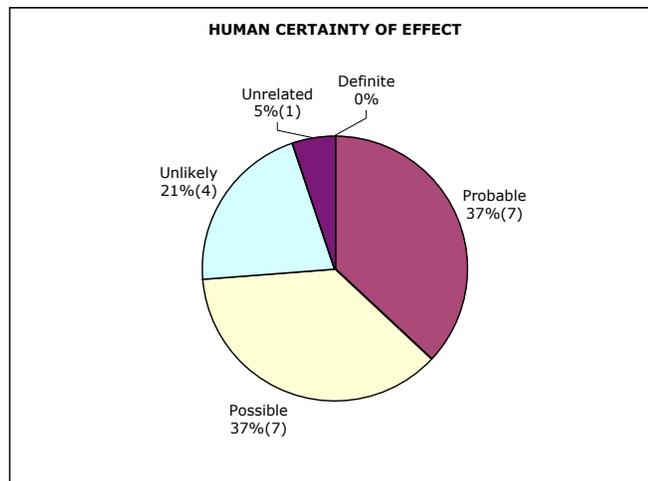


Figure 4: Human Cases – Certainty

Of these 35, there were no human cases where the certainty could be assigned as definite, seven cases (37%) were classified as probable, seven cases (37%) were classified as possible, four (21%) classified as unlikely and one (5%) classified as not pesticide related.

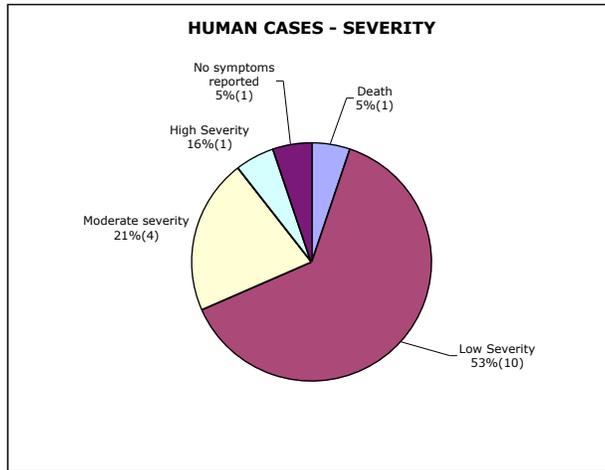


Figure 5: Human Cases – Severity

One case (5%) involved the death of a child, three cases (16%) were classified as high severity illnesses, four cases (21%) were considered to be of moderate severity, ten cases (53%) were of low severity and in one case (5%) there were no symptoms exhibited. It is important to note that the severity classification is not tied to the certainty classification, because the severity is specifically based upon the illness symptoms exhibited.

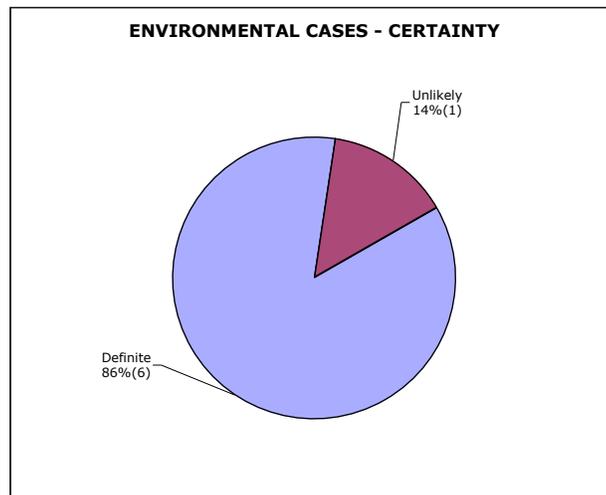


Figure 6: Environmental Cases – Certainty

Seven environmental cases were investigated and classified by the Board. Six environmental cases (86%) were definitely linked to the use of pesticides. One environmental case (14%), although of high severity, was classified as unlikely to have been caused by pesticides.

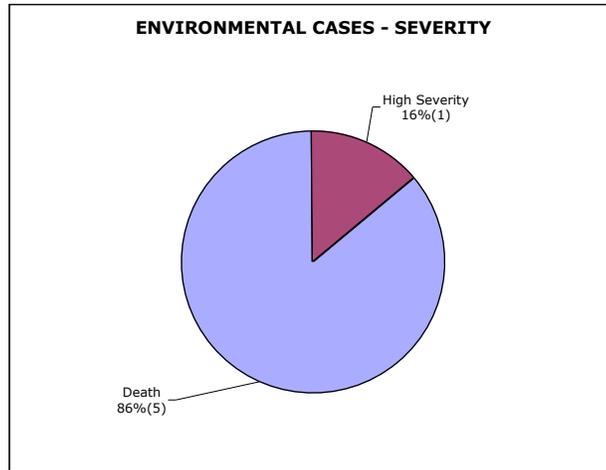


Figure 7: Environmental Cases – Severity

Of the six environmental cases investigated due to wildlife or plant life deaths attributed to pesticides, five (84%) resulted in the death of wildlife, with one case (16%) identified as having high severity symptoms to an endangered plant species.

Comparison with Previous Years

Following are comparison charts of the last five PARC reporting years with the 2005-2006 data. There are some areas where it is not possible to make direct comparisons between data sets. During previous years, every call was considered an exposure to pesticides and was classified according to National Institute of Occupational and Safety and Health (NIOSH) criteria. The new PARC criteria, initially used in 2005-2006, require investigation and medical records to confirm pesticide applications, type of pesticide and symptoms.

Table 1 Calls to PARC

Calls	1997	1998	1999	2000	2001	2002- June 05	July 05 – July 06
Total suspected incidents reported			118	200	213	PARC activities not funded	186
Incidents reviewed	69	60	46	95	73		84
Cases	69	60	46	95	73		35
# People involved	131	93	110	172	128		62
Children					23		
Animals	3	1	3	11	2		6
Environ.		3	4				2

All incidents tracked

Some differences in data collection between years can be seen in the chart above and the chart below. However, the data is essentially the same for incident reporting by agencies. Starting in 2005, all incidents were reviewed using PARC case criteria, with case numbers assigned and further investigation of those incidents with sufficient information available to determine if pesticides were involved in any reported illness.

Table 2 Incident Reporting

Agency	1997	1998	1999	2000	2001	2002- June 05	July 05 – June 06
OPC	13	16	12	39	25	PARC activities not funded	152
PARC	24	6	6	12	21		9
ODA	9	11	8	24	11		40
OERS	4	3	2	7	4		3
Workers Comp.			2	3	3		
ODF					2		1
ODFW							1
Local Health Dept.	3	2	2	1	2		
Health Care Provider	4	9	9	5	2		
OR- OSHA	4	3		2	1		4
DEQ	1	1	2	1			3
Medical Examiner	2						
NPIC	1	3					
Wash. State Health	1						
OPHD							6
USFWS							8
State Police							1
Other	6	6	3	1	2		2
Total	72	60	46	95	73		230

All reported incidents

Table 3 Type of Health Care

Type	1997	1998	1999	2000	2001	2002 – June 05	July 05 – June 06
None	63	11	52	41	54	PARC not funded	11
Consult	3	2	1	12	12		
Office	36	44	25	13	29		7
ER	15	31	15	16	29		
Hospital	5		3	6	4		1
Onsite care			1	8			4
Unknown		1	3	4			8
Other	9	4					

Type of health care sought by persons reporting exposure

Table 3 documents the information captured during reporting years. The information collected in 2005-06 did not regularly include the type of health care obtained.

Table 4 Occupational by Activity/Number of Individuals

Activity	1997-98	1999-00	2001	2002 – June 05	July 05 – June 06
Routine Work	53 (71%)	77 (78%)	19 (68%)	PARC not funded	44 (98%)
Related to Application	16 (21%)	18 (18%)	9 (32%)		
Emergency Response	4 (5%)	3 (3%)			
Other	2 (3%)				1 (2%)
TOTAL	75	98	28		45

Occupational Reports by Activity

In Table 4, 98% of the callers reporting symptoms were conducting routine work duties not associated with applying, mixing, loading, or handling pesticides.

Table 5 Occupational by Site/Number of Individuals

Site	1997-98	1999-00	2001	2002 – June 05	July 05 – June 06
Business	17 (23%)	49 (51%)	7 (25%)	PARC not funded	3(7%)
School	6 (8%)	8 (8%)	4 (14%)		1 (2%)
Construction		15 (15%)	4 (14%)		
Road		6 (6%)	3 (11%)		
Golf			1 (4%)		
Fm/Nursery	22 (30%)	18 (18%)	9 (32%)		30 (67%)
Institution	11 (15%)	2 (2%)			6 (13%)
Industrial	5 (7%)				2 (4%)
Forestry	6 (8%)				
Other	8 (9%)				3 (7%)
TOTAL	75	98	28		45

Occupational reports by site

In Table 5 the largest number of individuals reported being affected were at agricultural sites. None of these individuals were applying pesticides, but may have been affected by applications near them or by handling treated agricultural product(s).

Table 6 Non-Occupational by Activity/Number of Individuals

Activity	1997-98	1999-00	2001	2002 – June 05	July 05 – June 06
Intentional				PARC not funded	
	6 (4%)	2 (1%)	1 (1%)		1 (1%)
Application	11 (7%)	24 (13%)	10 (10%)		
Outdoors	64 (43%)	68 (37%)	24 (24%)		12 (70%)
Indoor	67 (45%)	86 (47%)	64 (64%)		4 (23%)
Spill/Dispose	1 (1%)	4 (2%)	1 (1%)		1 (6%)
TOTAL	149	184	100		18

Non-Occupational by Activity

Table 6 shows that the greatest number of reported non-occupational cases was associated with outdoors applications of pesticides.

Table 7 Non-Occupational by Site/Number of Individuals

Sites	1997-98	1999-00	2001	2002 – June 05	2005-06
Residence	109 (73%)	128 (70%)	84 (84%)	PARC not funded	15 (88%)
Road/trail	3 (2%)	13 (7%)	6 (6%)		1 (6%)
School	19 (13%)	28 (15%)	2 (2%)		1 (6%)
Service			2 (2%)		
Farm	8 (5%)	2 (1%)	1 (1%)		
Forest	3 (2%)	2 (1%)	1 (1%)		
Institution	4 (3%)				
Other	3 (2%)	11 (6%)	4 (4%)		
TOTAL	149	184	100		17

Non-Occupational by Site

Table 7 shows that the largest number of reported non-occupational cases occurred in or around residences in 2005-06.

Table 8 Counties where Cases Originated

County	2005	2006	Total (%)
Benton		3	3 (8.6%)
Clackamas	1	1	2 (5.7%)
Jackson	2		2 (5.7%)
Lake		1	1 (2.9%)
Lane	2	5	7 (20%)
Linn		1	1 (2.9%)
Marion	3	4	7 (20%)
Multnomah	2	4	6 (17%)
Umatilla	1		1 (2.9%)
Washington	2		2 (5.7%)
Yamhill	3		3 (8.6%)

Counties where cases occurred

Table 8 shows that Lane, Marion and Multnomah are the counties with the largest number of cases in 2005 - 2006.

It is sometimes difficult to draw direct comparisons between years, because criteria have been added or deleted that may not have been tracked. However, some generalizations can be made based upon the data available.

- Occupational exposures often occur to employees that are affected indirectly by a pesticide application. An example of this is an office where an application was made and the office workers smell an odor or exhibit symptoms they feel are associated with a pesticide application in their vicinity.

- The worksite where people are affected most often is on agricultural operations. However, most of these people are affected by applications that are ancillary to their work.
- Non-occupational exposures most often occur in or near the residence of a reporter from an application on another property, by a family member or by the affected person.
- Non-occupational exposures near residences most often occur outside the residence.
- Companion animal exposures often occur due to poor application techniques of rodenticides.
- Wildlife exposures most often occur as accidental exposure to broadcast applications of rodenticides.

ACCOMPLISHMENTS

Prior to the reorganization of PARC, from 2001 through June 2005, there was sporadic tracking of calls or cases as there was no funding for this program. Beginning in June 2005, with administration provided by the Oregon Department of Agriculture, several organizational processes were developed. These included the:

1. Development of Memoranda of Understanding between member agencies and PARC (Appendix V) to clarify roles and expectations;
2. Development of contracts with Oregon State University and Oregon Health and Sciences University for medical and toxicological assistance with cases (Appendix V), to clarify roles and to have immediate assistance when necessary;
3. Development and deployment of a website both to inform the public and to post important benchmarks of PARC; and,
4. Development of database criteria and cross-reference information for agency investigations to standardize information across agencies; and,
5. Contractual negotiations with a database contractor to develop the criteria into a useable database by December 2006.

Additionally, the Board functioned as a multi-agency forum for environmental and public issues. These included review and comment on overarching regulatory issues, including:

- ◆ DEQ “Guidance for Evaluating Residual Pesticide Levels on Land formerly Used for Agricultural Production, a document that affects all landowners, statewide;

- ◆ Coordination of technical outreach to Polk County residents, by all PARC agencies, which included investigation coordination of three regulatory agencies, public meetings, and cross-agency coordination with Federal agencies;
- ◆ Acting as a multi-agency resource to the Oregon Department of Forestry to develop the statewide ODF Hazardous Materials Response Directive that affects all responses by ODF personnel.

Programmatic improvement included:

- ◆ Development of PARC case and incident definitions (Appendix II);
- ◆ Adding a clear coordination component to clarify roles of each agency and of the Board;
- ◆ Development of training modules and posters for member agencies and existing public training venues;
- ◆ Production of educational Power Points for web-site based distribution to the public;
- ◆ Outreach to member agency staff.

Issues and Recommendations

Pesticide is a generic term for any product that kills, inhibits or mitigates living organisms. As such, herbicides, antimicrobials, rodenticides, insecticides, acaricides (kills spiders), moss killers, disinfectants, home foggers, and anti-bacterial skin products (to name only a few) are all registered with the U.S.EPA as pesticides.

Compliance with all aspects of the pesticide label is the law. Pesticide products are designed, registered, and labeled to affect target organisms and may have negative effects when used incorrectly. All persons, whether contracting a pesticide application to their home or business or applying a pesticide themselves, should read and understand the entire label of any pesticide being applied. The label always includes storage recommendations, aeration requirements, mixing and application techniques, and precautions to take to protect the applicator, the environment and others who might be near the application.

Anyone who is involved in using pesticides of any type should have the phone number of the local poison center posted prominently in their home.

The National Pesticide Information Center (NPIC) is available five days a week, eight hours a day, Pacific Coast time for questions, concerns and referrals and should be used by anyone who has questions or concerns about pesticides. The phone number for NPIC is 1-800-858-7378.

The PARC Board has requested that the coordinator continue to follow issues developed during incidents and case review. These include problems related to

pesticide uses and use changes or concerns that have a potential to cause issues in the future. Additionally, PARC may make recommendations or propose policy changes to Board member agencies.

- ◆ Issue: Reduced health care provider reporting of pesticide incidents.

Limited sampling shows that health care providers and public agencies are not reporting at a level that would be expected.

Recommendation:

Develop a plan to increase health care provider education about pesticides, support training in existing venues about pesticide illness reporting, and use current resources through the Department of Human Services to remind health care providers of the responsibility to report.

- ◆ Issue:

Timeliness of investigative reports from other agencies.

Recommendation:

As the Coordinator continues to identify untimely reporting, work within each agency to assure that investigations and reporting are done in a timely manner.

APPENDIX I

WHAT IS A PESTICIDE?

A pesticide is any substance or mixture of substances intended for:

- preventing,
- destroying,
- repelling, or
- mitigating any pest.

Though often misunderstood to refer only to insecticides, the term pesticide also applies to herbicides, fungicides, and various other substances used to control pests.

Under United States law, a pesticide is also any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

The term “Pesticide” Includes:

Pesticides that are related because they address the same type of pests:

ALGAECIDES

Control algae in lakes, canals, swimming pools, water tanks, and other sites.

ANTIFOULING AGENTS

Kill or repel organisms that attach to underwater surfaces, such as boat bottoms.

ANTIMICROBIALS

Kill microorganisms (such as bacteria and viruses).

ATTRACTANTS

Attract pests (for example, to lure an insect or rodent to a trap). (However, food is not considered a pesticide when used as an attractant.)

BIOPESTICIDES

Biopesticides are certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals.

BIOCIDES

Kill microorganisms.

DISINFECTANTS AND SANITIZERS

Kill or inactivate disease-producing microorganisms on inanimate objects.

FUNGICIDES

Kill fungi (including blights, mildews, molds, and rusts).

FUMIGANTS

Produce gas or vapor intended to destroy pests in buildings or soil.

HERBICIDES

Kill weeds and other plants that grow where they are not wanted.

INSECTICIDES

Kill insects and other arthropods.

MITICIDES

Kill mites that feed on plants and animals.

MICROBIAL PESTICIDES

Microorganisms that kill, inhibit, or out compete pests, including insects or other microorganisms.

MOLLUSCICIDES

Kill snails and slugs.

NEMATOCIDES

Kill nematodes (microscopic, worm-like organisms that feed on plant roots).

OVICIDES

Kill eggs of insects and mites.

PHEROMONES

Biochemicals used to disrupt the mating behavior of insects.

REPELLENTS

Repel pests, including insects (such as mosquitoes) and birds.

RODENTICIDES

Control mice and other rodents.

The term pesticide also includes these substances:

DEFOLIANTS

Cause leaves or other foliage to drop from a plant, usually to facilitate harvest.

DESICCANTS

Promote drying of living tissues, such as unwanted plant tops.

INSECT GROWTH REGULATORS

Disrupt the molting and maturity from pupal stage to adult, or other life processes of insects.

PLANT GROWTH REGULATORS

Substances (excluding fertilizers or other plant nutrients) that alter the expected growth, flowering, or reproduction rate of plants.

Types of Pesticides

Pesticides are often referred to according to the type of pest they control. Another way to think about pesticides is to consider those that are chemical pesticides or are derived from a common source or production method. Other categories include biopesticides, antimicrobials, and pest control devices.

Chemical Pesticides

Some examples of chemically related pesticides follow. Other examples are available in sources such as Recognition and Management of Pesticide Poisonings.

- ◆ Organophosphate Pesticides – These pesticides affect the nervous system by disrupting the enzyme that regulates acetylcholine, a neurotransmitter. Most organophosphates are insecticides developed during the early 19th century. Their effects on insects, which are similar to their effects on humans, were discovered in 1932.
- ◆ Carbamate Pesticides affect the nervous system by disrupting an enzyme that regulates acetylcholine, a neurotransmitter. The enzyme effects are usually reversible. There are several subgroups within the carbamates.
- ◆ Organochlorine Insecticides were commonly used in the past, but many have been removed from the market due to their health and environmental effects and their persistence (e.g. DDT and chlordane).
- ◆ Pyrethroid Pesticides were developed as a synthetic version of the naturally occurring pesticide pyrethrin, which is found in chrysanthemums. They have been modified to increase their stability in the environment. Some synthetic pyrethroids are toxic to the nervous system.

Biopesticides

Biopesticides are certain types of pesticides derived from natural materials such as animals, plants, bacteria, and certain minerals. For example, the food additives canola oil and baking soda can be used as pesticides when they are used to kill or mitigate pests and are considered biopesticides at that time. Biopesticides fall into three major classes:

- ◆ Microbial pesticides consist of microorganisms (e.g., a bacterium, fungus, virus or protozoan) as the active ingredient. Microbial pesticides can control many different kinds of pests, although each separate active ingredient is relatively specific for its target pest[s]. For example, there are fungi that control certain weeds, and other fungi that kill specific insects.

The most widely used microbial pesticides are subspecies and strains of *Bacillus thuringiensis*, or Bt. Each strain of this bacterium produces a different mix of proteins, and specifically kills one or a few related species of insect larvae. While some Bt's control moth larvae found on plants, other Bt's are specific for larvae of flies and mosquitoes. The target insect species are determined by whether the particular Bt produces a protein that can bind to a larval gut receptor, thereby causing the insect larvae to starve.

- ◆ Plant-Incorporated-Protectants (PIPs) are pesticidal substances that plants produce from genetic material that has been added to the plant. For example, scientists can take the gene for the Bt pesticidal protein, and introduce the gene into the plant's own genetic material. Then the plant, instead of the Bt bacterium, manufactures the substance that destroys the pest. EPA regulates the protein and its genetic material, but not the plant itself.
- ◆ Biochemical pesticides are naturally occurring substances that control pests by non-toxic mechanisms. Conventional pesticides, by contrast, are generally synthetic materials that directly kill or inactivate the pest. Biochemical pesticides include substances, such as insect sex pheromones, that interfere with mating, as well as various scented plant extracts that attract insect pests to traps. Because it is sometimes difficult to determine whether a substance meets the criteria for classification as a biochemical pesticide, EPA has established a special committee to make such decisions.

Appendix II Incident and Case Criteria

In order for PARC to coordinate the investigation of a pesticide related incident, it must meet one of the following criteria and sufficient information for coordination of investigations must be available:

Human Health Complaint:

- 1) A suspected or confirmed pesticide poisoning reported by a health care provider; or
- 2) An illness related to a recent pesticide exposure reported by an individual, where sufficient information is provided to suspect pesticides as a possible cause.

Animal Health Complaint (Includes companion animals and wildlife):

- 1) A suspected or confirmed pesticide poisoning reported by a health care provider; or
- 2) A recent pesticide exposure event reported by an individual, where veterinary assistance was sought and sufficient information is supplied to suspect pesticides as a possible cause, or
- 3) Multiple animal deaths where pesticides are a suspected cause.

Environmental Contamination:

- 1) Documented or potential environmental damage from a pesticide fire, spill, or incident, of sufficient magnitude to cause animal effects, or potential public health impacts.

When PARC is not provided with sufficient information to coordinate an investigation, the information is tracked as an incident report. Incidents are tracked if any allegations are made that a pesticide may be involved in the illness of a human or pet, causing harm to the environment, or spilled or released into the environment. This includes odor complaints, concerns about the environment in general, container issues or any time it is initially felt that pesticides are causing harm.

Additionally, when PARC acts as a consultant for public agencies or the public, the call may be tracked as an incident. This is done when, in the opinion of the PARC Coordinator, it may be an issue the Board might want to consider.

Each pesticide related incident that meets the criteria for investigation coordination is assigned an incident number AND a case number.

Appendix II Incident and Case Criteria

A case number may be issued to an incident that, upon further investigation, does not meet case criteria. These cases may be classified with the designation “Insufficient information to classify”.

The PARC Coordinator and appropriate state department(s) investigate all incidents to determine if they meet PARC Case criteria. When an incident does not meet case criteria, the findings are logged and the incident closed. Important incident findings are tracked and reviewed for valuable information on trends or patterns of problems associated with pesticide use.

CASE CLASSIFICATION CRITERIA

Every case is subject to review and classification by the PARC Board. Two indices are used during this classification review: certainty and severity.

Certainty Index (CI):

A human or domestic animal case requires a reported pesticide active ingredient and a reported exposure or possible exposure. The facts of the case must answer the question “Were the reported impacts caused by the reported exposure to pesticides?”

- Definition of the certainty indices for humans and domestic animals (companion animals, pets) are as follows:

CI = 1 Definite

Measured concentration(s), with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredient(s).

CI = 2 Probable

A clearly documented and highly plausible exposure pathway with health effects that is consistent with exposure to the active ingredient(s). A single, non-specific symptom (headache, nausea) is generally insufficient to classify with this certainty index.

CI = 3 Possible

There is uncertainty with respect to the likelihood of exposure, the circumstances surrounding the exposure, or the consistency of the reported symptoms based upon the reported active ingredient(s). Inconsistent symptoms with the known toxicology of the active ingredient are sufficient to move a classification to CI 4.

Appendix II Incident and Case Criteria

CI = 4 Unlikely

The primary complaint or the majority of the reported symptom(s) is not consistent with the toxicology of the active ingredient(s) or the time between exposure and onset or duration of symptoms is not consistent with the toxicology of the active ingredient(s) or there is no plausible exposure pathway.

CI = 5 Unrelated

Not pesticide related – requires corroboration of “Unrelated” classification from a qualified health care professional involved in the case.

CI = 0 Exposure, No symptoms

There is verifiable exposure, but no symptoms.

An environmental PARC Case requires reported active ingredients and reported exposure or possible exposure. The facts of the case must meet minimum criteria as follows:

- Wildlife, other non-target organisms (bees, fish, invertebrates, etc) indices are as follows:

CI = 1 Definite

Pesticide was confirmed as the cause through residue analysis or other reliable evidence, or the circumstances of the incident along with knowledge of the pesticide’s toxicity or history of previous incidents give strong indication that this pesticide was the cause.

CI = 2 Probable

Circumstances of the incident and properties of the pesticide indicate that this pesticide was the cause, but confirming evidence is lacking.

CI = 3 Possible

The pesticide possibly could have caused the incident, but there are possible explanations that are at least as plausible. Often used when organisms may have been exposed to more than one pesticide.

CI = 4 Unlikely

Evidence exists that a stressor other than exposure to a pesticide caused the incident, but that evidence is not conclusive.

CI = 5 Unrelated

Conclusive evidence exists that a stressor other than exposure to a pesticide caused the incident.

Appendix II Incident and Case Criteria

CI = 0 Exposure, no symptoms

A potentially significant exposure was documented, though no symptoms were reported due to mitigating circumstances, efficient clean up or rescue.

- Groundwater, surface water and drinking water detection indices are as follows:

CI = Major

A pesticide is detected at levels greater than the maximum contaminant level (MCL), health advisory level (HAL), or another applicable criterion for ambient water quality.

CI = Moderate

A pesticide is detected at levels greater than 10 percent but does not exceed the MCL, HAL, or another established criterion for ambient water quality.

CI = Minor

A pesticide is detected at levels less than 10 percent of the MCL, HAL, or another established criterion OR a pesticide is detected but there is no established level of concern.

Criteria consistency with Federal programs and expanded definitions are available in Exhibit 4, PARC Case Criteria.

Severity Index (SI):

The severity index was designed only for humans, though PARC applies this index to domestic animals and wildlife as well. For domestic animals and wildlife the symptoms indicated in the definitions guide the selection of the severity index for each case.

This index provides standardized criteria to ensure uniformity, with the recognition that it cannot address all situations. It is a flexible standard needing the user to employ judgment and experience when assigning severity.

SI =1 Death

This category describes a human fatality resulting from exposure to one or more pesticides.

SI = 2 High severity illness or injury

The illness or injury is severe enough to be considered life threatening and typically requires treatment. This level of effect commonly involves hospitalization to prevent death. Signs and symptoms include, but are not limited to, coma, cardiac arrest, renal failure and/or respiratory depression.

Appendix II Incident and Case Criteria

The individual sustains substantial loss of time (greater than 5 days) from regular work or normal activities. This level of severity may include the need for continued health care following the exposure event, prolonged time off of work, and the limitations or modification of work or normal activities.

SI = 3 Moderate severity illness or injury

This category includes cases of less severe illness or injury often involving systemic manifestations. Generally, treatment is provided. The individual is unable to return to normal functioning without any residual disability. Usually, less time is lost from work or normal activities (greater than 3 and less than 5 days). Effects may persist but no residual impairment is present.

SI = 4 Low severity illness or injury

This is the category of lowest severity. It is often manifested by skin, eye or upper respiratory irritation. It may also include fever, headache, fatigue or dizziness. Typically the illness or injury resolves without treatment. There is minimal lost time (less than 3 days) from work or normal activities.

SI = 5 No symptoms reported

This category is used for cases that the PARC Board or staff chooses to designate as a case for tracking purposes. They may highlight a risk or potential risk for future review.

In 2005-2006, the PARC Classification criteria were not available to the PARC Board. During development of this report, incidents that fit the case criteria were assigned a case number and researched to collect all investigative findings. These investigative findings were then used to assign a set of indices for each case, or to determine that there was insufficient information to classify it.

Appendix III
CASE SUMMARIES

Case # 050001

Washington County

Non-Occupational

One person

Type of Care: Hospitalization

Certainty Index: 4, (Unlikely) Evidence suggests that a stressor other than exposure to this pesticide caused the incident.

Severity Index: 2, (High severity illness or injury)

Product Type: Insecticide/Acaracide

Product: fipronil, deltamethrin

Professional outdoor application to a home and yard with no violations found by ODA.

Case # 050002

Clackamas County

Non-Occupational

One person

Type of Care: Health Care Provider (Office)

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE

Product Type: Insecticide

Product: bifenthrin

ODA found administrative violations to the professional application to the exterior of a duplex. No application violations were documented.

Although there is a temporal relationship between the application and the alleged illness, there are no medical records or listing of symptoms available for this case.

Case # 050003

Lane County

Non-Occupational

One person

Type of Care: Health Care Provider (Office)

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE

Product Type: Herbicide

Product: glyphosate

An apartment complex applied herbicides to common areas. No violations were found by ODA regarding the use of the glyphosate.

APPENDIX III CASE SUMMARIES

Case # 050004

Multnomah County

Occupational

Seven people

Type of Care: None

Certainty Index: 2, (Probable)

Severity Index: 4, (Low severity illness or injury)

Product Type: algaecide/moss control

Product: Technical grade sodium hypochlorite (65%)

Technical grade sodium hypochlorite is not registered as a pesticide, but was being used to mitigate moss on the roof of a commercial building. The company that was applying the material was not a licensed commercial pesticide applicator. A Notice of Violation was issued for licensing violations by ODA.

Case # 050005

Jackson County

Non-Occupational

One person

Type of Care: None

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE

Product Type: Termiticide/Insecticide

Product: lindane (cancelled pesticide)

A homeowner used a cancelled insecticide around the perimeter of a house. Although there is a temporal relationship between the application and the illness onset, there are no medical records or listing of symptoms available for classification of this case.

Case # 050006

Yamhill County

Environmental – Fish Kill

Certainty index: 4, (Unlikely): Evidence suggests that a stressor other than exposure to this pesticide caused the incident.

Severity index: 1, (Death)

Product Type: Insecticide

Product: esfenvalerate

Investigation of the application, sampling of the pond, fish, and weeds all found no contamination by pesticides and no violations of the law.

This incident met the criteria for a PARC Case due to the proximity of a pesticide application to the pond and the severity of the actual environmental harm (fish kill).

APPENDIX III CASE SUMMARIES

Case # 050007

Marion County

Environmental – Wildlife

Certainty Index: 1, (Definite) Measured concentration(s) with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredient(s).

Severity Index: 1, (Death)

Product Type: Rodenticide

Product: zinc phosphide

Sampling and analysis by Michigan State University confirmed that geese had consumed and been killed by zinc phosphide, a rodenticide bait.

The investigation was unable to discover the source of the rodenticide.

Case # 050008

Multnomah County

Pets – Dog

Certainty Index: 1 (Definite) Measured concentrations(s) with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredients(s).

Severity Index: 3 (Moderate) Less severe illness or injury with treatment.

Product Type: Rodenticide

Product: bromadiolone

A professional applicator applied a rodenticide to the property of the complainant.

The dog ate a block of the rodenticide and was taken to the veterinarian where it was diagnosed and treated for bromadiolone poisoning.

Case # 050009

Washington County

Environmental – Wildlife

Certainty Index: 1(Definite) Measured concentrations(s) with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredients(s).

Severity Index: 1(Death)

Pesticide Type: Rodenticide

Product: zinc phosphide

Zinc phosphide was confirmed as the cause of death for multiple geese found at one site. No site of application was found.

APPENDIX III CASE SUMMARIES

Case # 050010

Yamhill County

Non-Occupational

One person

Type of Care: Health Care Provider (Office)

Certainty Index = 4, (Unlikely) Evidence exists that a stressor other than exposure to pesticides caused the incident. Observed symptoms were unrelated to pesticide exposure/toxicity resulting from the application of pesticide(s).

Severity Index = 3, (Moderate)

Pesticide Type: Herbicide

Product: trichlopyr, dimethylamine salt of 2,4-Dichlorophenoxyacetic acid

No violations of pesticide laws were found by ODA.

Case # 050011

Jackson County

Occupational

One person

Type of Care: Emergency Medical Care

Certainty Index: 2, (Probable)

Severity Index: 3, (Moderate)

Pesticide Type: Herbicide

Product: dicamba, mecoprop, 2, 4-D

Citations were issued by OR-OSHA for lack of employee training, lack of health hazard control measures, lack of a hazard communication program, and the lack of Material Safety Data Sheets (MSDS).

Case # 050012

Marion County

Environmental – Wildlife

Certainty Index: 1 (Definite) Measured concentrations(s) with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredients(s).

Severity Index: 1 (Death)

Pesticide Type: Rodenticide

Product: zinc phosphide

Sample analysis confirmed that zinc phosphide was the cause of death of the geese. No site of application could be found.

Case # 050013

Marion County

Environmental – Wildlife

Certainty Index: 1 (Definite) Measured concentrations(s) with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredients(s).

Severity Index: 1 (Death)

Pesticide Type: Rodenticide

Product: zinc phosphide

Sample analysis confirmed that zinc phosphide was the cause of the death of the geese. No site of application could be found.

APPENDIX III CASE SUMMARIES

Case # 050014

Yamhill County

Environmental – Wildlife

Certainty Index: 1 (Definite) Measured concentrations(s) with a highly plausible exposure pathway and specific health effects that are consistent with exposure to the active ingredients(s).

Severity Index: 1 (Death)

Pesticide Type: Rodenticide

Product: zinc phosphide

Samples collected and analyzed confirmed zinc phosphide as the cause of the deaths of the geese. No site of application could be found.

Case # 050015

Washington County

Occupational

Twenty-one people

Type of Care: None

Certainty Index: 2, (Probable)

Severity Index: 4, (Low severity illness or injury)

Pesticide Type: Fumigant

Product: sulfur dioxide, technical

OR-OSHA issued a citation for respiratory hazards, lack of precautions, lack of training, lack of hazard communication training, lack of MSDS, and several other violations.

Case # 050016

Umatilla County

Occupational

One person

Type of Care: Emergency Medical Care

Certainty Index: 4, (Unlikely)

Severity Index: 4, (Low severity illness or injury)

Pesticide Type: Insecticide

Product: dichlorvos, chlorpyrifos

No violations of pesticide laws were found by ODA, however OR-OSHA issued a citation to the employer regarding the lack of required MSDS on site.

APPENDIX III CASE SUMMARIES

Case # 060001

Lane County

Non-Occupational – Death

One person

Type of Care: Emergency Medical Care

Certainty Index: 5, (Unrelated) Not pesticide related based upon corroboration by a health professional (Coroner's investigation)

Severity Index: 1, (Death)

On December 21, 2005 a child died in a house that had been treated two weeks before with an insecticide. The low concentrations of the pesticide used and the time relationship between the application and the onset of possible exposure did not indicate a plausible causal relationship. The pesticide was legally applied by a commercial applicator.

The following statement is contained in the PARC Board classification document: "It is the consensus of the group that the child's unfortunate death was unrelated to pesticide exposure/toxicity resulting from the applications(s) on December 8, 2005."

Case # 060002

Marion County

Non-Occupational

One person

Type of Care: None

Certainty Index: 2, (Probable) A clearly documented and highly plausible exposure pathway was seen, with specific health effects that are consistent with exposure to one of the active ingredient(s).

Severity Index: 4, (Low severity illness or injury)

Pesticide Type: Herbicide

Product: 2,4D or gramoxone

An individual drifted herbicide onto a neighbor, causing illness symptoms to be exhibited. No action was taken by ODA.

Case # 060003

Marion County

Non-Occupational

One person

Type of Care: Health Care Provider Office

Certainty Index: 2, (Probable) The route of exposure and the symptoms are consistent with exposure to this pesticide.

Severity Index: 3, (Moderate severity illness)

Pesticide Type: Insecticide

Product: pyrethroid

A professional application to a neighboring property was the cause of this call. ODA found multiple violations of applicator licensing and certification and issued a letter of advisement regarding conditions of the application.

APPENDIX III CASE SUMMARIES

Case # 060004

Marion County

Occupational

Two people

Type of Care: None

Certainty Index: 2, (Probable) The route of exposure and the symptoms are consistent with exposure to this pesticide.

Severity Index: 3, (Moderate severity illness) Symptoms persisted over several days and manifested systemically.

Pesticide Type: Fungicide

Product: chlorothalonil, propiconizol

Violations associated with an agricultural application were found by ODA after determining that drift onto people had occurred.

Case # 060005

Lane County

Non-Occupational

One person

Type of Care: None

Certainty Index: 3, (Possible) There is uncertainty with respect to the likelihood of exposure. Reported symptoms(s) are consistent with the reported active ingredient, the time course between exposure, onset and duration is also consistent and the time course of onset and the reported exposure pathway is possible.

Severity Index: 4, (Low severity illness)

Pesticide Type: Fungicide

Product: lime sulfur

A neighbor applied a fungicide to his own property but drifted it onto the next property. ODA issued a letter of advisement to the neighboring property owner.

Case # 060006

County: Benton

Non-Occupational

One person

Type of Care: None

Certainty Index: 3, (Possible)

The reported symptoms are consistent with the reported active ingredient, although there is uncertainty regarding the likelihood of exposure.

Severity Index: 4, (Low severity illness)

Pesticide Type: Insecticide

Product: chlorpyrifos

An agricultural application was found to have occurred near the site where the individual felt they were affected.

APPENDIX III CASE SUMMARIES

Case # 060007 **Benton County** **Environmental – Endangered Species (Plants)**

Certainty Index: 1, (Definite) Measured concentrations were found, with a highly plausible exposure pathway and effects that are consistent with exposure to the active ingredients.

Severity Index: 2, (High severity) The illness or injury is severe.

Pesticide Type: Herbicide

Product: dicamba, 2,4-dichlorophenoxyacetic acid

A professional agricultural application resulted in drift onto endangered species. The U.S. Fish and Wildlife Service and ODA both took regulatory action regarding this misapplication.

Case # 060008 **Benton County** **Occupational** **Nine employees**

Type of Care: None

Certainty Index: 3, (Possible) There was a possible pathway of exposure to these employees.

Severity Index: 4, (Low severity) Often symptoms are manifested by skin, eye or upper respiratory irritation.

Pesticide Type: Herbicide

Product: trinexapac-ethyl

An agricultural application of pesticides next to a commercial nursery resulted in possible exposure to nursery workers. ODA could find no violations during investigation.

Case # 060009 **Linn County** **Occupational** **One person**

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE

Pesticide Type: Herbicide

Product: trichlopyr, glyphosate, 2,4D

An agricultural application caused concern for a caller but the individual would not provide appropriate information for classification.

Case # 060010 **Multnomah County** **Occupational** **Two people** **Type of Care: None**

Certainty Index: 3, (Possible) A report of exposure and symptoms, but uncertainty with respect to the likelihood of exposure, the circumstances surrounding the exposure, or the consistency of the reported symptoms based upon the reported active ingredients.

APPENDIX III CASE SUMMARIES

Severity Index: 4, (Low severity) Often manifested by skin, eye or upper respiratory irritation.

Pesticide Type: Herbicide

Product: diuron, glyphosate, 2,4 D

ODA could not substantiate a misapplication with samples or investigation.

Case # 060011

Multnomah County

Non-Occupational

Type of Care: None

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE

Pesticide Type: Insecticide

Product: permethrin, cyfluthrin, cypermethrin, insect growth regulator

Professional applications to the interior and exterior of tenant living area.

Case # 060012

County: Lane

Non-Occupational

One person

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE.

Pesticide Type: Insecticide

Product: tetramethrin

Container failure during storage.

Case # 060013

Marion County

Non-Occupational

One person

Type of Care: Health Care Provider (Office)

Certainty Index: 3, (Possible) There is some uncertainty as to the likelihood of exposure however some of the symptoms are consistent with exposure to the pesticide.

Severity Index: 4, (Low severity) Often manifested by skin, eye or upper respiratory irritation.

Pesticide Type: Fumigant

Product: methyl-bromide, chloropicrin

ODA issued a notice of violation to the applicator for labeling violations.

APPENDIX III CASE SUMMARIES

Case # 060014

Clackamas County

Non-Occupational

One person

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE.

Pesticide Type: Unknown

Product: Unknown

No known pesticide applications however an investigation was conducted by ODA to find any local pesticide applications.

Case # 060015

Lake County

Non-Occupational

One person

Type of Care: Emergency Medical Care

Certainty Index: 0, (Exposure, no symptoms) There is a report of exposure, but no symptoms reported.

Severity Index: 5, (No symptoms reported)

Pesticide Type: Insecticide

Product: chlorpyrifos

ODA found a violation of pesticide labeling.

Case # 060016

Lane County

Non-Occupational

One person

Type of Care: None

Certainty Index: 3, (Possible) There is uncertainty with respect to the likelihood of exposure, the circumstances surrounding the exposure, or the consistency of the reported symptoms based upon the reported active ingredient(s).

Severity Index: 4, (Low severity illness symptoms) Often manifested by skin, eye or upper respiratory irritation.

Pesticide Type: Insecticide

Product: unknown

No violations of pesticide laws were found.

Case 060017

Multnomah County

Occupational

Two people

Type of Care: Health Care Provider Office

Certainty Index: 3, (Possible) The consistency of the reported symptoms based upon the reported active ingredients and the likelihood of exposure are consistent.

Severity Index: 4, (Low severity illness or injury) Often manifested by skin, eye or upper respiratory irritation.

APPENDIX III CASE SUMMARIES

Pesticide Type: Herbicide
Product: bromacil, 2,4D
No violations of pesticide laws were found.

Case # 060018 **Multnomah County**
Non-Occupational
One person

Type of Care: Health Care Provider Office

Certainty Index: 4, (Unlikely) Although there was a plausible exposure pathway, the nature of the symptoms and the prolonged duration makes it unlikely that the pesticides caused the illness symptoms.

Severity Index: 4, (Low severity illness or injury)

Pesticide Type: Herbicide

Product: dicamba, MCPA, triclopyr

ODA found no violations during investigation.

Case # 060019 **Lane County**
Non-Occupational
Two people

THERE WAS INSUFFICIENT INFORMATION AVAILABLE FOR THE PARC BOARD TO CLASSIFY THIS CASE.

Although investigated by the Food Safety Division and the Pesticide Division, this report of illness could not be corroborated as caused by pesticides.

APPENDIX IV

Member Agencies and Consultant Jurisdiction

Pesticide Analytical & Response Center (PARC)

Resources/Programs: By referral and coordination, PARC requests investigations or resources from each of its member agencies.

Oregon Department of Agriculture (ODA)

PESTICIDES DIVISION

Resources/Programs: ODA has field staff positioned around the state with experience in pesticide application technology and regulation. As part of an investigation, ODA has access to laboratory services. ODA maintains a label for each pesticide registered in Oregon and a database of information about those products. ODA also maintains a database of information about pesticide-related licenses and licensees.

Oregon Public Health Division, Department of Human Services

OFFICE OF ENVIRONMENTAL PUBLIC HEALTH (OEPH)

TOXICOLOGY, ASSESSMENT, AND TRACKING SERVICES (TATS)

Resources/Programs: TATS employs a toxicologist with expertise in pesticide-related issues as well as a Pesticide Program Coordinator. OEPH includes two more epidemiologists with expertise in occupational and environmental public health and another toxicologist. The Drinking Water Section is another potential resource. The Emergency Preparedness Planning Staff prepares hazard assessments re: chemicals (including pesticides) that are sold, stored, transported and used in Oregon.

Oregon Department of Fish & Wildlife (ODFW)

Resources/Programs: ODFW district biologists handle issues with pesticide poisoning or spills that affect fish and wildlife. ODFW biologists assist to identify potential fish and wildlife receptors and resources that are at risk; assess extent of damage to the resource(s); collect samples for analysis and to identify laboratories for analysis.

Oregon Department of Forestry (ODF)

Resources/Programs: ODF has field offices across the state. ODF field foresters administer forest practice pesticide rules, which deal with natural resource protection. ODF investigates incidents that may involve violations of the forest practices rules. ODF maintains a database of information on planned forest pesticide applications.

Appendix IV PARC Member Agency Pesticide Jurisdiction

Oregon Department of Environmental Quality (DEQ)

Resources/Programs: DEQ has field staff available in district offices and a dedicated laboratory facility. Water quality, air quality and environmental quality are all regulated by DEQ.

Oregon Occupational Safety & Health Administration (OR-OSHA)

Resources/Programs: OR-OSHA has field staff available to investigate occupational incidents, and a library of educational materials relevant to pesticide handling, storage, and application in agriculture.

Office of the State Fire Marshal (OSFM)

Resources/Programs: The OSFM can offer information about hazardous materials, including pesticides that are stored at facilities around the state including storage location, quantities and hazard type. Expertise is also available regarding application of the Oregon fire code to pesticide storage.

Oregon Poison Center (OPC)

Resources/Programs: OPC staff is available for emergency consultation and advice regarding clinical toxicology issues 24 hours a day.

PARC Board Consultants

Center for Research on Occupational & Environmental Toxicology (CROET)

The Toxicology Information Center houses a special-use library with access to a variety of occupational safety and health and environmental information resources, including those related to the use of pesticides. CROET also has on staff a toxicologist, epidemiologist, and industrial hygienist who are prepared to answer questions related to the use of chemicals (including pesticides) in the home and workplace. Additionally, animal poisoning issues can be addressed at CROET.

Oregon State University, Environmental & Molecular Toxicology Department (OSU)

Resources/Programs: OSU medical and environmental toxicologists evaluate case information using investigations and reports from member agencies, illness symptoms and pesticides identified during investigations. These evaluations are used by the Board to classify the likelihood of pesticide effects using the PARC Classification Criteria.

Appendix V
Memoranda of Understanding and Consultant Contracts

THE FOLLOWING DOCUMENTS ARE COPIES OF THE ACTUAL SIGNED MEMORANDA OF UNDERSTANDING AND CONSULTANT AGREEMENTS. Each document specifies the duties and responsibilities for each contractor.

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Department of Human Services

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Department of Human Services – Health Services, hereinafter referred to as "Health Services", and acknowledges the relationships between PARC and Health Services.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

HEALTH SERVICES

Health Services acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The Director of the Oregon Department of Human Services, or designee, is named to serve on the governing board of PARC.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.
- The Director of the Oregon Department of Human Services, or designee, and the Director of the Oregon Department of Agriculture, or designee, are to alternate serving as the chair of the governing board of PARC. The term for serving as chair is one year, and when one is serving as the chair the other shall serve as the vice chair.

Health Services will be an active member in PARC. Specifically, Health Services will:

- Regularly have the Director of the Oregon Department of Human Services, or designee, attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Have the Director of Oregon Department of Human Services, or designee, alternate on an annual basis with the Director of the Oregon Department of Agriculture, or designee, in serving as the chair of the governing board of PARC. When not serving as the chair, the Director of Oregon Department of Human Services, or designee, shall serve as the vice chair.
- Provide to PARC information received by Health Services relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use, consider this information in like manner as a complaint, and conduct associated investigations within existing Health Services authority and resources. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by Health Services.
- Receive, review and evaluate recommendations from PARC for action by Health Services associated with pesticide use. Health Services will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to Health Services employees, and organizations with which Health Services interacts, regarding the activities conducted by PARC.

Health Services further acknowledges and agrees to the following:

- Any medical information received by Health Services as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the regulatory authority of Health Services, and are not in lieu of the regulatory authority of Health Services.
- No funding will be transferred from PARC to Health Services for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for Health Services

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to Health Services on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to Health Services to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among Health Services and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to Health Services, and providing that information to Health Services.
- Coordinating other activities between and among Health Services and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between Health Services and any other agency, and is not in lieu of any other agreement between Health Services and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, Health Services, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher K. Kuly

Title: Administrator

Date: 12/06/2005

OREGON DEPARTMENT OF AGRICULTURE

By: Tamm Hendrick

Title: Asst. Director

Date: 12/23/05

OREGON DEPARTMENT OF HUMAN SERVICES

By: Melba, PhD MPH

Title: ODPE Administrator

Date: 12/15/05

AMENDMENT #1

MEMORANDUM OF AGREEMENT

Between

The Oregon Pesticide Analytical and Response System

And

The Oregon Department of Human Services

This document is Amendment #1 to the Memorandum Of Agreement dated December 6, 2005, between the Oregon Pesticide Analytical and Response Center (PARC) and Oregon Department of Human Services - Health Services (Health Services). This Amendment shall be in affect from July 1, 2005, to June 30, 2007, unless specifically amended as herein set forth.

The Agreement is hereby amended as follows:

PARC shall provide to Health Services an amount not to exceed \$93,385.00 for the services provided to PARC by Health Services as detailed in this Amendment. PARC providing these funds to Health Services is contingent upon the availability of adequate funding to PARC, through action of the Oregon Legislature, to meet PARC expenditures. Any change in funding availability during the term of this amendment will be communicated by PARC to Health Services, and may serve as a basis for amending this Amendment.

Health Services shall provide to PARC the services of staff of the Office of Disease Prevention and Epidemiology, and other Health Services staff, knowledgeable in epidemiology, human toxicology and industrial hygiene. These services shall include:

- Review reports and other documents provided by PARC associated with pesticide use incidents involving alleged or actual impacts on human health;
- Investigate, in collaboration with other PARC member agencies selected reports of pesticide exposure based on established criteria and available resources;
- Provide, as requested by PARC, written reports on the physical properties of specific pesticide active ingredients and products, with particular emphasis on epidemiology and human toxicology;
- Provide public health advice to PARC regarding specific pesticide use incidents and patterns observed among cases over time;
- Regularly attend meetings of the PARC Board to present and discuss reviews, reports and advice pertaining to pesticide use incidents and human health;
- Provide the PARC Board an annual summary report of pesticide cases that have come through Health Services.

Health Services shall provide invoices to PARC for services provided. These invoices will be no more frequently submitted than monthly. These invoices will detail the nature and cost of services provided to PARC, and shall serve as the basis for the transfer of funds from PARC to Health Services under this Agreement.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher K. Kelly

Title: Administrator

Date: 12/06/2005

OREGON DEPARTMENT OF AGRICULTURE

By: [Signature]

Title: Asst. Director

Date: 12/23/05

OREGON DEPARTMENT OF HUMAN SERVICES

By: [Signature]

Title: ODPE Administrator

Date: 12/15/05

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
Oregon State University

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and Oregon State University, hereinafter referred to as "OSU", and acknowledges the relationships between PARC and OSU.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

OSU

OSU acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- OSU representation on the governing board of PARC is not required by statutes, but OSU is named in statutes as a source of expert consultation to the governing board of PARC.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

OSU will be an active member in PARC. Specifically, OSU will:

- Regularly have a representative of OSU attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to PARC information received by OSU relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use, consider this information in like manner as a complaint, and conduct associated investigations within existing OSU authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by OSU.
- Receive, review and evaluate recommendations from PARC for action by OSU associated with pesticide use. OSU will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to OSU employees, to members of the public, and to groups with which OSU interacts, regarding the activities conducted by PARC.

OSU further acknowledges and agrees to the following:

- Any medical information received by OSU as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules. *
- The duties and activities of PARC do not supersede the authority of OSU, and are not in lieu of the authority of OSU.
- No funding will be transferred from PARC to OSU under this amendment for the conduct of any activities. Any transfer of funds from PARC to OSU will need to be the topic of, or part of, a separate agreement.

PARC as Resource for OSU

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to OSU on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to OSU to the attention of the other agencies participating in PARC.

- Facilitating the exchange of information on pesticide issues between and among OSU and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to OSU, and providing that information to OSU.
- Coordinating other activities between and among OSU and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between OSU and any other agency, and is not in lieu of any other agreement between OSU and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, OSU, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher Z. Kuby

Title: Administrator

Date: 12/06/2005

OREGON DEPARTMENT OF AGRICULTURE

By: *Joia Charille Jensen*

Title: *Deputy Director*

Date: *2/14/2006*

OREGON STATE UNIVERSITY

By: *[Signature]*

Title: TEMIS G. TAYLOR
RESEARCH GRANTS AND CONTRACTS OFFICER

Date: *1/11/06*

AMENDMENT #1

MEMORANDUM OF AGREEMENT

Between

The Oregon Pesticide Analytical and Response System

And

Oregon State University

This document is Amendment #1 to the Memorandum Of Agreement dated December 23, 2005, between the Oregon Pesticide Analytical and Response Center (PARC) and Oregon State University (OSU). This Amendment shall be in affect from July 1, 2005, to June 30, 2007, unless specifically amended as herein set forth.

The Agreement is hereby amended as follows:

PARC shall provide to OSU an amount not to exceed \$50,681.00 for the services provided to PARC by OSU as detailed in this Amendment. PARC providing these funds to OSU is contingent upon the availability of adequate funding to PARC, through action of the Oregon Legislature, to meet PARC expenditures. Any change in funding availability during the term of this amendment will be communicated by PARC to OSU, and may serve as a basis for amending this Amendment.

OSU shall provide to PARC the services of Daniel Sudakin, MD, and other OSU staff knowledgeable in human toxicology. These services shall include:

- Review reports and other documents provided by PARC associated with pesticide use incidents involving alleged or actual impacts on human health;
- Provide, as requested by PARC, written reports on the physical properties of specific pesticide active ingredients and products, with particular emphasis on human toxicology;
- Provide human toxicological advice to PARC regarding specific pesticide use incidents;
- Regularly attend meetings of the PARC Board to present and discuss reviews, reports and advice pertaining to pesticide use incidents and human health.

OSU shall provide to PARC the services of Jeffrey J. Jenkins, PhD, and other staff knowledgeable in environmental toxicology. . These services shall include:

- Review reports and other documents provided by PARC associated with pesticide use incidents involving alleged or actual impacts on the environment;
- Provide, as requested by PARC, written reports on the physical properties of specific pesticide active ingredients and products, with particular emphasis on environmental toxicology;
- Provide environmental toxicological advice to PARC regarding specific pesticide use incidents;
- Regularly attend meetings of the PARC Board to present and discuss reviews, reports and advice pertaining to pesticide use incidents and environmental impacts.

OSU shall provide the services of the Analytical Laboratory of the OSU Department of Environmental and Molecular Toxicology to analyze samples provided by PARC for pesticide residues. The purpose of such analysis will be to provide information useful in determining the impacts of pesticide use incidents on human health and/or the environment.

OSU shall provide invoices to PARC for services provided. These invoices will be no more frequently submitted than monthly. These invoices will detail the nature and cost of services provided to PARC, and shall serve as the basis for the transfer of funds from PARC to OSU under this Agreement.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher K. Kelly

Title: Administrator

Date: 03/07/2006

OREGON DEPARTMENT OF AGRICULTURE

By: Joni Charpildy Hansen

Title: Deputy Director

Date: 4/11/2006

OREGON STATE UNIVERSITY

By: Clem LaCava

Title: CLEM LaCAVA
Asst Contract Administrator

Date: 3/31/06

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Poison Center

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Poison Center, hereinafter referred to as "Poison Center", and acknowledges the relationships between PARC and Poison Center.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

Poison Center

Poison Center acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The Medical Director of the Oregon Poison Center, or designee, is named to serve on the governing board of PARC.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

Poison Center will be an active member in PARC. Specifically, Poison Center will:

- Regularly have the Medical Director of the Oregon Poison Center, or designee, attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to the Oregon Department of Human Services - Health Services information received by Poison Center relating to symptomatic health incidents involving pesticides, in compliance with Oregon Administrative Rules 333-018-0015.
- Receive information from PARC relating to actual or alleged health incidents involving pesticide use, and provide review, consultation and recommendations as requested within the resource capabilities of Poison Center.
- Provide information to Poison Center staff regarding the activities conducted by PARC.

Poison Center further acknowledges and agrees to the following:

- Any medical information received by Poison Center as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the authority of Poison Center, and are not in lieu of the authority of Poison Center.
- No funding will be transferred from PARC to Poison Center for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for Poison Center

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to Poison Center on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to Poison Center to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among Poison Center and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to Poison Center, and providing that information to Poison Center.

- Coordinating other activities between and among Poison Center and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between Poison Center and any other agency, and is not in lieu of any other agreement between Poison Center and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, Poison Center, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher K. Kink

Title: Administrator

Date: 12/02/2005

OREGON DEPARTMENT OF AGRICULTURE

By: Lisa Chapillon Hanson

Title: Deputy

Date: 12-16-2008

OREGON POISON CENTER

By: James G. [Signature]

Title: Dist. Director

Date: 12/7/05

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Department of Forestry

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Department of Forestry, hereinafter referred to as "Forestry", and acknowledges the relationships between PARC and Forestry.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

Forestry

Forestry acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The State Forester, or designee, is named to serve on the governing board of PARC.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

Forestry will be an active member in PARC. Specifically, Forestry will:

- Regularly have the State Forester, or designee, attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to PARC information received by Forestry relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use in forest situations, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use in forest situations, consider this information in like manner as a complaint, and conduct associated investigations within existing Forestry authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by Forestry.
- Receive, review and evaluate recommendations from PARC for action by Forestry associated with pesticide use. Forestry will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to Forestry employees, and to members of the industries regulated by Forestry, regarding the activities conducted by PARC.

Forestry further acknowledges and agrees to the following:

- Any medical information received by Forestry as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the regulatory authority of Forestry, and are not in lieu of the regulatory authority of Forestry.
- No funding will be transferred from PARC to Forestry for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for Forestry

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to Forestry on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to Forestry to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among Forestry and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to Forestry, and providing that information to Forestry.
- Coordinating other activities between and among Forestry and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between Forestry and any other agency, and is not in lieu of any other agreement between Forestry and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, Forestry, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher X. Kelly

Title: Administrator

Date: 12/02/2005

OREGON DEPARTMENT OF AGRICULTURE

By: *Dawn Idendy*

Title: *Asst. Director*

Date: *1/3/2006*

OREGON DEPARTMENT OF FORESTRY

By: *Heidi L. Lee*

Title: *Assistant State Forester*

Date: *December 21, 2005*

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
Oregon Department of Environmental Quality

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Department of Environmental Quality, hereinafter referred to as "DEQ", and acknowledges the relationships between PARC and DEQ.

PARC

PARC exists under Oregon Revised Statutes - Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

OREGON DEPARTMENT OF AGRICULTURE

By: Lisa Champillo-Hanson

Title: Deputy Director

Date: 2/14/2006

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

By: Mary M. Stearns

Title: Laboratory Division Administrator

Date: 1 Feb 06

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Department of Transportation

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Department of Transportation, hereinafter referred to as "ODOT", and acknowledges the relationships between PARC and ODOT.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

ODOT

ODOT acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- ODOT representation on the governing board of PARC is not required by statutes.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

ODOT will be an active member in PARC. Specifically, ODOT will:

- Regularly have a representative of ODOT attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to PARC information received by ODOT relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use in forest situations, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use, consider this information in like manner as a complaint, and conduct associated investigations within existing ODOT authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by ODOT.
- Receive, review and evaluate recommendations from PARC for action by ODOT associated with pesticide use. ODOT will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to ODOT employees, and to members of the industries regulated by ODOT, regarding the activities conducted by PARC.

ODOT further acknowledges and agrees to the following:

- Any medical information received by ODOT as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the regulatory authority of ODOT, and are not in lieu of the regulatory authority of ODOT.
- No funding will be transferred from PARC to ODOT for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for ODOT

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to ODOT on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to ODOT to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among ODOT and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to ODOT, and providing that information to ODOT.
- Coordinating other activities between and among ODOT and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between ODOT and any other agency, and is not in lieu of any other agreement between ODOT and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, ODOT, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher K. Kelly

Title: Administrator

Date: 12/02/2005

OREGON DEPARTMENT OF AGRICULTURE

By: Lisa Champillo-Anderson

Title: Deputy Director

Date: 2/14/2006

OREGON DEPARTMENT OF TRANSPORTATION

By: Luigi J. Brown

Title: State Maintenance Engineer

Date: 1/9/06

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Department of Consumer and Business Services

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Department of Consumer and Business Services – Occupational Safety and Health Division, hereinafter referred to as "OR-OSHA", and acknowledges the relationships between PARC and OR-OSHA.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

OR-OSHA

OR-OSHA acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The Administrator of the Occupational Safety and Health Division or designee, is named to serve on the governing board of PARC.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

OR-OSHA will be an active member in PARC. Specifically, OR-OSHA will:

- Regularly have the Administrator of the OR-OSHA, within the Oregon Department of consumer and Business Services, or designee, attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to PARC information received by OR-OSHA relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use, consider this information as a referral, and conduct associated investigations within existing OR-OSHA authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by OR-OSHA.
- Receive, review and evaluate recommendations from PARC for action by OR-OSHA associated with pesticide use. OR-OSHA will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to OR-OSHA employees, and to members of the industries regulated by OR-OSHA, regarding the activities conducted by PARC.

OR-OSHA further acknowledges and agrees to the following:

- Any medical information received by OR-OSHA as a result of participating in PARC will be held confidential as provided in Oregon Administrative Rules – Chapter 437, Division 2 and Code of Federal Regulations – Title 29, Part 1910, Section 1020 (29CFR1910.1020) (copy attached).
- The duties and activities of PARC do not supersede the authority of OR-OSHA, and are not in lieu of the authority of OR-OSHA.
- No funding will be transferred from PARC to OR-OSHA for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for OR-OSHA

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to OR-OSHA on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to OR-OSHA to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among OR-OSHA and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to OR-OSHA, and providing that information to OR-OSHA.
- Coordinating other activities between and among OR-OSHA and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between OR-OSHA and any other agency, and is not in lieu of any other agreement between OR-OSHA and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, OR-OSHA, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher R. Kuby

Title: Administrator

Date: 12/02/2005

OREGON DEPARTMENT OF AGRICULTURE

By: *Don Chapillon Hanson*

Title: *Deputy Director*

Date: *April 11, 2006*

OREGON DEPARTMENT OF CONSUMER AND BUSINESS SERVICES

By: *[Signature]*

Title: *Administrator, OSHA*

Date: *2/1/06*

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
Office of State Fire Marshal

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Office of State Fire Marshal, hereinafter referred to as "Fire Marshal", and acknowledges the relationships between PARC and Fire Marshal.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

Fire Marshal

Fire Marshal acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The State Fire Marshal, or designee, is named to serve on the governing board of PARC.

- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

Fire Marshal will be an active member in PARC. Specifically, Fire Marshal will:

- Regularly have the State Fire Marshal, or designee, attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to PARC information received by Fire Marshal relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use situations, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use, consider this information in like manner as a complaint, and conduct associated investigations within existing Fire Marshal authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by Fire Marshal.
- Receive, review and evaluate recommendations from PARC for action by Fire Marshal associated with pesticide use. Fire Marshal will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to Fire Marshal employees, and to members of the industries regulated by Fire Marshal, regarding the activities conducted by PARC.

Fire Marshal further acknowledges and agrees to the following:

- Any medical information received by Fire Marshal as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the regulatory authority of Fire Marshal, and are not in lieu of the regulatory authority of Fire Marshal.
- No funding will be transferred from PARC to Fire Marshal for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for Fire Marshal

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to Fire Marshal on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to Fire Marshal to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among Fire Marshal and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to Fire Marshal, and providing that information to Fire Marshal.
- Coordinating other activities between and among Fire Marshal and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between Fire Marshal and any other agency, and is not in lieu of any other agreement between Fire Marshal and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, Fire Marshal, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: Christopher L. Kelly

Title: Administrator

Date: 07/24/2006

OREGON DEPARTMENT OF AGRICULTURE

By: Lisa Chappell-Hanson

Title: Deputy Director

Date: 7/25/2006

OFFICE OF STATE FIRE MARSHAL

By: Nancy Orr

Title: State Fire Marshal

Date: July 24, 2006

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Department of Fish and Wildlife

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Department of Fish and Wildlife, hereinafter referred to as "Fish/Wildlife", and acknowledges the relationships between PARC and Fish/Wildlife.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

Fish/Wildlife

Fish/Wildlife acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The Director of the Oregon Department of Fish and Wildlife, or designee, is named to serve on the governing board of PARC.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- The PARC administrator is responsible for the performance of the duties of PARC.

Fish/Wildlife will be an active member in PARC. Specifically, Fish/Wildlife will:

- Regularly have the Director of the Oregon Department of Fish and Wildlife, or designee, attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Provide to PARC information received by Fish/Wildlife relating to actual or alleged health and environmental incidents involving pesticides. Such information may include complaints received about intended, alleged or actual pesticide use situations, and investigations associated with such complaints. Information will be provided to PARC in a timely manner.
- Receive information from PARC relating to actual or alleged health and environmental incidents involving pesticide use, consider this information in like manner as a complaint, and conduct associated investigations within existing Fish/Wildlife authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by Fish/Wildlife.
- Receive, review and evaluate recommendations from PARC for action by Fish/Wildlife associated with pesticide use. Fish/Wildlife will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to Fish/Wildlife employees, the public, and persons regulated by Fish/Wildlife, regarding the activities conducted by PARC.

Fish/Wildlife further acknowledges and agrees to the following:

- Any medical information received by Fish/Wildlife as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the regulatory authority of Fish/Wildlife, and are not in lieu of the regulatory authority of Fish/Wildlife.
- No funding will be transferred from PARC to Fish/Wildlife for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for Fish/Wildlife

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to Fish/Wildlife on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to Fish/Wildlife to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among Fish/Wildlife and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to Fish/Wildlife, and providing that information to Fish/Wildlife.
- Coordinating other activities between and among Fish/Wildlife and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between Fish/Wildlife and any other agency, and is not in lieu of any other agreement between Fish/Wildlife and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, Fish/Wildlife, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: _____

Title: Administrator

Date: _____

OREGON DEPARTMENT OF AGRICULTURE

By: _____

Title: _____

Date: _____

OREGON DEPARTMENT OF FISH AND WILDLIFE

By: _____

Title: _____

Date: _____



Oregon

Theodore R. Kulongoski, Governor

Department of Agriculture

635 Capitol Street NE
Salem, OR 97301-2532

December 2, 2005

Kent Anger, PhD, Associate Director
CROET, OHSU L606
3181 SW Sam Jackson Park Road
Portland OR 97201-3098



MEMORANDUM OF AGREEMENT REGARDING THE OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

Earlier this year, we meet to discuss a Memorandum of Agreement between the Oregon Pesticide Analytical and Response Center (PARC) and the Oregon Health and Sciences University – Center for Research on Occupational and Environmental Toxicology. The purpose of this Memorandum, and like Memorandum between PARC and the other state agencies participating in PARC, was to improve the organization and functioning of PARC.

The 2005 Oregon Legislature restored funding to PARC through the 2005 – 2007 budget approved for the Oregon Department of Agriculture (ODA). Overall administration of PARC has been assigned to the ODA Pesticides Division, and includes my appointment as Administrator of PARC. I am therefore pursuing finalizing the Memorandum we discussed earlier.

Enclosed are three copies of a Memorandum between PARC and your agency. I have attempted to include in this version of the Memorandum the comments you had provided to me. Please review the attached version. If additional changes need to be made, please provide your comments to me. If this version is acceptable, please pursue obtaining appropriate signing by Oregon Health and Sciences University. In an effort to facilitate the process, I have signed each copy as PARC Administrator. When each copy is fully signed, one copy will be provided to your agency, the ODA Director will retain one copy, and one copy will be retained by PARC.

Thank you for your assistance, and patience, in this process.

Christopher K. Kirby
Administrator - Pesticides Division
503/986-4638
ckirby@oda.state.or.us

Cc: Fred W. Berman, DVM, PhD - CROET representative to PARC

Enclosures (3)

MEMORANDUM OF AGREEMENT
Between
The Oregon Pesticide Analytical and Response System
And
The Oregon Health and Science University

This Memorandum of Agreement is entered into between the Oregon Pesticide Analytical and Response Center, hereinafter referred to as "PARC", and the Oregon Health and Sciences University - Center for Research on Occupational and Environmental Toxicology, hereinafter referred to as "CROET", and acknowledges the relationships between PARC and CROET.

PARC

PARC exists under Oregon Revised Statutes – Chapter 634, Section 550 (ORS 634.550). According to ORS 634.550 (1), the governing board of PARC consists of the following:

- The Director of the Oregon Department of Agriculture, or designee.
- The State Forester, or designee.
- The Director of the Oregon Department of Fish and Wildlife, or designee.
- The Director of the Oregon Department of Environmental Quality, or designee.
- The Director of the Oregon Department of Human Services, or designee.
- The Administrator of the Occupational Safety and Health Division within the Oregon Department of Consumer and Business Services, or designee.
- The State Fire Marshal, or designee.
- The Medical Director of the Oregon Poison Center, or designee.
- One citizen from the state at large appointed jointly by the Director of the Oregon Department of Agriculture and the Director the Oregon Department of Human Services.

The duties of PARC are stated in ORS 634.550 (5), and are summarized as follows:

- Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
- Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
- Identify trends and patterns of problems related to pesticide use.
- On the basis of identification of a trend or pattern of problems, make recommendations for action to a state agency. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
- Report in a standardized format the results of the investigations of pesticide incidents.
- Establish procedures for carrying out the responsibilities of PARC within the limits of available resources.
- Prepare and submit to each session of the Legislative Assembly a report of the activities of PARC, including a record of recommendations made to state agencies and the actions resulting from PARC's work.

According to ORS 634.550 (2), an administrator for PARC will be appointed by the Director of the Oregon Department of Agriculture. The PARC administrator will be responsible for performance of the duties of PARC.

CROET

CROET acknowledges the following:

- The statutory basis of PARC, contained in ORS 634.550.
- The duties of PARC are as set forth in ORS 634.550, and as summarized above.
- CROET representation on the governing board of PARC is not required by statutes, but CROET is named in statutes as a source of expert consultation to the governing board of PARC.
- The PARC administrator is responsible for the performance of the duties of PARC.

CROET will be an active member in PARC. Specifically, CROET will:

- Regularly have a representative of CROET attend meetings of the PARC governing board, and participate in the activities of PARC. Such participation may include the review and evaluation of information gathered through PARC, with particular emphasis on identifying trends and patterns of problems related to pesticide use, formulating recommendations to address these problems, and reporting.
- Refer persons to PARC who communicate with CROET relating to actual or alleged health and environmental incidents involving pesticides.
- Receive information from PARC relating to actual or alleged occupational health and environmental incidents involving pesticide use, consider this information in like manner as a complaint, and conduct associated investigations within existing CROET authority. Such investigations will be conducted in a timely and accurate manner in accordance with procedures established by CROET.
- Receive, review and evaluate recommendations from PARC for action by CROET associated with pesticide use. CROET will report to PARC regarding its review and evaluation of the individual recommendations, and the intended action in response to each recommendation.
- Provide information to CROET employees, to members of the public, and to groups with which CROET interacts, regarding the activities conducted by PARC.

CROET further acknowledges and agrees to the following:

- Any medical information received by CROET as a result of participating in PARC will be held confidential as provided in ORS 192.525, ORS 433.008, and associated statutes and administrative rules.
- The duties and activities of PARC do not supersede the authority of CROET, and are not in lieu of the authority of CROET.
- No funding will be transferred from PARC to CROET for the conduct of any activities unless a specific amendment to this agreement is adopted.

PARC as Resource for CROET

In addition to the duties of PARC stated in ORS 634.550 (5) and summarized above, PARC may serve as a resource to CROET on pesticide issues. PARC may act in such a capacity by:

- Bringing issues of interest or concern to CROET to the attention of the other agencies participating in PARC.
- Facilitating the exchange of information on pesticide issues between and among CROET and other agencies involved with PARC.
- Obtaining human or environmental toxicological information about pesticides of interest to CROET, and providing that information to CROET.
- Coordinating other activities between and among CROET and other agencies involved with PARC regarding pesticide issues. Such activities may include the identification and requesting of potential funding, the development and delivery of educational materials, and the review and evaluation of research, reports or other documents.

Agreement Administration

This Memorandum of Agreement will remain in effect unless another Memorandum of Agreement replaces it, or it is terminated by mutual consent of the parties, or by thirty days notice of cancellation from one party to the other party. Such termination shall be in writing.

This Memorandum of Agreement may be amended by mutual consent of the parties. Such amendment(s) shall be in writing and shall be attached to and made part of this agreement. Amendment(s) may be for a specific purpose and specific time period. Amendment shall be subject to specific conditions therein stated.

This Memorandum of Agreement does not supersede any other agreement between CROET and any other agency, and is not in lieu of any other agreement between CROET and any other agency.

Nothing in this Memorandum of Agreement shall be construed as obligating PARC, CROET, the Oregon Department of Agriculture or any other participant in PARC to expend funds or involve any party in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively available for work.

AGREED

OREGON PESTICIDE ANALYTICAL AND RESPONSE CENTER

By: _____

Title: Administrator

Date: _____

OREGON DEPARTMENT OF AGRICULTURE

By: _____

Title: _____

Date: _____

OREGON HEALTH AND SCIENCES UNIVERSITY

By: _____

Title: _____

Date: _____

Oregon Revised Statutes – Chapter 634

Pesticide Analytical and Response Center

634.550 Center governing board; duties and powers.

- (1) There is created a Pesticide Analytical and Response Center with a governing board consisting of the following members:
 - (a) The Director of Agriculture or designee.
 - (b) The State Forester or designee.
 - (c) The State Fish and Wildlife Director or designee.
 - (d) The Director of the Department of Environmental Quality or designee.
 - (e) The Director of Human Services or designee.
 - (f) The Administrator of the Occupational Safety and Health Division or designee.
 - (g) The State Fire Marshal or designee.
 - (h) The Director of the Poison Control and Drug Information Program of the Oregon Health and Science University or designee.
 - (i) One citizen from the state at large appointed jointly by the Director of Agriculture and the Director of Human Services.
- (2) The Director of Agriculture shall appoint an administrator for the Pesticide Analytical and Response Center, who shall be responsible to the board for performance of the duties of the center and the board.
- (3) The Director of Agriculture or designee and the Director of Human Services or designee shall alternate as chairperson of the board for terms of one year each. When one is serving as chairperson, the other shall serve as vice chairperson.
- (4) The board shall seek expert consultation from the extension service toxicology program, the Center for Research on Occupational and Environmental Toxicology and such other sources as may be needed.
- (5) The functions of the board are to:
 - (a) Direct the activities and priorities of the administrator of the center.
 - (b) Centralize receiving of information relating to actual or alleged health and environmental incidents involving pesticides.
 - (c) Mobilize expertise necessary for timely and accurate investigation of pesticide incidents and analyses of associated samples.
 - (d) Identify trends and patterns of problems related to pesticide use.
 - (e) Make recommendations for action to a state agency when a majority of the board considers that such action may be warranted on the basis of the findings of an incident investigation or on the basis of identification of a trend or pattern of problems. Recommended actions may include, but not be limited to, regulatory action, modification of administrative rules, proposal of new legislation, public education and consultation to industry.
 - (f) Report in a standardized format the results of the investigations of pesticide incidents.
 - (g) Establish by consensus, procedures for carrying out its responsibilities within the limits of available resources.
 - (h) Prepare and submit to each session of the Legislative Assembly a report of the activities of the center that includes a record of recommendations made by the board and the actions resulting from the board's work.
- (6) Upon receipt of a recommendation from the board, a state agency shall respond in a timely manner to inform the board of actions taken or the reasons for taking no action on the recommendation.
- (7) Any medical information received by a member of the board or by a staff member of the center in the course of carrying out the duties of the center or the board shall be held confidential as provided in ORS 192.518 to 192.526 and 433.008.
- (8) The functions of the board do not supersede the regulatory authority of any agency and are not in lieu of the regulatory authority of any agency. [1991 c.729 §2; 2001 c.2 §1; 2003 c.86 §14]



In compliance with the Americans with Disabilities Act, this publication will be made available in alternate formats upon request.