

## Year Book 1 July 2010 – 30 June 2011

**Released during November 2011** 



Delivering a Healthy WA

Who is the Environmental Health Directorate?

**Environmental Health Hazards Unit Toxic substances** asbestos awareness hazards in the home mould lead dust air emissions pesticides Mosquitoes licensing Insects and Pests Planning Prevention Skin penetration Food Unit Safe food meat temperature control food poisoning outbreaks education catering Food Act enforcement Auditing registration notification dairy Prevention Radiation Health Unit Uranium radioactive X-rays licensing Mobile phones **laser safety** electromagnetic fields and power lines Prevention Science and Policy Unit Social impact health impact health and wellbeing No smoking Tobacco control Research Planning for future generations aboriginal health healthy communities surveillance Climate change Public consultation Legislation Public Health Bill prevention Water Unit Safe drinking water Safe swimming beaches and rivers water fluoridation Recycled water stormwater wastewater Septic tanks Swan Canning Estuary Reuse Prevention

Delivering a Healthy WA

## **Our purpose**

To lead in the management of environmental public health risks

## **Our Vision**

Healthy people in a healthy environment

## **Our values**

Integrity | Leadership | Excellence | Fairness | Cooperation | Service

## Did you know.....

We have a helicopter on standby during peak mosquito breeding months to ensure we can urgently treat problem breeding sites. This is essential to minimise the public's exposure to disease carrying mosquitoes.

We have staff on call 24/7 to provide expert advice to the Fire and Emergency Services Authority where emergency events such as chemical spills and fire plumes have the ability to impact on the public's health.

We work with local government to collect water samples from popular swimming beaches along the Perth coast and Swan and Canning Rivers. This allows us to monitor water quality ensuring it is suitable for swimming.

We administer health legislation on government owned land such as Rottnest Island and Kings Park to make sure facilities are managed in a way that protects community health.

We regularly provide expert advice to local governments to help manage large mass gathering events such as the Australia Day Skyshow, leavers week, Red Bull Air Race, Big Day Out and the Perth Royal Show. We also attend these events to ensure appropriate safety measures are in place to monitor public safety.

> We help Government to determine ways to address health impacts associated with climate change such as increasing temperatures, increasing vector borne disease potential and extreme weather events.

> > And much more.....

## **Management structure**

The Environmental Health Directorate (the Directorate) belongs within the Public Health Division (PHD) of the Department of Health of Western Australia.

We have six main operational areas within the Directorate including the:

- Business Unit
- Environmental Health Hazards Unit (EHHU)
- Food Unit
- Radiation Health Unit
- Science and Policy Unit (SPU) and the
- Water Unit.

We currently employ ninety five staff from a diverse range of professional backgrounds such as Environmental Health Officers, Toxicologists, Environmental Scientists, Food Technicians, Policy Officers, Entomologists, Nutritionists, Health Physicists, Administration Officers and Record Services.



Jim Dodds Director Environmental Health Directorate



Manoj Agarwal Manager Business Unit



Dr Michael Lindsay Managing Scientist Environmental Health Hazards Unit



Stan Goodchild Manager Food Unit



Hazel Upton Managing Health Physicist Radiation Health Unit



John Hardy Manager Science and Policy Unit



Richard Theobald Manager Water Unit

## **Enabling Legislation**

We administer a wide range of Acts, Regulations, By-laws, and Codes of Practices including the:

### **Environmental Health Hazards**

Health (Air-Handling and Water Systems) Regulations 1994 Health (Asbestos) Regulations 1992 Health Act (Carbon Monoxide) Regulations 1975 Health (Garden Soil) Regulations 1998 Health (Poultry Manure) Regulations 2001 Hairdressing Establishment Regulations 1972 Health (Skin Penetration Procedure) Regulations 1998 Health (Offensive Trade fees) Regulation 1976 **Piggeries Regulations 1952** Health (Construction Work) Regulations 1973 **Construction Camp Regulations** Health Act (Laundries and bathrooms) Regulation Health (Swimming Pools) Regulations 1964 Health (Aquatic Facilities) Regulations 2007 Health (Public Buildings) Regulations 1992 Health (Rottnest Island) By Laws 1989 Fly Eradication Regulations Health (Pesticides) Regulation 2011 Health (Prescribed Insect Pests) Regulations 1991 Health Act (Local Authorities Sewerage Undertakings) Model By Laws Model By Laws Series A

#### Food

Food Act 2008 Food Regulations 2009 Australia New Zealand Food Standards Code

#### Water

Health (Treatment of Sewage & Disposal of Effluent & Liquid Waste) Regulations 1974 Health (Temporary Sanitary Conveniences) Regulations 1997 Health Act (Underground Water Supply) Regulations 1959

#### **Radiation Health**

Nuclear Waste Storage and Transportation (Prohibition) Act 1999

#### Radiation Health as secretariat to the Radiological Council

Radiation Safety (General) Regulations 1983 Radiation Safety (Qualifications) Regulations 1980 Radiation Safety Act 1975 Radiation Safety (Transport of Radioactive Substances) Regulations 2002

#### **Tobacco Control**

Tobacco Products Control Amendment Regulations 2010 - being drafted Tobacco Products Control Amendment Act 2009 Tobacco Products Control Act 2006 Tobacco Products Control Regulations 2006

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## **Significant Environmental Health events**

## 2000

A major toxic blue-green algal bloom in the Swan Canning Estuary System resulted in unprecedented closures of the whole estuary and fishing and recreational activities were suspended for twelve days. 2001

Staff contributed to the **largest hazardous emergency** and postfire clean-up activities following the destruction of the waste recycling and treatment plant in Bellevue on 15 February 2001. Following a government inquiry, a long-term medical register was initiated and remains active.

## 2005

Work commenced on drafting the **Public Health Bill** to better protect and promote public health. The Bill proposes to replace the *Health Act 1911* with modern, flexible public health law, providing robust tools to tackle the traditional, as well as the new and emerging public health concerns of the 21st century.



More than 45,000 people can look forward to a healthier working life, with **smoking banned** inside all pubs and clubs throughout WA.

Everyone from bar staff to glassies and waiters would no longer be exposed to hazardous second hand smoke.

## 2008

Western Australians are now protected under some of the most comprehensive food safety regulations in the country with the implementation of the **Food Act** 2008. Following the Act, October 2009 also saw the gazettal of the WA Food Regulations 2009. 2001

The first **Health Survey** of the Alcoa-Wagerup Community was released in April 2001 following health investigations, a joint venture of the Directorate and the University of WA. A second health study was undertaken in March 2008.

## 2007

Incorrect loading and transportation of **lead** through **Esperance** resulted in major bird deaths which triggered public health concerns. We undertook the major health investigations which followed, and continue to contribute to the cleanup coordinated by a number of State Government agencies.

## 2010

The Tobacco Products Control Amendment Regulations (2010) were gazetted, **tightening restrictions on tobacco** use to protect children and adults from the harmful consequences of passive smoking and the promotion of tobacco.



Jim Dodds, Director

## Message from the Director: A year in review

This Year Book is the first for the Environmental Health Directorate. Environmental Health is an area of public health that many people sometimes overlook, perhaps take for granted, or forget that a team of professionals within state and local government work hard to maintain. Our Year Book provides an opportunity to showcase the work that we do for the people of Western Australia.

Our State is faced with many challenges in environmental health. Not only do we manage traditional elements of environmental health,

such as ensuring a safe drinking water supply, we continually evolve to manage new risks of the 21<sup>st</sup> century, such as those risks associated with uranium mining, climate change and the treatment of wastewater to a standard suitable for drinking water purposes.

This financial year alone, we managed a number of real and sometimes perceived health risks including:

- Contamination of areas adjacent to Cockburn Cement in Rockingham
- Lead risks in Northampton, Geraldton Port and Esperance
- Emergency management of natural disasters such as the Carnarvon floods and Roleystone bushfires
- Dredging around Fremantle Port
- Debate regarding the public health benefits of chlorination and fluoridation of our drinking water supplies
- · Issues surrounding the introduction of genetically-modified foods, and
- Mosquito-borne disease risks including nine cases of Murray Valley Encephalitis.

Other areas of work include:

- Reforms to Asbestos Legislation
- Management of a range of Aboriginal environmental health contracts and
- Progressing with the implementation of the Food Act.

We have listed a number of ambitious targets for the 2011-12 year. Unpredictable distractions will surely impact on this proposed work program. Events, such as the Commonwealth Heads of Government Meeting, natural disasters and contaminated sites issues play a major role in how much of our target we are able to achieve. We make every effort to meet our deadlines but immediate health demands will always take precedence over our scheduled work. This is the very nature of our work and its unpredictability is what makes environmental health a challenging yet hugely rewarding experience, and this Directorate a great place to work.

The imminent introduction into Parliament of the new Public Health Bill sees the most significant legislative reform in the health sector in recent years. The present Health Act, introduced in 1911, has been a good and faithful legislative servant, but its use-by date is now exceeded. We will work closely with our stakeholders to ensure we are well placed to see a smooth and seamless transition to the risk-based approach contained in the Bill.

The Year Book also discusses our new Business Unit which streamlines licensing requirements and corporate governance issues, the implementation of an intense Occupational Safety and Health program, and outlines our planned program for 2011-12.

In closing, I want to commend the significant amount of work undertaken by Directorate staff. Like most modern workplaces, there have been some very stressful times. Staff are unwavering in the way they have addressed issues that rapidly disrupt more orderly activities and sometimes require them to undertake tasks both unpleasant and complex.

# A brief look at the Environmental Health of Western Australians

## **Quick facts**

- WA's population has grown faster than any other Australian state or territory. The Australian Bureau of Statistics figures released for 2010 indicate that WA was the fastest growing state in Australia with 2.29 million people (up by 49,100). Most of the state's growth has been due to overseas immigration, followed by natural increase, then interstate migration.
- In 2001, 3.5% of the total Western Australian population were of Aboriginal descent (ABS 2006). It has been estimated that 25% of Aboriginal people live in remote or very remote areas (compared to 2% of non-Aboriginal Australians).



The Swan River, a WA icon

• Aboriginal Australians, in general, are the least healthy of all indigenous populations within comparable developed countries, with chronic diseases the main cause of early mortality and morbidity.

## Perceived environmental health risks

In 2009, we wanted to gauge current public opinion of environmental health risks in WA to quantify community opinion on selected environmental health risks and to better inform our strategic planning and ongoing decision making processes.

The University of Western Australia (UWA), School of Population Health, was commissioned to conduct a "<u>Community Survey of Perceived Environmental Health Risks in Western</u> <u>Australia</u>" to determine the perceived risk. The study was based on a similar national survey (published in 2000) measuring public perception of environmental health risks.

Surprisingly, the three hazards perceived by nearly 60% of Western Australians to be the highest overall risk to health were:

- passive smoking
- water scarcity and
- sun exposure.

The top three hazards perceived to be the highest risk to families were:

- misuse of chemicals and poisons in the home and garden
- food additives and
- 'germs' in food.

More than 20% of respondents rated these hazards a 'high' risk to health.

Most likely to rate hazards as a 'high' risk to health were women, people aged 55 years, those with secondary-school only education, people with a poor self reported health status, those perceiving little control over health risks and people rating the environment where they live as 'Fair/Poor'.

The three perceived risks least regarded as being in the high category in the study were mobile phone towers, re-use of treated wastewater as drinking water and re-use of treated wastewater on market gardens.

Hazardous issues such as *nuclear waste, chemical pollution overall, ozone depletion*, and *indoor air quality* are all perceived as a lower risk in the WA survey when compared to the WA component of the national survey. *Climate change* and *smoke from wood heaters* are perceived as a higher risk in the WA survey when compared to the WA component of the national survey.

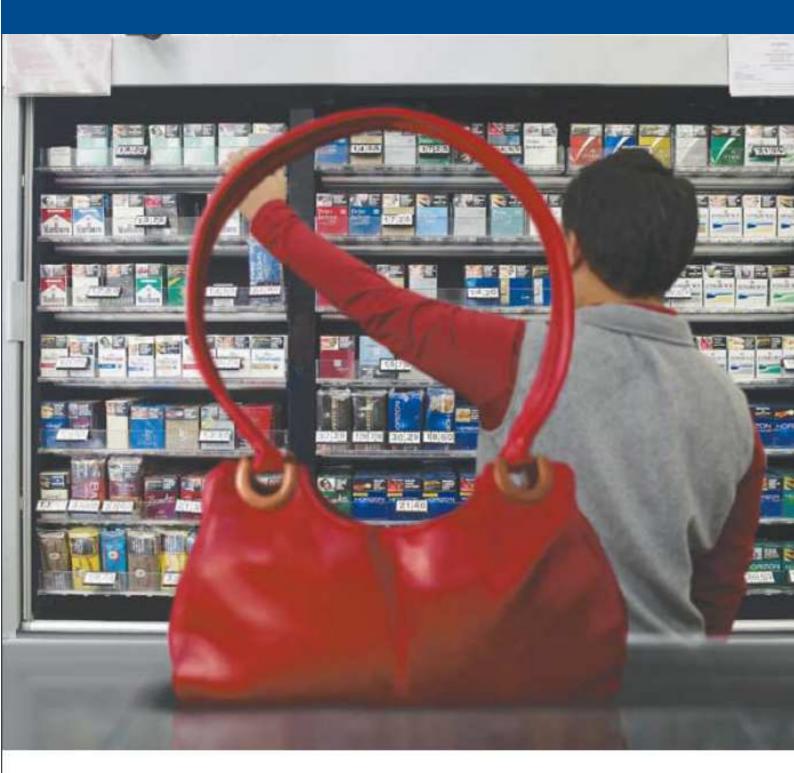
Overall, perceived environmental health risks for 23 hazards considered in the survey are shown in Figure 1, with the hazards ranked according to the percentage of respondents rating it as a 'high' health risk.

Passive smoking	6	57		23 9	10
Water scarcity	66			24 6	2 1
Sun exposure	64	4		30	510
Nuclear waste	52		16	20 7	5
Ozone depletion	50			7 1	6
Air pollution from cars	49			12	11
Contamination of soil by industry	47		34	15	23
Chemical residues in food	45			15 1	4
Air pollution from factories	44			15	2 2
Chemical pollution overall	44			15	21
Climate change	43		40	12 2	23
High-voltage power lines	40	3	2	19 3	6
Pesticides in air or water	40		37	19	23
Pollution of groundwater	39	3	6	20 2	23
Diseases carried by mosquitoes	38	3	38	21	1 2
Pollution of beaches, rivers, lakes	35	4	1	21	2 2
Treated wastewater pumped into rivers, lakes, seas	32	32		<b>28</b> 5	4
Uranium mining	30	26	28	6 10	
Genetically modified food	28	33	26	4 9	
Germs in swimming pools	27	37		28 3	5
Mobile phone towers	21		27	3 11	
Re-use of treated wastewater as drinking water	21	30	35	10	6
Re-use of treated wastewater on market gardens	12 30		44	10	4

Figure 1: Perceived health risk of twenty-three hazards to Western Australians (%)

% High % Moderate % Low % None % Don't Know

# Achievements



## Tobacco products are now banned from display in shops.

Smoking and shopping shouldn't go together. That's why new tobacco legislation bans smoking

products from being on display in most shops. Retailers can be prosecuted for showing packets and may have to cough up a hefty fine. The new tobacco laws will help clear the air for everyone. To find out more, visit www.health.wa.gov.au/tobaccocontrol



One of a series of posters used to promote the Tobacco Control reforms introduced during 2010

## Achievements for 2010-11

2010–11 has been a challenging but productive year. We have completed and/or been recognised for a number of successful projects that work towards improving environmental health in WA.

#### Some of our most significant achievements for 2010–11 include:

**Leading the way with tobacco control reforms**: We coordinated the development and gazettal of the *Tobacco Products Control Amendment Regulations 2010*. The new legislation tightens restrictions on the promotion of tobacco and on tobacco use to protect children and adults from the harmful consequences of passive smoking.

**Winning water awards:** The "*Premier's Collaborative Research Program: Characterising Treated Wastewater for Drinking Purposes Following Reverse Osmosis Treatment*", a joint initiative with the Water Corporation, was successful in winning the Water Awards for 2010. This is a prestigious award and a great accolade for our staff.

**Recognition as a key community organisation:** We were excited when we were presented with a Community Organisation Award for our contribution to the advancement of public health in WA. The award recognised a number of our achievements over recent years, including leading a range of public health initiatives such as the advancement of the new Public Health Bill and smoking reforms.

**Managing Aboriginal health contracts:** We took over the management and administration of more than 30 contracts and grants to Aboriginal communities, providing a range of environmental health services contributing to the improvement of living conditions and quality of life experienced by Aboriginal people living in regional and remote communities.

**Supporting investment in Aboriginal eye health programs:** We helped coordinate funding for environmental health activities related to trachoma prevention in Halls Creek and the Goldfields. Funding allows the employment of an Environmental Health Officer with Aboriginal Environmental Health Practitioner support in Halls Creek, and the creation of an Aboriginal Environmental Health Practitioner position in the Goldfields Population Health Unit.

**Publishing the Health Risk Assessment (Scoping) Guidelines:** The Guidelines were developed in partnership with the World Health Organisation Collaborating Centre for Environmental Health Impact Assessment at Curtin University, to complement the Environmental Impact Assessment process for new developments. We recognised the limitations of traditional risk assessment methodologies and the need for more specific characterisation of potential risks to public health.

Launching the new Health (Pesticides) Regulations 2011: After extensive consultation and a lot of hard work the Pesticides Regulations were published. The new regulations now allow us to better determine the risks to the public during the application of potentially hazardous chemicals. This process has been welcomed by the pesticide industry.

# Looking ahead



Mosquito fogging is one component of mosquito management programs partly funded by the Directorate

## Looking ahead 2011-12

Our astute team recognises and addresses current and emerging issues and trends which may impact on the health of Western Australians.

Following are some key projects planned for the coming year that aim to improve the way we work, and minimise environmental health risks to the WA community:

**Developing alternate water guidelines**: With Perth's drying climate there is a move towards water sensitive urban design. We recognised a need to develop best practice guidelines for developers and the community to minimise health risks associated with the use of alternate water sources. Alternate water sources may include reusing water from stormwater, roofwater, shallow bore or surface water bodies for non-potable end uses such as irrigation and toilet flushing. Without appropriate systems and checks in place these water sources have the potential to cause human illness. The proposed guidelines set out ways to mitigate any risks, providing confidence to the community about the safety of these sources.

**Developing guidelines for food borne disease outbreak investigations:** To improve state-wide investigation of food borne disease outbreaks, we need to develop guidelines clarifying the roles for improving investigations gastroenteritis outbreaks. Development and implementation of a guideline will help to guide environmental health investigators from the moment notification of a known or suspected gastroenteritis case occurs, through to implementing preventative measures.

**Relocating Radiation Health Unit staff:** The impending demolition of U-Block at the QEII Medical Centre in Nedlands housing the Radiation Health Unit necessitates urgent relocation to our main facility, Grace Vaughan House. We need to focus on constructing a purpose-built testing laboratory of approximately 280 square metres, which will require significant coordination and resourcing to ensure the move can be completed during 2012. This move ensures 80% of our team are housed in the one location, enhancing the way we do business and communicate across the Directorate.

**Implementing the next stages of the Public Health Bill:** The Minister for Health has signalled his intention to introduce the Public Health Bill into Parliament. We are working with the Legal and Legislative Services Directorate to develop an implementation and project plan, ensuring the Bill is complete, and with essential supporting material prepared.

**Reviewing funding for Local Government Mosquito Management:** The management of disease vector mosquitoes is undertaken collaboratively by state and local governments under the Contiguous Local Authorities Group (CLAG) scheme. The 1990 scheme was reviewed with the intention that more local governments will be eligible for the scheme. We will implement the recommendations from the review over the coming year.

**Establishing a Development Assessment Panel (DAP):** This panel will accept responsibility for assessment of external state wide development and planning proposals that request/require input across disparate Divisions within the Department of Health.

# What we did



Jared Koutsoukos, from our Water Unit, collecting water samples from the Swan River as part of our Recreational Water Monitoring Program

## What we did

During the year we were involved in a number of activities to help manage risks arising from perceived, existing or emerging health threats to the WA community in order to meet our overall objectives of;

## **Business Unit**

"Managing the financial, administrative, licensing and business functions of the Directorate".

## **Environmental Health Hazards Unit**

"Minimising risks from environmental health hazards".

## **Food Unit**

"Identifying and managing food safety and supply risks".

## **Radiation Health Unit**

"Minimising exposure to harmful radiation".

## **Science and Policy Unit**

"Coordinating across-Directorate projects, policy and innovations".

## Water Unit

"Minimising exposure to risks associated with water".

Our work for the 2010-11 financial year is detailed on the following pages.

## Significant programs and projects

## Legislation, guidelines and publications

We initiated and/or completed a number of reviews of legislation, guidelines and publications during 2010-2011.

### **Contaminated sites**

To assist the public and industry to better manage health risks associated with contaminated sites, the following resources were published:

- Asbestos Guidelines Summary Sheet, • May 2011
- Guidance Note on Recommended • Procedures for Laboratory Analysis of Asbestos in Soil, June 2011
- Guidance Note on the Identification, • Assessment and Management of Asbestos Contamination in Regional Public Areas, May 2011
- Asbestos Issues Who Do You Call? May 2011

### **Tobacco control reforms**

We coordinated the development and gazettal of the Tobacco Products Control Amendment Regulations 2010 on 22 September 2010. The legislation further restricts tobacco use to protect children and adults from the harmful consequences of passive smoking and issues arising from the promotion of tobacco.

The legislation now prohibits:

- the display of tobacco products, packages and smoking implements at point of sale
- smoking "between the flags" at a patrolled swimming area on a beach
- smoking in outdoor eating areas
- smoking within 10 metres of playground equipment in a public place and
- smoking in or on vehicles if someone under 17 years old is in or on the vehicle.

Extensive consultation occurred across industry and government, including a \$315,000 state wide media campaign, consisting of radio, press advertisements and posters to raise awareness of the implications of the amendments.

#### Asbestos

Consulted on the proposed amendments to the Health (Asbestos) Regulations 1992 occurred, with the aim to improve the management of asbestos removal and disposal. Submissions are now being considered and will guide the development of drafting instructions to Parliamentary Counsel.





"Western Australia is leading the way in combating smoking and this legislation will result in major health benefits for all Western Australians".

**Kim Snowball Director General**, **Department of Health** 

## **New Pesticides Regulations**

Amended <u>*Health (Pesticides) Regulations</u></u> <u>2011</u> were published on 1 February 2011. The Regulations require:</u>* 

- better record keeping by licensed operators
- improved signage where applications of pesticide occur in public places
- improved business registrations for pesticide and fumigation companies
- consolidated photo IDs to enhance security for individual operators and
- amalgamation of company registrations to reduce the financial burden on pesticide and fumigation businesses

Both industry and the community have welcomed these changes.

## Stable fly nuisances

Amendments to address public concerns surrounding stable flies and odours associated with poultry manure used in horticulture were implemented. The horticulture industry is now prevented from using poultry manure in selected local governments from 1 September 2011

## **Bushfire hazards**

#### The Hazards on your property after a

bushfire guideline was released following the 2011 Roleystone bushfires to provide advice on the management of asbestos and other hazards resulting from bushfires.

## Guidelines for the non-potable uses of recycled water in WA

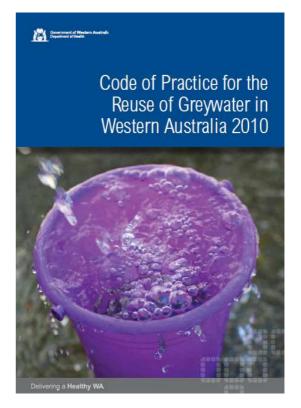
The Department supports the use of nondrinking water quality applications such as agriculture, industrial cooling and toilet flushing.

To manage risks associated with water recycling schemes, we released the <u>Guidelines for the non-potable uses of</u> <u>recycled water in Western Australia</u>. The document incorporates a '12 element' risk assessment framework based on the National Guidelines for Water Recycling. Consulted occurred across government and industry, and the document is viewed as a constructive approach to minimise potential health risks associated with recycled water schemes across WA.

## Update of the Code of Practice for the Reuse of Greywater

The <u>Code of Practice for the Reuse of</u> <u>Greywater in Western Australia 2010</u> has been updated to now consider advances in technology and additional end use applications such as toilet flushing.

The document sets out the minimum requirements for three greywater reuse options (bucketing, diversion devices and treatment systems) and defines the agency (i.e. local government) responsible for the approval process.



## Revised the Wastewater Overflow Response Procedures

We coordinated the revision of interagency Wastewater Overflow Response Procedures which detail the government management responses required to minimise public health risks associated with sewage spills in swimming waterways and domestic properties throughout the state.

## **Government Sewerage Policy**

The existing Government Sewerage Policies have now been combined into one overarching policy which applies to all unsewered subdivision and development in WA.

An interagency committee, consisting of the Departments of Planning, Environment and Conservation and Water Corporation, assisted with the review. The draft policy will be released for public comment during the coming year.

### Health Risk Assessment (Scoping) Guidelines

In conjunction with the World Health Organisation Collaborating Centre for Environmental Impact Assessment (EIA) at Curtin University, we developed the <u>Health</u> <u>Risk Assessment (Scoping) Guidelines</u>. This document enables assessment of demonstrated health risks, and guides priorities during early stages of development proposals.

This document was supported by the Environmental Protection Authority (EPA), as part of the risk based approach for EIA, which now addresses public health issues associated with project developments.

#### Government of Western Australia Department of Health

## Health Risk Assessment (Scoping) Guidelines

A health risk assessment process for risk assessors for use within the scoping stages of environmental and health impact assessments



#### Scoping out public health problems

With the resource boom and increased urban development it became clear to us that guidance was needed for developers and government to assist with identifying public health factors during the early planning stage of developments. We developed two guides, <u>Mine sites</u>, <u>exploration camps and construction</u> <u>villages: Public Health considerations and Residential estates</u>, <u>precincts and urban</u> <u>developments: Public Health considerations</u> to help facilitate an improved planning process.

These Guides have the potential to significantly reduce the impact on health by encouraging more inclusive planning decisions.

> "This is fantastic work, the first significant steps towards an integrated approach to Impact Assessments".

Manager Health and Ranger Services

## Regulatory food safety auditing

The component of the *Food Act 2008* providing the framework for approval of food safety auditors and the auditing of mandatory food safety programs for specified high risk food businesses resulted in the finalisation and release of the <u>Regulatory Food Safety Auditor Approval</u> <u>Process Policy and the Management of</u> <u>Regulatory Food Safety Audit Policy</u>.

Four auditors were approved to work with local government enforcement agencies to help implement a consistent approach to auditing food safety programs.

### WA Food Alliance Working Group

We continued to coordinate the WA Food Alliance Working Group, whose primary purpose is to guide the consistent and practical administration of the *Food Act* 2008 and its subsidiary legislation. An increase in membership to include regional representation highlights the continuing success of the work of this group.

### Food Act reporting requirements

The first <u>Report on the Food Act 2008</u> summarising the activities of 140 enforcement agencies, as required under the *Food Act 2008*, was completed and presented to the Minister for Health.

A number of issues identified in the report will assist in the process of shaping the framework for future reporting. We were pleased to note that all local government enforcement agencies reported, reflecting a fundamental aim of the new legislation to monitor continued compliance activities by local government.

#### **Air Toxics Guidelines**

To assist with determining the potential health risks of specific airborne substances we developed the <u>Guidance on using the</u> <u>Threshold of Toxicological Concern for</u> <u>screening evaluation of air toxics</u>. This document can be used by a range of industries, including the expanding mining sector, to ensure airborne emissions do not present a risk to urban environments.

Government of Western Australi Department of Health

Guidance on Using the Threshold of Toxicological Concern to Screening Evaluation of Air Toxics



## Community studies and other surveys

We continued to contribute towards the health research needs for the state by participating in a number of state wide surveys and community studies.

### **Kwinana Child Health Study**

In collaboration with the DEC and the Institute of Child Health, we completed Part one of a two-part objective study investigating child lung health and air quality in the Kwinana industrial area.

The aim of the study was to investigate respiratory symptoms and lung function in school aged children, a group susceptible to the adverse health effects of air pollution. Part two of the study will report on air quality through the Kwinana area. Findings are expected to be formally released to the community by the end of 2011.

### Fruit and vegetable residues

A follow up survey monitoring levels of pesticide residues in fruit and vegetables sold domestically was coordinated through the WA Food Monitoring Program and local government to complement previous health surveys. The first survey was completed in 1989. A Government inquiry relating to country of origin labelling reinforced the need for ongoing surveys. Once completed, the Report will be made available to the public.

### Folic acid fortification

The National mandatory folic acid fortification of wheat flour for making bread compliance survey, overseen by WA, assessed Quality Assurance Arrangements (QAA) to demonstrate the effectiveness of the addition of folic acid by the flour mill industry to ensure compliance with the requirements of the Australia and New Zealand Food Standards Code.

Our Food Unit staff coordinated the WA component of the survey at flour mills producing wheat flour for bread production, completing an audit at each mill. The assessments confirmed satisfactory implementation of the QAA by industry. We also contributed to the National survey.



## Survey of egg based sauces and Salmonella

The <u>Survey of Egg Based Sauces and</u> <u>Salmonella in Small to Medium Food</u> <u>Businesses April – August 2010</u>, was coordinated by the WA Food Monitoring Program in collaboration with 25 local governments. The survey helped us determine if salmonella contamination could be caused from raw eggs used in common sauces, such as mayonnaise.

The survey included the collection of egg based sauces and spreads made on-site at WA food premises, and the collection of information on food safety management, hygiene practices and details of eggs being used, including quality, storage and sources.

The findings concluded that there was no evidence of risk of salmonella contamination from egg based sauces made at small-to-medium food businesses, however a follow-up survey will be completed during the coming year.

### Food and Cost Survey

We worked with local government and Curtin University to conduct the <u>Food</u> <u>Access and Costs Survey</u> at 160 grocery stores across WA, including remote Aboriginal communities.

The survey was used to explore how cost and availability of foods determines food choices, and the feasibility for developing a nationally harmonised system for monitoring food access and cost.

The <u>survey findings</u> were released in 2011, identifying recommendations to improve food security for people living outside of Perth and major regional towns and people dependent upon welfare. The Department supports measures to ensure people have affordable access to nutritious foods and be empowered to incorporate healthy food in their diet to combat non-communicable diseases (overweight, obesity, diabetes) that are rising in our population.

We would like to thank local government environmental health officers for their support with helping to conduct the survey.



Robert Mullane, from our Science and Policy Unit, completed the Food and Cost Survey at a number of remote grocery stores including the remote Aboriginal community of Mulan.

## Projects, programs and other health initiatives

We coordinated or were involved in progressing a number of state and national projects, programs and other health initiatives.

## Aboriginal environmental health contracts

Our Directorate assumed management of over 30 contracts and grants providing environmental health services that contribute to the improvement of living conditions and quality of life experienced by Aboriginal people in regional communities.

Funding is distributed across multiple agencies to employ a combined workforce of more than 60 Environmental Health Practitioners. The predominantly Aboriginal staff monitor and report on health conditions in their communities, focussing on a wide range of environmental health factors, and providing general maintenance services (e.g. fixing leaking taps) to community buildings.

These services require strong partnership between Government agencies, educational institutions, Aboriginal Medical Services, and other not-for-profit agencies located in regional Aboriginal communities.



Wakathuni Community near Tom Price

## Environmental Health tracking project – Phase II

We researched and submitted a report on Phase II of the <u>National Environmental</u> <u>Health Tracking Project</u> to enHealth members in December 2010.

Phase II involved the development of a pilot project which, 1) investigated the prevalence and distribution of Ross River Virus, Barmah Forrest Virus and Murray Valley Encephalitis in WA, and 2) assessed outdoor air quality data and data associated with incidents of asthma and respiratory distress in nominated parts of Australia.

The final report identifies issues with data access and use, securing partnerships and information technology requirements.

The development of an environmental health tracking system will significantly advance the monitoring, review and analysis of environmental health operations, enabling better communication of performance to stakeholders.

#### Aboriginal trachoma prevention

Commonwealth funding to support trachoma prevention in the Aboriginal populations of Halls Creek and the Goldfields was made available. This helped us facilitate employment of Environmental Health Practitioners (EHP) in these locations.

These practitioners now work closely with clinical teams to address disease transmission risks and to provide practical and effective interventions for risk factors associated with trachoma infections

### Dog health program

This program aims to reduce the impact of dog borne diseases and parasites in dogs in remote Aboriginal communities where there is no access to veterinary services. Funded by the Commonwealth, in partnership with the community councils, Shire of Broome, WA Police, and Nirrumbuk Environmental Health Service, we are managing a two year program in the Ardyaloon and Djarindjin communities. The program complements existing dog health programs in these communities.

Funding is used to train Aboriginal EHPs to manage a variety of dog health programs and is expected to provide tangible health outcomes for community members.



Learning injection techniques during dog health training

## Participation in the Managing Water Quality Project Stage 2

Our Water Unit staff participated in the Managing Water Quality – Gaps and Opportunities Stage 2 project led by the Department of Water, but with input from numerous government agencies. The project aims to drive legislative change by identifying opportunities for more effective/efficient water quality management in the State.

### Fremantle dredging

We continued to monitor activity at the Fremantle Inner Harbour Dredging Reclamation at Rous Head and Offshore Disposal Project. One of the biggest impacts of the dredging was the perceived public health risk, generated by clearly visible sediment plumes, particularly within the lower reaches of the Swan River. Water clarity for public recreation and aesthetics values was regularly substandard at a number of lower Swan River recreational beaches. Whilst proving to be of nuisance value only, it reduced visibility for swimmers, divers and other recreational water users.

To manage these concerns signs warning swimmers of this poor visibility were erected during peak dredging plume events.

With our representation, the interagency Fremantle Harbour Dredging Reference Group was formed to ensure effective communication and management throughout the project.

## Albany Harbour Dredging

The Minister for the Environment approved the Albany Port Expansion Project in 2010, which initiated the dredging of a shipping channel in King George Sound for the entry of Cape size vessels to the Albany Port.

The Department was represented on the Albany Port Dredging Reference Group to help identify potential health risks, and ensure appropriate management throughout the course of the development. Our involvement assists the WA government in implementing a significant infrastructure project by identifying and addressing potential health concerns.

## Water Corporation Groundwater Replenishment Trial

We assist the monitoring of the <u>Water</u> <u>Corporation's Groundwater Replenishment</u> <u>Trial</u>, assessing the effectiveness and safety of groundwater replenishment to determine if it can be used to boost future

drinking water supplies.

The trial involves treating wastewater from the Beenyup Wastewater Treatment Plant to achieve drinking water quality before being recharged to groundwater.

This was a comprehensive research project that helps improve water efficiency in WA.

## Food labelling

The Food Unit coordinated an across agency submission to the *Labelling Logic* report of the National Review of Food Labelling Law and Policy, released for comment in January 2011. The report contained 61 recommendations covering a wide range of labelling issues with potential implications to a variety of state jurisdictions.

## **Radiation Health Committee**

The "National Directory for Radiation Protection Edition 1", endorsed in June 2004, is now regarded as the Framework for National Uniformity in Radiation Protection. WA provides a representative to this Committee to ensure national standards remain appropriate to WA.

### Interagency uranium review

With the lifting of the ban on uranium mining in 2008, the Department of Mines and Petroleum invited our representation on an interagency working group.

Several issues regarding resource requirements needed to regulate uranium mining to achieve world best practice standards were identified. The need to increase the number of trained state



Several of our Water Unit staff with a representative from Queensland Health on a tour of the Beenyup Wastewater Treatment Plant regulators to review future uranium mining applications is seen as a priority.

## **Uranium mining**

Uranium mining and the transport of uranium ore is subject to the *Radiation Safety Act* 1975 and its subsidiary legislation.

Our Radiation Health Unit provides advice to the Radiological Council on industry radiation management plans, processes requests for approval for radiation safety officers, reviews occupational and environmental reports and conducts inspections and audits.

Since the lifting on the uranium ban we have reviewed a number of Radiation Management Plans outlined in the following table.

Financial Year	2010/	2009/	2008/
	2011	2010	2009
Radiation Management Plans reviewed	18	31	1



Unmined uranium exploration site inspected by our Radiation Health Officers

## Extraordinary / major issues

During the year we responded to a number of unplanned events requiring our expertise to assist in managing environmental health implications.

## Dangerous lead levels found in kids' playground equipment

Following the discovery of lead contamination in Esperance during 2007, the <u>Esperance Clean-up and Recovery</u> <u>Program</u> detected high levels of lead on playground equipment. The report findings implicated playground equipment throughout WA as being a potential exposure risk to children. This news attracted significant media coverage and community concern.

We undertook a major risk assessment program of equipment in conjunction with

state and local governments, and playground manufacturers. Following the assessment, which concluded that playground equipment in good condition posed no health risk, the development and distribution of a fact sheet and <u>guidance on</u> <u>risk assessment</u> documents to manage at risk playground equipment greatly assisted in alleviating community concern.

### **Dust emissions at Cockburn Cement**

The Standing Committee on Environment and Public Affairs commenced an inquiry into Cockburn Cement Ltd, following community concerns and media attention on air emissions, dust in particular, emanating from the facility.

In consultation with the DEC, City of Cockburn and Cockburn Cement, our



toxicologists reviewed environmental monitoring data, providing input into the development of a rigorous environmental plant licence and responding to the Standing Committee on health implications.

The Minister for Health requested that we address specific health complaints and the basis of these complaints. We released two public reports, <u>Analysis of dust</u> <u>deposition gauges in the Munster area</u> (September to December 2010) and <u>Investigation into the health complaints</u> from residents near the Cockburn Cement Plant Ltd (December 2010) in March 2011.

Senior officers provided expert witness to the inquiry. The inquiry report is now publicly available.

## Magellan Metals transporting lead to Fremantle Port

Results from routine monitoring of transport routes provided to the DEC showed levels of lead exceeding health guidelines. Our toxicologists provided an interpretation and assessment of results to determine potential health implications at each monitoring site. Our follow up assessments showed very low levels of lead, and indicated that laboratory testing in this case may have resulted in incorrect reporting during the initial testing. This issue received significant media attention and had the capacity to jeopardise the ongoing export of the lead utilising the Fremantle Port facility.

## Northampton lead investigations

Large volumes of lead tailings once stockpiled at the historic State Battery site in Northampton were found to be used by the local community to construct building foundations, driveways and pavements at households and businesses around the town.

We were asked by the local community to investigate the extent and distribution around the town site. This issue remains a work in progress and final results are not yet available.

In June 2011, our toxicologists met with residents to discuss the investigation, possible health implications and steps necessary to reduce lead exposure. Factsheets, <u>Minimising the health risks of</u>



DEC officer collecting a soil sample surrounding the Geraldton Port

### lead and Northampton and lead exposure

were distributed to the public, including the local GP, child health nurse and local government.

#### **Geraldton Port lead concerns**

Our toxicologists also worked with local community volunteers and the City of Greater Geraldton to coordinate the environmental sampling program of the Geraldton Port in response to community concerns about fugitive lead, copper and zinc dust detected during routine monitoring conducted as part of licensing conditions. The sampling program included extensive soil and dust monitoring, and rainwater testing within a 3.5 km radius of the Port.

We concluded that the levels of lead, copper and zinc detected were well below health guidelines and did not pose a health risk to the residents. Two public documents were released, <u>Geraldton dust report</u> and <u>Dust investigations information sheet</u>, helped allay community concern.

### Japan nuclear incident

On 11 March 2011 an earthquake and subsequent tsunami struck the Japanese eastern coast. One of the major issues we were involved with was in relation to the operation of the Fukushima Daiichi nuclear power plant. The strong community concern regarding the dispersion of radioactive material required us to ensure we had up to date and reassuring information to address the many phone calls we received from community members.

#### **Carnarvon floods**

Some Western Australians were victims of flooding that engulfed the town of Carnarvon in late December 2010. The process of return to normality required the expertise and knowledge of many health officers at state and local government level.

A State of Emergency was declared and we sent senior officers to assist the Shire in its flood response and recovery efforts. Assessments were undertaken to determine priority health impacts from:

- Damage to onsite sewage disposal systems
- Waste (general refuse, chemical, asbestos)
- Mosquito breeding (spraying program initiated)
- Contaminated swimming pools

Carnarvon was hit by further flooding in some areas, destroying much of the previous response and recovery efforts. We again provided assistance at no cost to the Shire during this stressful time. Shire councillors were extremely appreciative of our ongoing assistance.



Images of the Carnarvon floods including the aftermath of flooded home and the overflowing Gascoyne River

## Dengue fever risks to WA travelers to Bali

Significant numbers of Western Australians travelling to Bali contracted dengue fever during 2010-11. We issued health warnings advising people travelling to Bali to take precautions to minimise mosquito exposure. This sparked a number of public enquiries concerning the risks of mosquitoborne diseases associated with travel in South East Asia. Fact sheets incorporating general health advice for avoiding dengue fever were developed and placed on our website.

## Murray Valley encephalitis in northern WA

Widespread and ongoing activity of the rare, but potentially fatal mosquito-borne virus, Murray Valley Encephalitis (MVE) virus occurred in northern and central regions of WA during early 2011. There were nine confirmed cases of MVE, including one death, with the likely places of exposure to the virus being the Kimberley, Pilbara, Gascoyne, eastern Goldfields and possibly the Midwest/Murchison regions.

We issued repeated health warnings during the season to ensure heightened public awareness about the need to minimise mosquito exposure. Fortunately, the Directorate-funded sentinel chicken surveillance program (undertaken by the UWA) detected activity of MVE and the related Kunjin viruses prior to the occurrence of human cases, allowing these timely health warnings to be issued.

## Cyclospora investigation and response

An environmental health investigation was conducted on a Cruise Ship which docked in Fremantle, with a number of people diagnosed with cyclosporiasis, an infection caused by a protozoan transmitted in contaminated food and water.

Interviews and an audit of the ship's food handling practices were conducted with medical staff and senior officers to determine the likely cause of infection. Findings interpreted by the Communicable Disease Control Directorate (CDCD) indicated that the contamination was most likely linked to contaminated lettuce or similar fresh produce purchased at overseas markets.

## Salmonella typhimurium PFGE3 Outbreak Investigation

From 26 January to 26 March 2011 a Salmonella typhimurium PFGE 3 outbreak was associated with a Perth food business, affecting 23 people (14 of which were hospitalised).

We assisted local government in interviewing all cases to determine any activities which may have led to the consumption of unsafe food. Investigations involved an intense sampling and swabbing regime, monitoring of food handlers' practices during peak times and a series of food safety compliance assessments.

Results negative to salmonella made it difficult to determine with any certainty the exact cause of the outbreak.

Despite this, investigations identified potentially hazardous food processing and handling practices. The food business concerned ceased these practices and agreed to undertake food handler training with the relevant local government.

## Mosquito nuisance and Ross River virus disease

Public complaints regarding nuisance mosquitoes were at record levels during the summer months of 2010-11. Significant cases of Ross River virus disease were also notified throughout WA.

Mosquito breeding over extensive areas of tidal saltmarsh in Perth and the south-west was triggered by extreme high tides associated with La Niña weather conditions. In conjunction with the UWA, we undertook State-wide surveillance, which informed the need to issue health warnings to the public. Provision of advice to the public and routine funding for local government mosquito management programs assisted in mitigating significant increases in potential vector borne disease cases. etc), not just gymnasiums. This information will form the basis of a future policy or code of practice for deployment of AEDs in public places.



Salt marsh mosquitoes can be a nuisance and disease risk to people

#### **Automatic External Defibrillators**

Australian deaths from sudden cardiac arrest are estimated at in excess of 20,000 each year. Clinical evidence indicates treatment using automated external defibrillators (AEDs) provides a greater chance of survival for victims. We assisted the Minister of Health to investigate the gains to health of requiring installation of AEDs in public buildings, particularly those used for activities that may exacerbate heart conditions such as health clubs or gymnasiums.

We worked closely with the Regulatory Gatekeeping Unit of the Department of Treasury and Finance and industry stakeholders in view of the potential costs for some sectors of the fitness industry. Ultimately, it was determined that the greatest health gains were likely to derive from deployment of AEDs in a broad range of public places (e.g. transport hubs, shopping centres, entertainment venues,

## **Compliance activities**

We have a range of obligations that relate to legislation compliance activities including licensing, registration, approvals, permits, notification and assessment services for a range of activities.

Various processes are in place including auditing and compliance requirements to monitor industry risks against appropriate health standards.

## **Contaminated sites management**

Our toxicologists assisted the DEC to classify 539 sites in accordance with the *Contaminated Sites Act 2003*. Most common contaminants included heavy metals, petroleum hydrocarbons and asbestos.



John Howell, our Senior Toxicologist, inspecting a potential contaminated site

#### Food business assessments

The Department is the enforcement agency under the *Food Regulations 2009* for a food business located in public hospitals, primary production of dairy and seafood, or not within a local government district.

The Department also audits food businesses processing animal products for human consumption under the *Australian New Zealand Food Standards Code*. The table below indicates the number of assessments undertaken by Food Unit officers.

Assessment of Food Business Premises 2010- 2011				
Type of premises	Number premises	Number assessments		
Meat Premises	138	230		
Dairy Farms	184	173		
Dairy Processors	47	82		
Vulnerable Persons	88	36		
Rottnest/Kings Park/Hillarys	25	19		
Total	482	540		

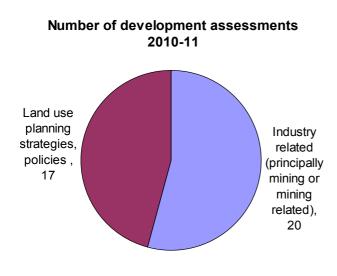
#### Food sampling

Samples collected as part of independent assessment of food safety issues and enteric disease investigations, in conjunction with local government are detailed in the following table.

Food premise samples 2010-11			
Sample program	Number samples		
Animal Feed Monitoring Program	52		
Carcase Swabs (Abattoir Monitoring)	253		
Carcass Excision	217		
Dairy Products	538		
DOH Miscellaneous Samples	26		
Nut and Nut Products Survey 2011	22		
Food Complaint	5		
Food Poisoning	2		
Outbreak Investigation	426		
Poultry Monitoring Program	36		
Shellfish Monitoring (Local)	23		
Smallgoods Equipment	501		
Smallgoods Products	421		
Moore Swabs (Salmonella)	560		
Total	3082		

#### **Development assessments**

We are now recognised by proponents and decision makers as the agency required to provide high level health advice to development proposals with the capability of impacting on health services and the community throughout the state. We provided advice to thirty-seven complex development proposals, of which 17 related to land use planning strategies, policy or scheme amendments and 20 to industry related activities, principally resource or mining. These are outlined below:



#### Total = 37 development assessments

A Development Approvals Panel is to be established over the coming year and will take responsibility for the distribution and management of health input to external requests made to the Department.

#### **Pesticide licensing**

The licensing of Pest Management Technicians, combined with the registration of Pest Management Businesses, is a requirement under the *Health (Pesticides) Regulations 2011*. We issued licences to approximately 2000 technicians and registered 800 pest management businesses.

#### **Radiation authorisations**

Our Radiation Health staff provide administrative support to the Radiological Council, issuing licences and registrations in accordance with the Radiation Safety Act, including registration of radiation producing devices, radioactive substances and associated premises, and individual radiation users licences. The following licences and registrations are currently held:

# Registration 1536 Licences 4122 Total = 5,658 Radioactive substances

#### X-ray and/or electronic products





A further break down of licences and registrations is attached in Appendix 2.

Radiation Health officers also inspect radiation producing equipment and radioactive substances used in medicine, industry, research and education, and the premises in which they are used.

## **Radiation monitoring**

The laboratory within the Radiation Health Unit provides wipe test assessment services. The total number of wipe test assessments provided by the Unit during the last five financial years is as follows:

Year	2010/	2009/	2008/	2007/
	2011	2010	2009	2008
*Wipe test batches	114	64	99	115

\*Each wipe test batch may contain multiple samples

Radioactivity analysis of items such as soils, building materials and other substances is undertaken. The total number of radioactivity analyses conducted during the last five financial years is as follows:

Year	2010/	2009/	2008/	2007/
	2011	2010	2009	2008
Radiometric analysis	30	34	12	11

The Radiation Health Unit also provides an annual service for the calibration of industry standard sources used by sectors of the mining industry for assessment of the internal radiation dose of their workers. In addition to calibration, wipe testing and radioactivity analysis services, the Radiation Health Unit provides health physics services on a consultancy basis in specific circumstances.

#### Regulatory compliance testing programs

The Radiation Health Unit performs an administrative, supervisory and auditing role in the Radiological Council's compliance testing program for medical and dental x-ray equipment, which commenced in 1997. This program assists in maintaining surveillance of the rapidly growing use of x-ray equipment in the State.

The required frequency of testing is dependant on the type of equipment and is either one, two or three yearly. The number of compliance tests processed during the past five financial years is as follows:

Medical Compliance Tests					
Financial Year	2010/ 2011	2009/ 2010	2008/ 2009	2007/ 2008	2006/ 2007
Number of tests processed	1142	1214	991	980	951

The industrial compliance testing program for fixed radiation gauges commenced in 1999 and requires that gauges are not used unless they have a current certificate of compliance. Gauges must be compliance tested every three years. The number of fixed gauge compliance tests during the past five financial years is as follows:

Fixed Gauge Compliance Tests					
Financial Year					
Number of tests processed	336	746	663	447	

## Structural radiation protection assessments

The Radiation Health Unit provides structural radiation protection assessments for the installation and use of x-ray producing equipment or radioactive substances used in a variety of industries. The assessments advise as to whether the current or planned structures will provide sufficient radiation protection for both occupationally exposed persons and members of the public.

The number of structural radiation assessments conducted and reports issued by the Radiation Health Unit during the 2010–2011 financial period is as follows:

Area assessed	Reports issued
Dental	65
Chiropractic	4
Nuclear Medicine	3
Radiation Oncology	3
Veterinary	10
Mammography	4
Bone Densitometry	13
Medical Radiology	17
Total	119

## **Tobacco licensing**

Sellers of tobacco products by retail, indirect or wholesale methods are required to have a licence under the *Tobacco Products Control Act 2006*. At the end of the 2010-2011 year, there were 3802 current tobacco sellers licences.

#### Active licences by type of sale

Type of Sale	Total Number
Retail Sale	3708
Retail Sale, Indirect Sale	7
Retail Sale, Wholesale	
Sale	45
Retail Sale, Indirect Sale,	
Wholesale Sale	12
Indirect Sale	5
Wholesale Sale	24
Indirect Sale, Wholesale	
Sale	1
Total number of licences	
issued	3802

### **Tobacco control compliance activities**

Enforcement of the *Tobacco Products Control Act 2006* includes running a proactive state-wide compliance program to educate licensees by conducting store visits and audits of tobacco sellers.

Tobacco Control officers conduct complaints investigations and carry out a range of enforcement activities. These activities have been outlined in the table below.

Type of activity	Number of
Store visits/audits conducted	590
Complaints investigated	66
Infringements written	0
Warnings issued	34
Prosecutions	1



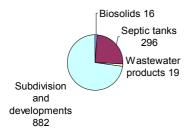
New look display cabinets complying with new Tobacco Control reforms

### Wastewater approvals

A range of wastewater systems and product applications require assessment and approval in accordance with the *Health* (*Treatment of Sewage and Disposal of Effluent and Liquid Waste*) *Regulations* 1974.

These have been outlined in the following chart.

## Number of wastewater applications assessed during 2010-11 financial year



### **Recycled water schemes**

The Department of Water is the lead agency for the approval of non-drinking water schemes. Our Water Unit assists by regulating the stages from design through to maintenance of sewage schemes in accordance with the *Health Act 1911*. A number of scheme assessments were conducted outlined in the table below.

Environmental water program	Number of
Routine water	8
sampling events	
Sanitary	6
Inspections/Report	
Assessments	
Total	14

### **Drinking water**

The Water Unit is responsible for reviewing, interpreting and applying the *Australian Drinking Water Guidelines 2004* to WA drinking water supplies.

This involves the coordination of the statewide drinking water quality monitoring program which requires large water suppliers (including large and small scheme suppliers), minesites and bottled water manufacturers to monitor and report on their systems. Monitoring is also required by non-scheme suppliers such as roadhouses, tea-rooms, caravan parks and farmstays.

The table below outlines the drinking water assessments and approvals completed:

Drinking water assessments / approvals	No. of applications assessed
Source Protection Plans	6
Water Quality Management Plans	25
Substances & Materials in Contact	32
Total	65

### **Environmental water monitoring**

In partnership with local government we collect water samples to test for bacteria, and carry out health assessments at popular WA waterways commonly used for swimming, surfing and skiing.

Details of the program can be viewed on the Public Health website, <u>bacterial water</u> <u>quality monitoring</u>.

During the year we completed the following sampling and sanitary inspections.

Recycled water schemes assessments	No. of
Assessed requiring additional information	43
Approved to construct/install	20
Validation and verification reports assessed	10
Final approval given (Permit to Use)	14
Total	87

### **Emergency health responses (water)**

We coordinate the health response to sewage spills and algal blooms that occur in popular recreational waterways throughout the state, as well as sewage spills into domestic properties. This involves the preparation of media warnings and onsite inspections to ensure health warning signs are erected. These responses are outlined in the following table.

Emergency health responses - water	Number of response
Environmental Sewage Spills	7
In building Sewage Spills (during	7
office hours)	
Toxic Algal Bloom Responses	5
Total	19

### Public events and mass gatherings

Staff liaised with event organisers and local governments on the approval process of more than 40 medium to high risk major events such as the Big Day Out, the Southbound Music Festival (which includes a camping component), Australia Day celebrations and the 2010 Rebel Sport City to Surf for Activ.

Our staff attended nearly 60% of these, to assist local government to ensure they ran smoothly, to be an onsite liaison, and to review current trends in the events industry. These events were attended by approximately 1,600,000 people, who collectively paid more than \$80,000,000 to attend.

We also approved two new State-owned facilities, the WA Performing Arts Centre and the Albany Entertainment Centre, and provided expert advice on numerous smaller events, including horseracing and motorsports.

The following images detail some of the events attended by our staff during the past year.



Melbourne Cup at the Ascot Races



Monster trucks at the Burswood Dome



**Rottnest Island Channel Swim** 



A heat stress metre used to monitor temperatures during visits to large outdoor music festivals and other mass gathering events

## Awards and recognition

We were delighted that the outstanding work of our staff was formally recognised through partnerships we have formed with our stakeholders.

### **WA Water Award**

An initiative called the *Premier's Collaborative Research Program: Characterising Treated Wastewater for Drinking Purposes Following Reverse Osmosis Treatment*, investigating how to treat wastewater to drinking water standards for groundwater replenishment, was successful in winning the Water Awards 2010.

The project identified chemicals and microbes found in wastewater and assessed their removal through advanced treatment methods.

The project allowed a consortium of government agencies to develop health and environmental specifications for safely recycling water into groundwater sources.



Major supporters of the project included the Water Corporation, Department of Water, Curtin University, DEC and Chemistry Centre WA.

### **Community service award**

We were humbled to be presented with the Community Organisation Award for our contribution to the advancement of public health in WA. "The success of the Project is testament to the professionalism and dedication of all involved."

"Thanks to the hard work of many, the groundwork for a replenishment trial in Perth has now been laid."

Kim Snowball, Director General, Department of Health WA

Nomination for the award recognised a number of our recent achievements, including a range of public health initiatives such as:

- The Public Health Bill policy consultation and development process
- Development and implementation of the Food Act 2008
- Development and implementation of the Tobacco Products Control Amendment Regulations 2010
- Initiatives in Aboriginal Environmental Health including the Environmental Health Needs of Aboriginal Communities in W<sup>n</sup> survey. The award was presented by the Public Health Association (WA Branch) at its annual conference.



### **Emerging threats**

Not only do we have to manage traditional environmental health issues such as food and water quality concerns, but we need to be aware of the new environmental health threats that are emerging in WA.

Some of these emerging issues that we need to better understand so we can help to minimise future health implications and alleviate real or perceived public concerns include:

### Fracking

Hydraulic fracturing of rock (fracking), a mining process used to extract natural gas and oil trapped in rock and coal seams, has only been used four times in remote WA locations. There are indications that industry want to significantly increase the use of this process throughout WA.

Some international studies have linked poor regulation of this industry to contamination of ground water and risk to air quality and a potential for subsequent impacts on public health.

We will need to work closely with numerous agencies and industry groups to develop best practice guidelines that appropriately address public health concerns.

### Wind farms

There have been recent concerns in some parts of Australia that wind farms, used to generate low carbon energy, may potentially be causing health problems in people who live in close proximity to these farms.

The evidence has yet to confirm if this is a real or a perceived risk. We will monitor the evidence and consider whether measures to minimise health implications from wind farms established in WA are warranted.

We are currently engaged with industry groups and agencies to discuss issues

associated with the establishment of wind farms in WA.



#### **Clandestine drug laboratories**

Increased numbers of clan labs are being discovered by police throughout WA, rising from 17 in 2000 to over 131 in 2010.

Manufacture of drugs frequently occurs in residential dwellings, most commonly of methylamphetamine (Meth). This can result in chemical contamination on surfaces throughout a residence, particularly in interconnected rooms.

As proper cleanup of such dwellings is difficult, we are working with the DEC to provide guidance to local government EHOs to ensure contaminated properties' are suitable for occupation.



A backyard clandestine lab

### **Priorities**

We have ambitious targets and have identified a number of community projects for the coming year.

### **Food Unit**

- Reviewing the *Food Regulations 2009* including surveillance fees and meat business enforcement agency arrangements.
- Developing and implementing the management system for the Regulatory Food Safety Auditors Framework.
- Reviewing options for the provision of meat inspection at domestic abattoirs in conjunction with meat business enforcement agency arrangements.
- Completing the review of food related outbreak investigations, guidance procedures and develop a new guidance manual.
- Completing the guidelines for food borne disease outbreak investigations.

### **Environmental Health Hazards Unit**

- Implementing recommendations arising from a review of funding for CLAG for health-driven mosquito management.
- Reviewing the *Health (Asbestos) Regulations 1992* and preparation of drafting instructions.
- Finalising the report into heat stress in prisons.
- Completing guidelines on air quality levels related to bush fire smoke.
- Completing water spray park guidelines for operators and Local Governments.

- Developing competencies for feral animal control.
- Completing guidelines for health aspects of dust in residential and industrial settings.
- Developing a policy for the Directorate when requested to provide expert health input into hearings for the State Administrative Tribunal.

### **Science and Policy Unit**

- Developing supporting documentation to assist with the implementation of the next stages of the Public Health Bill
- Establishing a Development Assessment Panel to enhance the coordinated and more detailed health responses to development assessments.
- Expanding the Aboriginal Environmental Health program including:
  - a) Development of a Statewide plan to reflect regional needs.
  - b) Developing a home hygiene resource.
  - c) Liaising with the Plumbers Licensing Board to effect regulatory changes required to allow non-plumbers (EH workforce) to undertake basic repairs to household plumbing.
  - d) Establishing the Goldfields forum as a group reporting to the Aboriginal Health Forum.
  - e) Assisting with the allocation of machinery to encourage local Aboriginal recruitment.
  - f) Utilising regional gatherings to identify and implement specific training needs.

### Water Unit

- Completing the Code of Practice for Onsite Wastewater Management, Wastewater Management Disposal, and Aerobic Treatment Units.
- Reviewing the Harmful Algal Bloom Response Procedures.
- Developing the Recreational Waters Sanitary Inspection Database and integrating the GIS system.
- Extending GIS availability to remote workers and other Directorate Units
- Developing mutual recognition between the States and Territories regarding the approval of waste water disposal systems.
- Developing the Phase 1 Recycling Guidelines data management system.

 Developing a Memorandum of Understanding for Wastewater Services with Water Corporation.

### **Radiation Health Unit**

- Continue working on various aspects of the implementation of the Code of practice for the security of radioactive sources.
- The Radiation Health Unit will conduct a review of a number of specific programs on behalf of the Radiological Council.



The Water Unit has identified the need to revise the Harmful Algal Bloom Response Plan for Recreational Waters as a priority for the coming year.

## Communication



Richard Theobald, our Water Unit Manager, presenting at the 2010 Recreational Waters Workshop

### Communication

### **Our clients include:**

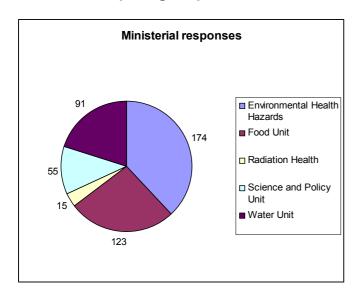
- Community members and special interest groups
- Minister for Health
- Industry groups, businesses and research institutions
- Local, state and national government officers
- Non-government sectors; national and international organisations
- Health sector workers
- Our staff

### **Ministerial correspondence**

We work closely with the Department's Ministerial Liaison Unit to assist the Minister to respond to a range of community concerns.

During the 2010-2011 financial year we provided draft responses to 458 issues raised in correspondence to the Minister. This is nearly 50% of ministerial correspondence directed to the Public Health Division for advice.

## Number of ministerial correspondence requiring response



"We provided draft responses to 458 issues raised in correspondence to the Minister"

### Ministerial topics of most public concern

Hot topics	Coordinating Unit
Dogs in alfresco areas	Food Unit
School canteen fees	Food Unit
Fluoridation of	Water Unit
drinking water	
Tobacco Regulations	SPU
Phone towers	Radiation
	Health Unit
Titanium dioxide	Radiation
waste	Health Unit
Asbestos	EHHU
Cockburn Cement	EHHU
Stable fly	EHHU

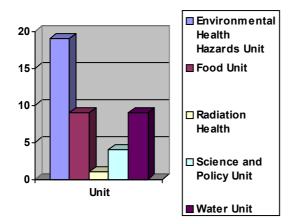
### Freedom of information (FOI)

We assisted Corporate Governance to respond to a number of FOIs, mostly related to contaminated site issues throughout the State. These are outlined below:

Unit	Number of FOIs
EHHU	4
Food Unit	1
Radiation	
Health Unit	1
SPU	1
Water Unit	1
TOTAL	8

### **Briefing notes / Parliamentary questions**

As part of the Parliamentary process, we provided draft briefings to the Minister on 42 occasions. These issues are outlined by individual Unit responses below.



We also provided advice to the Minister following a number of questions posed during Parliamentary sittings.

### Seminars and workshops

As part of our professional development commitments, our staff organised or were invited to present at over 73 workshops, seminars and conferences.

We invest considerable time and resources to raise awareness and promote better management of environmental health risks across the state. These programs are organised as part of our commitment to address emerging issues and other routine matters requiring the attention of government, industry members or the general community.

A summary of these seminars and workshops are outlined in Appendix 1.

"I've been to an emergency management course before at Mt Macedon but this was the first course completely relevant to public health"

Local Government Environmental Health Officer following the Disaster Management Course in the Pilbara

#### **Evolving our website**

As community needs evolve, so does our website <u>www.public.health.wa.gov.au</u>. We recognise the importance of web based communication to provide fast, reliable and accessible information to the community, industry and other stakeholders on a range of environmental health issues.

During the past twelve months we have developed extensive web resources and invested in new technologies to meet the growing public demand for internet based information. Some noteworthy web based



Recreational waters workshop

### Delivering a Healthy WA

projects including:

- Using GIS to indicate monitoring locations for the environmental water monitoring program
- Revising the wastewater management webpages to improve accessibility and information availability
- Migrating existing environmental health websites onto the one site

As we look forward, the appearance of the website will be further improved by installing a rotating image carousel on the homepage and providing better accessibility to over 500 online publications. We also aim to increase the community's awareness of our extensive range of online services.

### Communication

We formed a Communications Team which has been developing a Communication Strategy to identify and prioritise issues on how we can better communicate with our clients and our staff.

Numerous operational procedures have been developed to address these concerns, including the development of a Public Health Division intranet to improve internal communication.

Further components of the Strategy will be implemented as a priority for the coming year.

### **Environmental Health newsletter**

We revised our quarterly electronic newsletter, used to provide regular updates to the environmental health profession.

The newsletter provides an opportunity to view information about state wide projects and emerging health threats. The newsletters are well received as they provide a mechanism for the environmental health profession to contribute to the direction of current and future projects.

Past editions of the newsletter are available on the <u>Public Health website</u>.

Environmental Health Directorate newsletter Healthy people in a healthy environment



New pesticide guidelines for WA See story page 3

our value: Integrity | Leadership | Excellence | Fairness | Cooperation | Service

"Just wanted to say thanks and well done. The information in the newsletter is great and will be useful".

**Principal Environmental Health** 

### **Customer service charter**

Our Communications Team developed a Customer Service Charter to validate our commitment to customer service, corporate values and complaints (Appendix 3).

#### **Envirohealth list server**

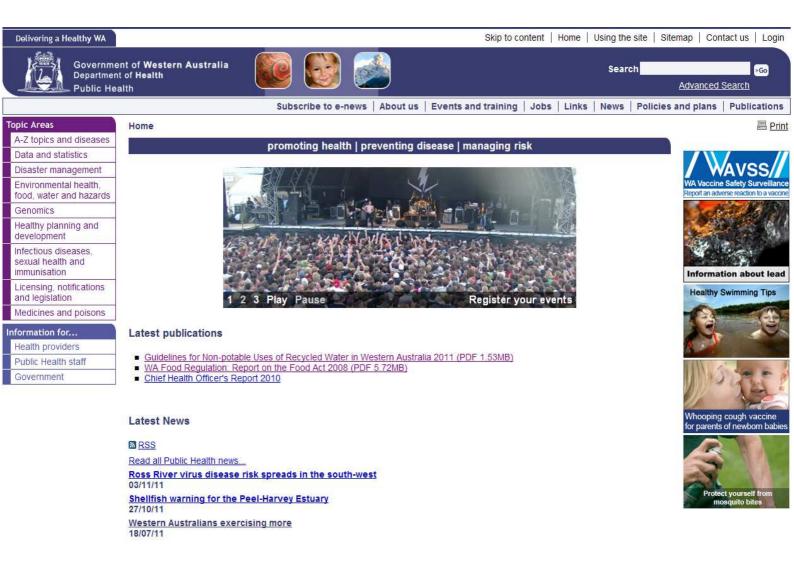
We created the "Envirohealth list server" in 2005, an electronic notification system enabling us to make email contact with our subscribers in a more effective and timely fashion.

During the financial year, our 623 subscribers were emailed information on 77 separate occasions. The success of the list server is confirmed through the continual increased numbers of subscribers to the services.

### **Communication commitments**

Our communication commitments for the upcoming year include:

- Continuing to improve the functionality of the website
- Assessing further ways to increase the community's knowledge and understanding of the information available on the website
- Consulting our stakeholders to gain a better understanding of their professional development needs and preferred methods of communication



# **Internal operations**



The relocation of the Radiation Health Unit to our main Grace Vaughan House facility has required the installation of a demountable to store records.

## Staffing

We view our staff as one of our most valuable assets, and undertook a range of activities designed to improve our working environment.

## Workplace culture and professional development survey

We conducted a workplace culture and professional development survey which aimed to identify areas of strength, opportunities for improvement, and to develop a baseline for future surveys.

The voluntary survey resulted in nearly 60 responses, considered a fantastic result demonstrating increased levels of staff engagement.

Key findings include:

- While 80% staff had an initial performance review, only 40% had a follow up review, although staff indicated they found the performance review process valuable.
- Majority of staff found that some or all requests following the initial performance review had been met.
- Overall staff were happy in the workplace. However, improving professional development opportunities and changing business practices were identified as two key areas that could improve staff satisfaction.

We intend to review the survey for 2011-2012 to include questions related to Occupational Safety and Health, and to ask staff what changes could be made to improve the workplace.

### Office relocation and renovations

A hail storm in March 2010 severely disrupted operations at GVH. Several work areas, including the lecture theatre, were subject to significant interior flooding, and caused parts of the ceiling to collapse. This damage impacted on our ability to continue normal business activities over the subsequent weeks.

Repairs involved removing office walls and relocating staff into open planning. This provided the opportunity to accommodate additional off site staff to GVH.

### Modern management of accommodation

We will review modern approaches to managing government accommodation such as "Non-territorial Office Environments", which adopt concepts such as desk sharing. These approaches build a more flexible and creative workplace that enhances internal communication and partnerships, as well as reducing costs associated with running multiple business facilities.



Senior staff member, Sid Brodie recognised for his work in public events management

### Staff professional development

To enhance employees' professional development and enable efficiency, productivity and capability, we encourage our staff to attend training and development programs. Staff are given the opportunity to discuss training needs during performance reviews and management are encouraged to support these opportunities when appropriate.

## Trialled the employee recognition program

We are dedicated to recognising exceptional performance by our staff. While we understand that there are limited opportunities for recognition of exceptional service within the formal remuneration processes, management are encouraged to use other opportunities to recognise and reward exceptional performance by our staff.

In 2010 we developed and trialled the *Formal Recognition of Achievements Policy* to formalise the process for recognising the hard work of our dedicated staff. Each month management has the opportunity to

recognise their staff contribution to the performance of the Directorate.

Our Radiation Health staff attended a FESA emergency response training course



### **Occupational Safety and Health (OSH)**

OSH is a fundamental requirement of the way we operate. We continually review and implement improvements to areas related to OSH, and support activities that promote health and wellness of our staff. Our newly appointed OSH representative has been instrumental in establishing a number of programs during the year.

### First aid training

Staff were given the opportunity to complete Senior First Aid training, with a total of 42 staff completing the training, and a further 19 booked for courses in the coming year.

Provided by the WA Surf Life Saving Club Association, this training provided staff with the necessary skills to respond to life threatening and minor health situations at the workplace, in the field and in their home. An introduction to using an Automatic External Defibrillator was also included, with a defibrillator now installed at GVH, the Directorate's main building.

First aid training is considered an important OSH requirement due to the diversity of offsite field work undertaken by our staff particularly in remote areas of WA.



First aid training exercises

### Evacuation plans and procedures

A consultant upgraded the evacuation plans and procedures for two of our facilities, GVH and the Pesticide Safety building in Mt Claremont, in response to renovation work at these facilities.

The new plans were communicated to staff and:

- Fulfilled workplace health and safety obligations
- Addressed the safety of all building occupants and
- Assisted in minimising legal exposure resulting from fires or other emergency events.

The consultants are now conducting OSH audits and fire compliance audits for all of our facilities.

### Flu shots

Many staff took advantage of the offer for free flu vaccinations in time for the winter season. The vaccinations, provided by CDCD nurses, were aimed at reducing work hours lost as a result of influenza outbreaks.

### Incident / Accident / Hazard Reporting

Throughout 2010-11, six incident, accident and hazard report forms were completed by staff. Four OSH issues in regards to these hazards/incidents have since been addressed.

Staff were reminded to complete and submit essential documentation to the OSH representatives. This has been identified as an area of concern and further training and awareness-raising is planned for the 2011-12 year.

### **Occupational Safety and Health to do list**

#### Site Specific Induction Processes

 Site Specific Induction Processes for new staff or visitors for EHD facilities including GVH and Pesticide Safety are presently inadequate. This issue has received strong support from management and will be urgently addressed in the coming year.

### OSH training for management

 The legislated need for managers and team leaders to complete formal OSH training has been recognised. Documentation identifying training needs for senior officers is being reviewed and some shortcomings are being addressed. It is proposed that a better records management system for OSH training will be arranged and implemented for the coming year.

### Staff Awareness/Training in regards to OSH

 An upgraded staff awareness and training program for OSH requirements needs to be implemented. In particular, documentation of individual OSH roles and responsibilities needs to be better understood, with a management program to be implemented as soon as possible.

### Health and lifestyle

We support staff participation in activities that contribute towards improved health and wellness. Some activities our staff participate in include:

- Lunchtime pilates classes
- Riding our office bikes to nearby work meetings and lunchtime exercise
- Participating in community events such as Ride to Work Day and the Spring Cycle Challenge, and
- Walking around Shenton Park Bushland.

To further support workplace fitness activities, particularly during the winter season, we will assess costs associated with converting our dining room into an activities room enabling staff to continue all weather pilates and other activities.



Lunch time pilates classes

### Green team activities

We are committed to environmentally sustainable work practices that ensure the environmental integrity and economic efficiency of our business operations.

A green team, established in 2008, has implemented a number of environmental improvements at GVH.

Our staff continue to identify areas for improvement, and we encourage change beneficial to our operations. Some recent achievements include the installation of colour-coded recycling bins to improve waste separation by staff.

### Challenges and areas for further development

We understand the importance of continually evolving and developing the work that we do, and have recognised a number of operational and service areas that need to be further developed over the coming year. These priority areas include:

### **Relocation of the Radiation Health Unit**

The impending demolition of U-Block at the QEII Medical Centre housing the Radiation Health Unit has necessitated the relocation of the Unit to GVH. Accommodation for 17 staff is being facilitated by a significant open plan renovation. Essential to the relocation, is the construction of a purposebuilt testing laboratory of approximately 280 square metres. A funding source has yet to be confirmed, however, documentation seeking planning approval for this building is currently with relevant government agencies. Completion of this addition is projected for 2012.

### New way of managing the budget

Our budget has undergone significant change in the way it is managed by the agency. To help better manage these changes, a prototype budget template was created, providing up-to-date financial information to management and enabling more efficient allocation of funds to service Units and assist in priority planning for the new financial year.

## Implementation of our Communication Strategy

A communication strategy developed for the Directorate in previous years identified a range of internal and external operational requirements to improve the way we communicate both internally and externally. We are now working hard to further develop the strategy to ensure we are equipped to meet the needs of our staff and clients.

### Improving technologies at GVH

To achieve one of our visions to be recognised as a key public health

educational facility and secondary emergency response centre, improvements are gradually being made to meeting and lecture theatre rooms. This includes provision of technologies such as projectors, IT equipment and video conferencing facilities.



New meeting facilities at Grace Vaughan House

## Better management of development assessment processes

Due to the input required from a number of health experts in relation to acrossgovernment policies or infrastructure proposals, the need for a single entry point into the agency was identified.

To manage this, we are forming an integrated Development Assessment Panel to ensure our Directorate becomes the distribution point for all such proposals. This will facilitate consistent and timely advice to proponents and decision makers ensuring the health needs of the community are considered.

## Implementation of single database and knowledge management systems

A single "database and knowledge management system" is crucial for our staff to assist in reducing duplication and improving internal partnerships. During 2008-2010, audits across the Directorate allowed us to significantly improve our understanding of our information management needs.

Integration of the existing multiple databases, including licensing functions, into one system was identified as a priority. Not only will this enhance multi skilling of licensing staff and information sharing, it is intended to address the current licensing surges which occur throughout the year.

## Development of a Business Continuity Plan (BCP)

A BCP will be developed to manage severe disruption to services in the event of an emergency. The BCP will identify all resources necessary to continue crucial functions.

### **Review Job Description Forms**

We will coordinate a review of Job Description Forms to address identified skill gaps within the area of administrative research.

### **Review revenue**

We need to review the licensing fees and cost recovery processes to assist the Directorate to better recover costs associated with the issue of all licences. The review will look to improve payment options for licence holders, which will include online payment mechanisms.

### Internal operational commitments

Our operational commitments for the upcoming year include:

- Investigating the feasibility for site specific OSH induction processes, particularly for GVH.
- Establishing an ongoing OSH training program for Senior Management.
- Improving staff OSH awareness / training.
- Assessing approaches to a "Non-territorial office environment" and determine the suitability for GVH.

#### **Electronic document management**

We need to better coordinate our indexing of electronic documents to handle the significant increases in this form of communication. This will be consistent with other agency initiatives, and will also improve records management processes.

## **Our financial status**



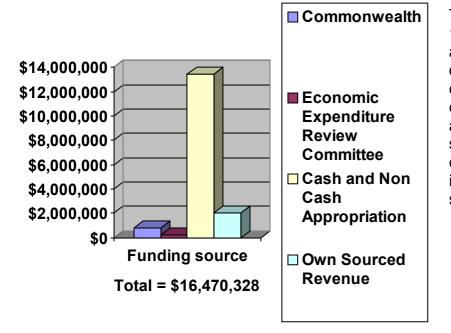
We fund mosquito monitoring and control programs throughout the State

### **Our financial status**

The annual budget for 2010-11 was \$16.7 million representing an increase of 10% on the 2009-10 budget. The actual expenditure for 2010-11 was \$16.5 million and there was less than 2% variance between the budget allocation and the actual expenditure.

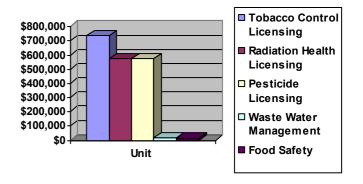
### Financial highlights for 2010-2011

- **\$640,114** on state wide environmental surveillance programs in WA.
- **\$381,163** on mosquito control programs to manage mosquito borne disease impacts.
- \$315,000 on a state-wide media campaign, including radio, press advertisements and posters to raise awareness of the *Tobacco Products Control Amendment Regulations 2010* and its implications.
- \$203,133 for the implementation of food surveillance surveys to estimate the levels of pesticide residues in fruit and vegetables produced and sold on the domestic market.
- **\$5000** to conduct three training workshops in the area of drinking water, wastewater and environmental waters.
- \$11,000 on the purchase and installation of Geographical Information Systems (GIS) that enable officers to locate and manipulate site specific data across the range of water, wastewater, recycled water and drinking water functions.



## Where our funding came from Our revenue

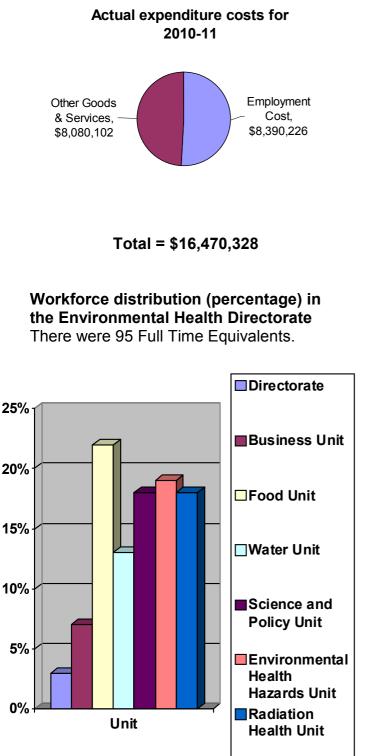
Income was generated through a range of legislative licensing and compliance requirements. This income funds ongoing activities in these areas. For example, funds generated through tobacco licensing support tobacco compliance activities including auditing and inspections to ensure retailers aren't selling tobacco products to minors. These funds also allowed a mass media campaign and the continuation of the Tobacco Quit Line.



### Total = \$1,906,514

### Expenditure

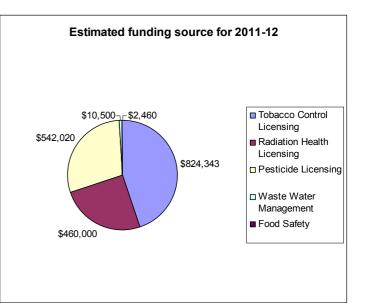
Total operating expenditure for 2010-11 was \$16.5 million. Salaries, wages and staffing costs accounted for 51% of expenditure. This included direct costs of employee salaries and wages, costs of providing for leave liabilities and indirect payroll costs such as superannuation and workers' compensation. Staffing costs also include appointment expenses and staff training.



### **Future finanical estimates**

In preparartion for the current financial year we have estimated the total revenue to be \$16,963,901 with an additional \$1,839,323 sourced form our own revenue sources.

### Estimated funding from own sourced



### revenue 2011-12 budget

Total = \$1,839,323

## **Financial commitments**

Our financial commitments for the upcoming year include:

- \$5.03 million for aboriginal health programs
- \$370,000 for Esperance lead monitoring program
- \$212,400 for monitoring and analysis of production and marketing of food in WA
- \$350,000 to boost mosquito management capacity across WA
- \$95,000 for Radiation Health Unit relocation to GVH
- \$150,000 for the investigation of contamination at the Pesticide Safety site



Sign post detailing some of the remote Aboriginal communities visited throughout the year

## Glossary

CDCD	Communicable Disease Control Directorate
CLAG	Contiguous Local Authorities Groups
DEC	Department of Environment and Conservation
Department or DOH	Department of Health
Directorate or EHD	Environmental Health Directorate
EHHU	Environmental Health Hazards Unit
EH	Environmental Health
EHP	Environmental Health Practitioner
GIS	Geographical Information System
GVH	Grace Vaughan House
SPU	Science and Policy Unit
WA	Western Australia
WACHS	Western Australian Country Health Services
WALGA	Western Australian Local Government Association
WHO	World Health Organization

## Appendix 1 – Seminars and workshops

A snapshot at the diverse range of awareness raising activities hosted by our staff are outlined in the table below.

Date	Торіс	Aim	Attendance
			numbers (approx)
July			(approx)
6-7/07/2010	Dog Health Program Training (Roebourne)	Conducted Dog Health Program Training with Professor Ian Robertson of Murdoch University	11
12/7/10	Management of mosquitoes and nuisance insects in relation to water recycling (Recycled Water Workshop, Perth)	Educate local government and other agency officers about the risks and management of mosquitoes breeding in water recycling infrastructure	80
16/07/2010	Recycled Water Workshop (Perth)	Inform EHO about the across agencies role in water recycling	80
18/07/2011	Trends in the Skin Penetration Industry	Update to EHOs of innovations and new procedures in the skin penetration industry	80
26/07/2010	Aquatic Legislation	Training course for swimming pool manager candidates.	15
August			
3/8/2010	WA Police and tobacco laws (Joondalup WA Police Academy)	Explain to WA Police cadets what tobacco legislation is in place, how it affects them and the relationship they can have with the Department of Health.	60
7/08/2010	Conference Presentation on Aquatic Legislation	Presentation for LIWA Aquatics State Conference	150
13/08/2010	Environmental Health Seminar Series (Perth)	<ul> <li>Update Local Government on:</li> <li>New tobacco laws</li> <li>Health Risk Assessment (Scoping) document</li> <li>Food Access and Cost survey</li> <li>A framework supporting EH decision making</li> </ul>	88
15/08/2010	Lectures in Health Impact Assessment, 3 <sup>rd</sup> year students in Bachelor of Planning (Perth)	To raise awareness of Health Impact Assessment and the application within planning	11
16/08/2010	Lectures in Health Impact Assessment, 3 <sup>rd</sup> year students in Bachelor of Environmental Health, Curtin University (Perth)	To raise awareness of Health Impact Assessment and the application within Local and State Government activities	8
23/08/2010	2 <sup>nd</sup> Joint Workshop on Measurement of Disinfection Byproducts in Water	To develop a national research agenda into disinfection byproducts	10

Date	Торіс	Aim	Attendance numbers (approx)
25/08/2010	Climate Change and Health seminar (WESROC)	To raise awareness of potential health impacts from climate change across the western suburbs of Perth	60
September			
1/9/2010	Climate Change and Health: SITA Study day (Perth)	To inform a range of waste management stakeholders on the latest developments in sustainability	100
1/9/2010 and 7/9/10	Lectures on Mosquito biology and ecology and on identification of mosquitoes (The University of Western Australia)	Postgraduate training in infectious diseases	6
6/9/2010	National Recycled Water Regulators Forum (Perth)	Hosted national forum members	15
13/9/2010	Smoke Free WA Health Local Action Meeting (Perth)	Metro and WACHS Update on new tobacco laws	30
14/9/2010	Vector-borne disease incidence and management in WA 2008-2010	Invited presentation to the Mosquito Control Association of Australia	120
15/09/2010	Lecture in Health Impact Assessment, 3 <sup>rd</sup> year students in Bachelor of Planning (ECU)	To raise awareness of Health Impact Assessment and its application within planning	11
16/9/2010	Onsite Wastewater Management Workshop (Perth)	Provide EHOs with clear information about onsite systems assessment and regulations	70
17/9/2010	Sustainable September (Perth)	Raise awareness on the need to improve WA Health's environmental footprint.	50
23- 24/9/2010	Arboviruses	Lectures on arboviral infections, epidemiology and management to Travel, Tropical and Remote Area Medicine course of Masters of Infectious Diseases, UWA	10
25/11/10	Biting flies in the bush (Toyota 4WD Club, Perth)	Raise awareness of the public health risks associated with exposure to mosquitoes and other insect vectors	150
October			
01/10/2010	Health Risk Assessment (Scoping) Guideline (EPA)	To raise awareness of the new HRA processes by the EPA's Stakeholder Reference Group	20
04/10/2010	Lecture in Indoor Air Pollution, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about issues and management related to indoor air quality	100
6- 20/10/2010	Vectors of infectious disease	A series of 5 lectures on vector-borne diseases to the Vectors and Vector Control course of Masters of Infectious Diseases, UWA	8

Date	Торіс	Aim	Attendance numbers
			(approx)
8/10/2010	Groundwater Replenishment Trial: An option to augment Perth's underground groundwater resources?	ECU- SONS Seminar	50
13/10/2010	Lecture in Toxic Chemicals, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about toxicological principles associated with chemicals in the environment	100
13/10/2010	Lecture in Waste Water Management, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about environmental and health management of waste water	100
14/10/2010	Recreational waters workshop (Perth)	Provide local government Environmental Health Officers/ technicians and other agencies with an opportunity to increase their understanding and practical skills to better manage public health risks related to recreational waters.	75
15/10/2010	2010 EHAA Conference	Provide EHO's with information about new tobacco legislation and what compliance role they will have	50
15/10/2010	Code of Practice for the Reuse of Greywater in WA	EHAA Conference	40
26- 28/10/2010	Pilbara Disaster Management and Training (Roebourne)	The two and ½ day course is aimed at increasing participants' awareness of the considerations for preventing, preparing, responding to and recovering from a disaster that may compromise public health	30
November			
03/11/2010	Lecture in Health Impact and Health Risk Assessments, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about current processes for consideration of health impacts and their risks in environmental approvals processes	100
8/11/2010	Groundwater Replenishment Trial: An option to augment Perth's underground groundwater resources?	Western Power presentation	60
16/11/2010	Presentation and workshop on climate change and health, Silver Chain (Perth)	To raise awareness of and commence development of adaptation strategies	40
23- 25/11/2010	FESA CBRN Emergency Response Course	To raise awareness of the management of radioactive sources.	-

Date	Торіс	Aim	Attendance
			numbers (approx)
19/11/2010	Impacts of climate change and health at the Public Health Association of Australia (WA Branch) conference (Perth)	The conference was used to provide a snap shot of some of the responses that are being put in place by Local and State Governments to protect people and support communities.	30
30/11/2010	Health Risk Assessment (Scoping) Guideline (DEC)	To raise awareness of the new HRA processes by DEC Industry Regulation Officers	20
December			
15/12/2010	Real time web based modeling (Perth)	Professor Jorg Imberger of the University of Western Australia Water Quality Research Centre presented on Real time web-based bacterial indicator modelling for the metropolitan coastline and Swan and Canning Rivers.	
15/12/2010	ARPANSA Security in Transport of Radioactive Sources workshop	Security requirements related to the transport of radioactive sources	-
16/12/2010	New tobacco laws and Restricted Officer Training (Perth)	Inform EHO's about new tobacco legislation and what compliance role they will have	25
5-9/11/2010	Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM): <i>"Engineering and Physics in Medicine"</i> in Melbourne	Attended and presented paper: "Incident of inadvertent radiation exposure in a linac bunker" by Mary Aerts	100
January			
-	Pilbara Disaster Management and Training (Roebourne)	The two and ½ day course is aimed at increasing participants' awareness of the considerations for preventing, preparing, responding to and recovering from a disaster that may compromise public health	30
20/1/2011	New tobacco laws and Restricted Officer Training (Perth)	Inform EHO's about new tobacco legislation and what compliance role they will have	20
February			
2/2/2011	Integrated Water Management Conference Fremantle	Presentation given describing legislative framework	150
3/2/2011 4/2/2011	2 training sessions conducted. New tobacco laws and Restricted Officer Training (Town of Vincent) Murdoch University Recycled water	Inform EHO's about new tobacco legislation and what compliance role they will have Annual presentation given to students	15 50
	Recycled water Presentation		

Date	Торіс	Aim	Attendance numbers (approx)
22/2/2011	New tobacco laws and Restricted Officer Training (City of Bayswater)	Inform EHO's about new tobacco legislation and what compliance role they will have	10
-	Sir Charles Gairdner (Research Governance Unit): <i>"Radiation and Diagnostic Tests in Research"</i> seminar	Presentation of paper on: "Human Research Projects – the role of the Radiation Safety Officer and the Radiological Council in assessment of projects"	-
March			
6/3/2011	Medical Technology and Physics Department, Sir Charles Gairdner Hospital, seminar	Present the findings of the paper: "Incident of inadvertent radiation exposure in a linac bunker"	20
8/3/2011	Peel Region mosquito management (City of Mandurah Planning Committee)	To provide information on management strategies and recommendations for resourcing	20
18/03/2011	Curtin University Skin Penetration and Legionaires Lecture	Annual presentation given to students	20
28/3/2011	Curtin University Drinking Water Lecture	Annual presentation given to students	35
April			
1/4/2011	Lecture on Smoking in enclosed and certain outdoor public places (Curtin University)	Inform Bachelor of Environmental Health students on the smoking laws and what their role will be once qualified.	15
1/4/2011	Notre Dame Med Students Drinking/waste water lecture	Annual presentation to students	105
10/4/2011	Environmental Health seminar series <i>Fukushima nuclear</i> <i>power plant.</i>	To provide a summary of the public health issues associated with the <i>Fukushima nuclear power plant.</i>	50
4/4/2011	Curtin University Environmental Water Presentation	Annual presentation to students	35
04/04/2010	Lecture in Indoor Air Pollution, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about issues and management related to indoor air quality	100
8/4/11	Mosquito management at Perth Zoo	Presentation to Perth Zoo staff on mosquito management to minimise amenity and public health impacts from mosquitoes	150

Date	Торіс	Aim	Attendance numbers (approx)
13/4/2011	2 training sessions conducted. New tobacco laws and Restricted Officer Training (City of Fremantle & City of Rockingham)	Inform EHO's about new tobacco legislation and what compliance role they will have	20
18/04/2011	Aquatic Legislation	Training for swimming pool manager candidates on aquatic legislation	15
18/4/2011	Arboviruses	Lecture to undergraduate medical students, UWA	160
20/04/2010	Lecture in Toxic Chemicals, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about toxicological principles associated with chemicals in the environment	100
20/04/2010	Lecture in Waste Water Management, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about environmental and health management of waste water	100
Мау			
6/5/11	Mosquito and mosquito-borne disease risk assessment of Cocos (Keeling) Islands (Agency stakeholder committee, Cocos (Keeling) Islands)	Mosquito and mosquito-borne disease risk assessment of Cocos (Keeling) Islands	6
9/5/2011	Tutorial for UWA Radiation Biology and Protection unit	Tutorial for a UWA unit on Radiation Biology and Protection as part of the "Graduate Diploma in Work, Health and Safety"	30
12/5/2011	Mosquito and mosquito-borne disease risk assessment of Christmas Island (Health Consultative Committee, Christmas Island)	Mosquito and mosquito-borne disease risk assessment of Christmas Island	8
16/05/2010	Lecture in Health Impact and Health Risk Assessments, 1 <sup>st</sup> year student Bachelor of Environmental Science (Murdoch)	To raise awareness about current processes for consideration of health impacts and their risks in environmental approvals processes	100
19/5/2011	New tobacco laws and Restricted Officer Training (Town of Kwinana)	Inform EHO's about new tobacco legislation and what compliance role they will have	10

Date	Торіс	Aim	Attendance numbers (approx)
20/5/2011	Outdoor Festivals Forum	The Forum was used to discuss issues specific to events, including event design, first aid, security, communication, and matters surrounding drugs and alcohol. It is also a forum where EHOs can ask for advice, recommend best practice and advise of innovations, as well as discussing events that did not run smoothly, and how they can be improved next time.	50
25/5/2011	WA Police and tobacco laws (Joondalup WA Police Academy)	Explain to WA Police cadets what tobacco legislation is in place, how it affects them and the relationship they can have with the Department of Health.	60
June			
17/6/2011	Environmental Radiation Monitoring Workshop	To discuss Contaminated Sites issues associated with radioactive sources	-
28 & 30/6/2011	FESA CBRN Emergency Response Course		-
29/6/2011	Ross River virus: management challenges of an adaptable mosquito- borne virus of public health significance	Invited presentation to academics and researches at the Institute of Child Health Research and Vaccine Trials Group, PMH	50

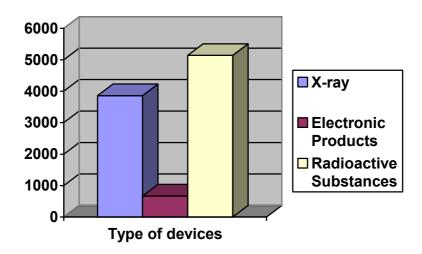
## Appendix 2 – Radiation licensing

	X-ray and/or Electronic Products				
Year	2010	2009	2008	2007	2006
Licences	3946	3636	3401	3075	2281
Registrations	1495	1460	1466	1256	1326
Total	5441	5096	4867	4331	3607
5 year change	+ 51%				

The licences and registrations held under the Act for the past five calendar years is as follows -

	Radioactive Substances				
Year	2010	2009	2008	2007	2006
Licences	1813	1708	1554	1381	1216
Registrations	344	334	333	318	306
Total	2157	2042	1887	1699	1522
5 year change	+ 42%				

The number of devices registered as at 30 June 2011 is as follows:



The number of devices registered for the past five calendar years is as follows -

Year	2010	2009	2008	2007	2006
X-ray	3786	3607	3470	4128	3936
Electronic Products	644	638	578	581	513
Sealed Radioactive Sources	5125	4729	4210	4183	3925
Total	9555	8974	8258	8892	8374
5 year change	+ 14%				

## **Appendix 3 – Customer Service Charter**

# **Environmental Health Directorate**

### **Customer Service Charter 2010**



Vision: "Healthy people in a healthy environment"

### What we do:

The Environmental Health Directorate (EHD) provides for the protection of the Public Health through regulation, providing advice to mitigate risks and guidance in best practices concerning:

- Consumption of water and food
- Exposures to hazardous materials
- Changes to legislation governing environmental health issues
- Establishment of new residential and industrial developments
- Promotion of preventative measures to improve health and wellbeing

### **Our customers include:**

- Individual members of the public and members of staff in the EHD
- Health sector workers
- Communities and special interest groups
- Industry groups, businesses and research institutions
- Local, state and national government officers
- Non-government sectors; national and international organisations
- Minister for Health

### What you can expect from us:

We aim to provide services that are fair, timely and relevant to your needs and consistent for all. We encourage your feedback to assist us to continually improve our services.

### What we do not do:

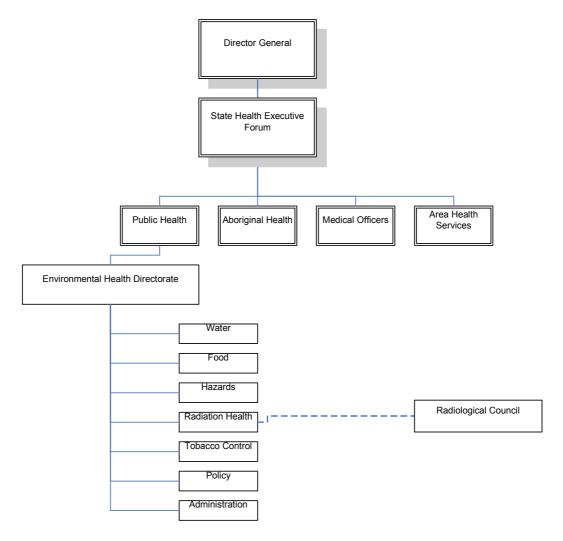
- The Environmental Health Directorate does not provide legal advice.
- We do not comment on political policies or Government directives.

### Our values and expectations:

- Treating customers with courtesy and respect and being treated similarly
- Supporting our customers with timely, accurate and reliable information
- Building strategic collaborations with local, state and federal authorities
- Intellectual integrity and confidentiality in a supportive workplace
- Transparency, equity and sustainability in all interactions and outcomes
- Consistency of approach with all stakeholders

### **Our services:**

We specialise in providing advice on the mitigation of potential risks to public health. Each unit concentrates on a specialty area: water, food, health hazards, radiation, tobacco, policy and administration of licensing. This is a basic representation of the organisational structures of the Department of Health



The Environmental Health Directorate operates as part of the Public Health Division. We are committed to meeting our organisational goals in providing a high standard of reliable, accurate and consistent advice and guidance.

### Our organisational goals:

- Modernising infrastructure to meet our needs and those of our customers
- Enhancing our profile and demonstrating our impacts and capabilities to influence innovation and meet demands
- Supporting our staff and developing a culture that encourages and rewards professional behaviours that enhance our reputation and increases our flexibility and reliability as a centre of excellence
- Engaging stakeholders to develop our capacity for robust regulatory impact analysis and establishment of risk management processes

### **Accountability:**

### Public Sector Code of Ethics and WA Health Code of Conduct

The EHD complies with the Public Sector Code of Ethics and endeavors to:

### **Personal Integrity**

Act with care and diligence and make decisions that are honest, fair, impartial, and timely, and consider all relevant information

### **Relationships with others**

Treat people with respect, courtesy and sensitivity and recognise their interests, rights, safety and welfare

### Accountability

Use the resources of the state in a responsible and accountable manner that ensures the efficient, effective and appropriate use of human, natural, financial and physical resources, property and information

As employees of WA Health, we are responsible for ensuring that our behaviour reflects the standards of conduct embodied in the **Department of Health Code of Conduct** 

Care by demonstrating commitment and consideration to others as we work.

**Respect** for each other, our customers and their families, carers and the community by preserving individual dignity and supporting the right of everyone to make choices.

**Excellence** by providing high quality, accessible, integrated and safe health advice to the community. We believe in working in partnership with customers to improve the health of the community.

**Integrity** by providing quality services and advice for the common good and having honest dealings and communication with our customers.

**Teamwork** by valuing the contribution of the team, working safely and cooperatively and communicating effectively with the team.

**Leadership** by communicating WA Health's vision, taking responsibility for our actions and decisions and displaying trust in our colleagues.

Link to the current WA Health Code of Conduct:

### Complaints handling system for the EHD

The Director of the EHD will endeavor to resolve complaints quickly and effectively and ensure there are adequate resources to record, respond and respectfully resolve all complaints in accordance to the established procedures.

### **Annual Reporting to the Parliament**

The Annual Report for the EHD will supply information on the performance of the EHD to the established strategies and state any significant issues that may have impacted on the agency.

A copy of the Annual Report, the Business plans and Strategic plans for the EHD will be made available on the Public Health website. <u>http://www.public.health.wa.gov.au/</u>

The EHD Communications Strategy can be made available upon request. Please contact the Director of Environmental Health.

Phone:	(08) 9388 4999
Email:	ehinfo@health.wa.gov.au
Postal:	PO Box 8172 Perth Business Centre WA 6849

### Feedback

We value your opinion of our services. Please let us know how we are doing in meeting your needs.

### **Quality of Service form**

The EHD is an organisation that cares about the quality of service we provide to our customers.

We are keen to gather and use feedback on how we measure up to your expectations, as customers of the Environmental Health Directorate.

Please take the time to complete the following short evaluation questions to help us to improve our services.

Feel free to add more space to include all your feedback.

Thank you for taking the time to let us know how we are performing.

Did our officers treat you with respect and answer your queries?

Did our responses to your enquiries meet your needs?

What worked well?

What didn't work well?

Please submit your suggestions for improvements.

### Legislation

We administer the following Acts and associated Regulations of the Parliament of Western Australia:

#### **Environmental Health Hazards**

Health (Air-Handling and Water Systems) Regulations 1994 Health (Asbestos) Regulations 1992 Health Act (Carbon Monoxide) Regulations 1975 Health (Garden Soil) Regulations 1998 Health (Poultry Manure) Regulations 2001 Hairdressing Establishment Regulations 1972 Health (Skin Penetration Procedure) Regulations 1998 Health (Offensive Trade fees) Regulation 1976 **Piggeries Regulations 1952** Health (Construction Work) Regulations 1973 **Construction Camp Regulations** Health Act (Laundries and bathrooms) Regulation Health (Swimming Pools) Regulations 1964 Health (Aquatic Facilities) Regulations 2007 Health (Public Buildings) Regulations 1992 Health (Rottnest Island) By Laws 1989 Fly Eradication Regulations Health (Pesticides) Regulation 2011 Health (Prescribed Insect Pests) Regulations 1991 Health Act (Local Authorities Sewerage Undertakings) Model By Laws Model By Laws Series A

#### Food

Food Act 2008 Food Regulations 2009 Australia New Zealand Food Standards Code

#### Water

Health (Treatment of Sewage & Disposal of Effluent & Liquid Waste) Regulations 1974 Health (Temporary Sanitary Conveniences) Regulations 1997 Health Act (Underground Water Supply) Regulations 1959

#### **Radiation Health**

Nuclear Waste Storage and Transportation (Prohibition) Act 1999

#### Radiation Health as secretariat to the Radiological Council

Radiation Safety (General) Regulations 1983 Radiation Safety (Qualifications) Regulations 1980 Radiation Safety Act 1975 Radiation Safety (Transport of Radioactive Substances) Regulations 2002

#### **Tobacco Control**

Tobacco Products Control Amendment Regulations 2010 - being drafted Tobacco Products Control Amendment Act 2009 Tobacco Products Control Act 2006 Tobacco Products Control Regulations 2006

The State Law Publisher web site holds copies of all current and past legislation. <u>www.slp.wa.gov.au/Index.html</u>

