TO:

Productivity Commission's 'Australian Urban Water Sector Inquiry, Draft 2011 April Report Response by Laurence Jones:

FROM:

Laurence Jones,

DATE:

May 2011.

SUBJECT:

MY RESPONSE TO THE PRODUCTIVITY COMMISSION'S 'AUSTRALIAN URBAN WATER SECTOR INQUIRY' DRAFT APRIL 2011 REPORT.

WHAT FOLLOWS IS MY OPINION ONLY:

IN A HISTORIC VOTE, THE UNITED NATIONS DECLARED WATER A FUNDAMENTAL HUMAN RIGHT. THE UNITED NATIONS'S GENERAL ASSEMBLY HAS DECLARED FOR THE FIRST TIME THAT ACCESS TO CLEAN WATER AND SANITATION IS A FUNDAMENTAL HUMAN RIGHT.

It would seem by their actions that the Australian Federal Government, National Water Commission, Productivity Commission and National Water Initiative, while acknowledging the statement have ignored it.

In November 2010 I attended the Productivity Commission's 'Australian Urban Water Sector Inquiry', held in Sydney. At that time I addressed the Chair of the Inquiry and the only commissioner at that table in which I stated that I believed that certain members of the commission had conflicts of interest that would, under both their legal and moral obligations, have prohibited their involvement in this Inquiry.

Of concern was that I believed that certain members of the commission, including the Chair of the Inquiry, Wendy Craik AM who was previously President of the National Competition Council, formally CEO of Earth Sanctuaries Ltd, a publicly listed company specialising in conservation and eco tourism have conflicts of interest on this issue.

In my submission I also supplied 12kg of documents outlining my concerns regarding the Productivity Commission and National Water Commission's bias and rampant conflicts of interest. The Productivity Commission has totally ignored the information in my submission.

Furthermore, I believe that the Federal Government has set out to unfairly influence, prejudice and predetermine the outcomes of the Australian Urban Water Sector Inquiry with the intention of getting back on track their 1992 strategy to force the introduction of treated sewage effluent sourced from hospitals, industry, homes and abattoirs into the public's drinking water supply mains.

I also believe that the Australian Federal Government, Productivity Commission and National Water Commission have and continue to grossly misled, deceive and lie to the public on their true intention which is not to force the introduction of Indirect Potable Reuse {Through a dam before reuse}, as stated, but is to force the introduction of the 'DIRECT' reuse of treated sewage effluent {Pipe to Pipe after treatment}, both world firsts as are planned here.

The Productivity Commission's Inquiry Draft's proposal to force the introduction of Indirect Potable Reuse of Treated Sewage Effluent, instead of serving the public interest, removes core public health protection. Furthermore, their decision also damages representative governments, the rule of law and the fundamental rights and freedoms embedded in democratic ideals.

Indirect Potable Reuse of Treated Sewage Effluent will impact Australia's economic prosperity by introducing unacceptable and unnecessary risk to health, property, infrastructure and ecosystems. All of which the Productivity Commission is both legally and morally required to protect.

This reply to the Productivity Commission's 'Australian Urban Water Sector Inquiry Draft' will concentrate on a strategy involving the Productivity Commission, their condemnation of desalination, instead, the promotion of the forced reuse of treated sewage effluent used for human consumption, the issues of specific reform proposals including governments removing policy and legal barriers to recycled water and potable reuse and their push for privatisation of Australia's \$80 billion of water and wastewater infrastructure.

THE AUSTRALIAN ARTICLE 'COMMISSION SLAMS DESAL PLANTS 'BY LAUREN WILSON, DATED APRIL 14TH 2011.

"In a recommendation that will probably draw criticism, the commission also declared state governments and water bodies should be open to returning highly treated recycled wastewater to waterways for drinking."

"The 600 page report is highly critical of decisions by state governments across the country to overinvest in expensive and inefficient desalination plants."

THE AUSTRALIAN ARTICLE 'CITIES TOLD: PLAN FOR FUTURE WATER CRISIS, BY ANNABEL HEPWORTH, DATED APRIL 7TH 2011,

"Australian governments have been urged to scrap barriers to recycled water ---Specific reform proposals that the commission will push include governments removing
policy and legal barriers to recycled water and potable reuse."

"The report also argues that because government owned water monopolies provide water to the cities and towns, this is resulting in "very limited" competition."

REFERENCE INQUIRY DRAFT: CONSIDERATIONS:

In conducting the inquiry, the Commission is to have regard to:

- 2 "The importance of long term water security –taking into account changes in climate, population and economic activity-without compromising social, health and environmental outcomes."
- 8 "The COAG 1994 reform outcomes, the national competition policy arrangements, the National Water Initiative provisions applying to urban water, the third party access provisions of the Trade Practices Act Part 111A, competition and access regimes and the 2006 intergovernmental Competition and Infrastructure Reform Agreement; and

REFERENCE FROM THE AUSTRALIAN URBAN WATER SECTOR DRAFT INOUIRY:

'WHAT HAS THE COMMISSION BEEN ASKED TO DO?'

- "Provide options to achieve the identified efficiency gains, and quantitatively assess these options {to the fullest extent possible} to identify their:"
 - economic, social and environmental impacts
 - impacts on Australian governments, business and consumers
 - propensity to facilitate supply and demand planning and decision making in the medium and long term
 - propose a work program including implementation plans for the options, identifying.

EXTRACT FROM DRAFT: SCOPE OF THE INQUIRY:

"2 Options to achieve the efficiency gains identified in point 1. The options are to be subjected to a rigorous cost benefit analysis, including using quantitative assessments to the fullest extent possible, to identify:

EXTRACTS FROM DRAFT:

BOX 4: PRINCIPLES FOR BEST PRACTICE REGULATION-REGULATION TASKFORCE {2006}.

"Only the option that generates the greatest net benefit for the community, taking into account all the impacts, should be adopted."

EXTRACT FROM CORRESPONDENCE FROM PRODUCTIVITY COMMISSION'S URBANWATER- TO MYSELF, DATED MAY 5TH 2011.

"The Draft Report does not promote the forced introduction of treated sewage effluent into the public's drinking water supply and indeed stresses the need for community consultation on supply augmentation decisions."

"It also does not condemn desalination. On this later point, you are not alone in gaining the impression that the Commission has taken a position against desalination and we will take care in the final report to make sure that our position is clear-that is, the costs and benefits of all supply augmentation should be taken into account and costly investments should not be made before they are needed."

AUTHOR'S COMMENTS:

The articles above definitely condemn desalination while promoting the forced introduction of treated sewage effluent for human consumption. If the Productivity Commission does not condemn desalination and does not promote indirect potable reuse why didn't they have the Australian newspaper retract those articles and run others correcting the mistakes?

First, as stated above, the articles above leave no doubt that the Productivity Commission is condemning desalination while promoting the forced Indirect Potable Reuse of treated sewage effluent, as options.

Second: It promotes the forced introduction of Indirect Potable reuse by its proposal to "scrap barriers to recycled water, remove policy and legal barriers."

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Third, Page xxxvii: On one hand the commission is seen to promote community consultations but is proposing to by pass the process by recruiting a 'representative group' which would be made up of proponents of reuse to endorse supply augmentation. The commission also ignores several studies, strategies and referendums carried out since 1996 in which the public totally rejects this type of reuse.

"A consumer representative group could have a role in the development of service offerings, reliability standards and assessing supply augmentation. The Commission is seeking views about the desirability of such a group and how it would be structured."

Fourth, the commission deceives the public by referring to Indirect Potable Reuse when several failed attempts have been made since 1993 to force the introduction of Direct Potable Reuse.

Five, the commission misleads and deceives the public by stating that Indirect Potable Reuse is carried out in Singapore and the USA when in fact what is planned here is a world first.

As above, the commission was asked to:

Choose "Options to achieve the efficiency gains identified in point 1. The options are to be subjected to a rigorous cost benefit analysis, including using quantitative assessments to the fullest extent possible."

"provide options to achieve the identified efficiency gains and quantitatively assess these options [to the fullest extent possible] to identify their; Economic social and environmental impacts etc

EXTRACTS FROM CORRESPONDENCE FROM THE PRODUCTIVITY COMMISSION'S URBAN WATER TO MYSELF DATED 6TH MAY 2011.

"In my reply I was wanting to explain that there is no analysis of the benefits and costs of recycling for potable use because there is no recommendation in the report that this option should be adopted [only that it should be properly considered]. We welcome comment through submissions and hearings on the commission's position on this and other matters set out in the draft report."

AUTHOR'S COMMENTS:

How is it possible for the commission to condemn desalination and push for the forced introduction of indirect potable reuse without first carrying out a cost benefit analysis for comparison? The commission has failed the public, failed to abide by their terms of reference, instead, falling over themselves in order to implement government policy.

The fact is that the Productivity Commission is well aware that what is planned here is Direct Potable Reuse, not indirect. Why waste time, resources and money on a lie?

Furthermore, if the Productivity Commission was to carry out a cost, benefit analysis on Indirect Potable Reuse the commission would have to include the cost of resuming properties for a pipeline from existing sewerage treatment plants to existing dams, some hundreds of kg away and some in mountains.

The commission would have to include the costs of infrastructure, expensive advanced wastewater treatment plants and expensive processes, for pipes, pumps, electricity to get the recycled water back to the dams and costs to further treat the effluent after insertion into dams to return the already treated effluent back through water treatment plans.

To these costs add extensive testing and monitoring requirements and the disposal of the brine that is classified as 'Hazardous' one that is very difficult and expensive to deal with. All this for hundreds or thousands of separate 'Indirect Potable Reuse Schemes' right across Australia {Reference further on}.

QUESTION:

Why would you treat sewage effluent using expensive advanced wastewater treatment plants to a standard that proponents class as 'Purified' and then pump it back into a dam that proponents classify as {Contaminated}, Indirect Potable Reuse?

THE PUBLIC HAS THE RIGHT TO KNOW WHY THE PRODUCTIVITY COMMISSION HAS PROMOTED THE INTRODUCTION OF INDIRECT POTABLE REUSE OF TREATED SEWAGE EFFLUENT, CONDEMNED DESALINATION AS EXPENSIVE, WITHOUT DOING A COST, BENEFIT ANALYSIS ON INDIRECT POTABLE REUSE?

Direct Potable Reuse is what is intended, reference towards back of this submission.

PART EXTRACTS FROM DRAFT:

The Productivity Commission.

"The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australian. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian Community."

"The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the Wellbeing of the community as a whole."

AUTHOR'S COMMENTS:

By referring to COAG outcomes in the Productivity Commission's 'Brief' the Australian Federal Government guaranteed that certain government policies, specifically the forced introduction of direct potable reuse of treated sewage effluent were included in outcomes of the inquiry. In other words, predetermined and guided outcomes of the inquiry which was supposed to be, by law and an ACT of Parliament, 'Independent'.

The Productivity Commission's 'Australian Urban Water Sector Inquiry' was not 'Independent' as it relied upon outcomes and was directed by policies from organisations such as the National Water Commission. The Inquiry's outcomes were also directed and influenced by the COAG and NCP and NWI, all of which have a bias and were directed at forcing the direct introduction of treated sewage effluent for human consumption.

In doing so, the Productivity Commission has ignored public opposition against this concept and scientific, medical and technical concerns regarding the public good and threats to the public's health and wellbeing and that of the environment.

The outcomes of Community Consultations that were ignored included: 1996 South Caboolture Water Reuse Strategy.

Executive Report recommended building a DIRECT reuse plant at Caboolture. The council seemed to back down after the community initiated a campaign against this concept and the Mayor lost his position at the following election.

In 1998 – The \$550-000 Caloundra / Maroochy Strategic Wastewater Management Study was held. 10,000 signatures were obtained on petitions with 8000 registered before the council was seen to back down from building several DIRECT potable reuse plants in both Caloundra and Maroochydore.

In 2006 Toowoomba residents voted 68% against the introduction of potable reuse of treated sewage effluent.

In 2007 the ACT government was forced to back down after residents became aware that their government was to introduce treated sewage effluent into their water supply mains.

In 2007 Gold Coast City Council plans to introduce direct reuse was delayed by community anger.

In 2007 Qld Government was to force the introduction of this concept. Their plans were postponed after the community rejected their proposal and after scientific, technical and medical concerns were raised.

Despite the community rejecting potable reuse in all above those involved continued to plan to force the introduction of DIRECT reuse.

GOVERNMENTS AT ALL LEVELS, PRODUCTIVITY COMMISSION, COAG, NATIONAL COMPETITION POLICY AND COUNCIL, NATIONAL WATER COMMISSION HAVE ALL LIED AND MISLED THE PUBLIC ON THIS ISSUE. WHAT IS PLANNED HERE IS DIRECT POTABLE REUSE OF TREATED SEWAGE EFFLUENT. NOT INDIRECT POTABLE REUSE AS STATED.

THERE HAVE BEEN SEVERAL DOCUMENTED ATTEMPTS TO FORCE THE DIRECT INTRODUCTION OF THIS CONCEPT SINCE 1993.

EXTRACTS FROM DRAFT:

<u>IMPEDIMENT TO EFFICIENT WATER RESOURCE ALLOCATION AND SUPPLY AUGMENTATION:</u>

"The National Water Commission has <u>stated there are no public health barriers</u> and it is used overseas for example, in Singapore and the United States."

"In such circumstances, it is important that the community and decision makers are properly informed about the costs, benefits and risks to water consumers, so that the best choices can be made. Community consultation needs to be a component of any decision on supply augmentation."

"There are many instances in Australia and other regions {notably Europe} of wastewater being treated and discharged into river systems used to supply downstream communities with potable water. For example, most of the wastewater from the ACT is treated and discharged into the Molonglo River. This water is used to supply many cities and towns, including Adelaide."

AUTHOR'S COMMENTS:

The National Water Commission also states that decision makers should be properly informed about costs, benefits and risks so that the best choices can be made and community consultation needs to be a component of supply augmentation.

The Productivity Commission, while accepting the NWC's incorrect statement that there are no public health barriers involving indirect potable reuse fails to carry out any cost, benefit and risk assessment on Indirect Potable Reuse before recommending its introduction as confirmed by their email above.

In Nov 2010 I attended the Productivity Commission's 'Australian Urban Water Sector Inquiry' in Sydney where I addressed the Inquiry Chair Wendy Craik AO and registered my submission weighing 12kg.

I BELIEVE THAT THE PRODUCTIVITY COMMISSION HAS ATTEMPTED TO PERVERT THE COURSE OF JUSTICE BY FAILING TO REFER ALL OF MY SUBMISSION AND ALLEGATIONS TO THE FEDERAL ATTORNEY GENERAL'S OFFICE FOR INVESTIGATION.

NATIONAL WATER COMMISSION AND COLLUSION:

As I stated in my submission I believe that the National Water Commission is not 'Independent' with a number of National Water Commissioners having extensive conflicts of interest that should, under both their legal and moral obligation, have prohibited their inclusion as commissioners. The Productivity Commission's Australian Urban Water Sector Inquiry has chosen to ignore that information in my submission, instead, rely on their outputs as directed by the Federal Government.

Furthermore, certain statements and certain recommendations for government policies and implementation of those policies by the Productivity Commission in their 'Australian Urban Water Sector Inquiry Draft Report' are in violation of all Australian's basic human rights including their Freedom of Choice and the provision of a safe, wholesome supply of drinking water and forces both their involvement and that of their children and grandchildren as guinea pigs in a world first intergenerational experiment without written consent.

TO REFUTE THE NATIONAL WATER COMMISSION'S STATEMENT, 'NO PUBLIC HEALTH BARRIERS':

ARTICLE THE COURIER MAIL 'UNFIT TO DRINK? NOT TO WORRY..., BY CRAIG JOHNSTONE DATED 9-10 MAY 2009:

"The Bligh Government is set to relax rules on the quality of recycled water produced by its \$9 billion water grid, after a report found it contained levels of chemicals above legislated standards."

"The report, by the QWC's Advisory Board on recycled water, said tests of samples produced out of the Western Corridor Recycled Water project has detected bromodichlorokethane, a by product of chlorination that is known to cause liver cancer in animals. The levels were above standards set out in state public health regulations, which dictate the quality of recycled water deemed fit to drink."

EXTRACTS FROM AUSTRALIAN GUIDELINES 21 FOR RECYCLED WATER DRAFT FOR PUBLIC COMMENTS REPLY DATED 8 /25/2007, BY JIM BYNUM, RETIRED SAFETY CONSULTANT:

EPA STATES.

"given the unknowns, limitations, and uncertainty with current state of science and technology, it is not possible to establish the threshold at which no observed effect would occur, just as it is not reasonable to expect current scientific techniques to demonstrate the absence of an impact on human health."

"There is huge lack of public information about the effects of chemicals on human health and the environment: 80 to 90% of all chemicals lack basic information. The Reclaimed Water Guidelines not only further erodes protection of public health, but puts the national economy at risk based on speculation by waste industry representatives that by some magic potion, the lack of knowledge, the pollutants {pathogens & chemicals} in reclaimed water will not harm, or kill, enough people to be noticed."

AUTHOR'S COMMENTS:

Obviously the reason behind the National Water Commission's advice accepted by the Productivity Commission to remove legal and policy obligations for water recycling for human consumption. Should we place out trust in these government organisations who place the public good last and corporate profits first?

Six hundred pages and the main and first outcomes of the Productivity Commission's Australian Urban Water Sector Inquiry's Draft Report are to condemn desalination while promoting potable reuse of treated sewage effluent.

I also believe that corruption, collusion and fraud is endemic and an integral part of the fabric of the Australian political system. The way it works as I see it is that all levels of Australian governments fill positions in their government owned, operated and controlled commissions, boards etc with a majority of persons with a bias and conflicts of interest on those specific issues on which the governments would prefer a predetermined outcome.

SMARTWATER RESEARCH CENTRE- ARC GRANT FOR NATIONAL ENDOCRINE DISRUPTION STUDY NOV 2009:

"The Australian Research Council has awarded a substantial grant to a Smart Water Research Centre project to conduct **the first** comprehensive endocrine disruption study of Australian waterways."

"Dr Leusch said the project will be the most wide ranging of its kind ever undertaken in Australia. This weight of evidence approach will allow us to get a more accurate picture of whether endocrine disruption is likely to be a problem in Australia."

AUTHOR'S COMMENTS:

The Productivity Commission's 'Australian Urban Water Sector Inquiry' has relied upon the above National Water Commission statements which are misleading and incorrect, to get the government's strategy back on track by publicly promoting the indirect reuse of treated sewage effluent for human consumption, despite knowing that what is planned here is Direct Potable Reuse of treated sewage effluent..

They have unfairly used propaganda such as unplanned, unadvertised and inadvertent reuse, while ignoring the fact that no short or long term research has been carried out Australia wide on the health of any community consuming treated sewage effluent in this unplanned manner.

EXTRACT FROM CORRESPONDENCE FROM JENIFER SIMPSON DATED MAY 1999 OBTAINED UNDER FOI LEGISLATION: CHAIR OF ONE OF THE OLD WATER REUSE STRATEGY'S TAGS AND LONG TERM PROPONENT OF DIRECT POTABLE REUSE.

"They are already used to water recycled via rivers and it doesn't help at all because they don't about it and don't have the information to know what sort of risk this is exposing them to."

EXTRACT FROM NRMMC-EPHC - AUSTRALIAN GUIDELINES FOR WATER RECYCLING; AUGMENTATION OF DRINKING WATER SUPPLIES DRAFT.

1.1 'UNPLANNED OR UNINTENDED ADDITION'.

"Proponents of planned addition sometimes cite unplanned addition as evidence of safety of recycled water, but caution should be applied. In some instances, no apparent disease outbreaks have been associated with upstream sewage discharges. However, in other instances, waterborne outbreaks have been associated with unplanned addition, sometimes in urban drinking water supplies serviced by modern water filtration plants and disinfection facilities {Hrudey and Hrudey}.

AUTHOR'S COMMENTS:

The Productivity Commission should have INDEPENDENTLY researched the NRMMC –EPHC's Draft and other scientific, technical and medical information other than that of

the National Water Commission's before following their promotion of the forced introduction of treated sewage effluent for human consumption.

SOUTH CABOOLTURE WATER REUSE STUDY – , CARRIED OUT BY KINHILL METCALF AND EDDY, 1996 – EXTRACT:

'EPIDEMIOLOGICAL INVESTIGATIONS:'

"It is recommended that an epidemiological evaluation program be established to monitor short term {infectious} effects and long term {mainly chronic} effects of potable reuse. This would need to be established in conjunction with the local medical practitioners and hospitals. The study would review health effects for persons using potable reuse water and a control group not using the water. The presence of the local hospital and the distinct catchment boundaries for potable and non potable water users should enable a reasonable opportunity for carrying out such a study. External funding for this study may be possible in view of its importance to the community at large."

AUTHOR'S COMMENTS:

"importance to the community at large". Why would Metcalf and Eddy recommend that Epidemiological investigations be commenced to determine both the short and long term impacts on human health if what was produced and inserted indirectly and directly into the public's drinking water supply was free of contaminants, if it was done worldwide and if there were short and long term health studies available?

Despite the public's continuing refusal to allow this type of reuse {Community Consultations dealt with further on}, the Productivity Commission's Inquiry supports the lies and forced use of the Australian public as guinea pigs in a world first intergenerational experiment without written consent.

SYDNEY MORNING HERALD ARTICLE 'RECYCLED SEWAGE CLOSER TO TAP, WITHIN LIMITS', BY MARK METHERELL DATED AUG 3RD 2007:

"Drinking recycled sewage has moved a step closer with the drafting of what are said to be the <u>world's first</u> national guidelines to establish standards for recycled water quality."

AUTHOR'S COMMENTS:

More proof that what is planned here is a world first. If Indirect and Direct potable reuse was carried out worldwide as stated by the NWC and supported by the Productivity Commission, why are there NO national guidelines anywhere else in the world?

RESEARCH:

SMART WATER RESEARCH CENTRE EXTRACT FROM BRISBANE TIMES WEBSITE DATED NOV 27th 2009:

"Examining the healthiness of recycled water -----\$18 million research facility on the Gold Coast."

"What will occur here is world class research into water safety, water security and water supply."

"Smart Water CEO Larry Little told reporters researchers would examine, among other things, recycled water, -----."

<u>URBAN WATER SECURITY RESEARCH ALLIANCE – UQ NEWS ONLINE 3rd April 2007 :</u>

"UQ scientists, engineers and social scientists will lend their expertise to the \$50 million Urban Water Security Research Alliance, -----."

"The five year initiative will develop Australia's largest urban water research program, and its finding will underpin the third-largest water recycling scheme in the world."

AUTHOR'S COMMENTS:

The Urban Water Security Research Alliance was, until 2007 called the Consortium for Integrated Research Management {CIRM} and involved CSIRO, Qld DPI, EPA, DNR, University of Qld and Griffith University. CIRM, initiated in 1993 had been carrying out research into direct reuse since 1995.

SMARTWATER RESEARCH CENTRE WEBSITE DATED NOV 2009:

"The Australian Research Council has awarded a substantial grant to a Smart Water Research Centre project to conduct the first comprehensive endocrine disruption study of Australian waterways."

"This project will be the first to use a comprehensive ----- at a National level."

"This weight of evidence approach ----accurate picture of whether endocrine disruption is likely to be a problem in Australian waterways."

NEWS RELEASE FROM NOMURA RESEARCH INSTITUTE LTD DATED AUGUST 2008:

NRI to INAUGURATE INTERNATIONAL JOINT RESEARCH PROJECT WITH RESEARCH ALLIANCE IN AUSTRALIA'S QUEENSLAND TO STUDY STRATEGIC USE of WATER RESOURCES:

The study will include health effects of consuming treated sewage effluent.

AUTHOR'S COMMENTS:

"No Public Health Barriers".

Why then if there are 'NO HEALTH BARRIERS', have Australian governments allocated so much money to Alliances etc to carry out research into the impacts on human health, wellbeing and the environment, of consuming treated sewage effluent?

Despite governments and scientists being well aware for over forty years that endocrine disrupting chemicals, including pharmaceuticals are present in sewage and treated wastewater entering waterways, revealed in the books 'Silent Spring' by Rachel Carson's 'Our Stolen Future' by Colborn, Myers and Dumanoski, published in 1996, 'The Feminization of Nature' by Deborah Cadbury published in 1997 and 'Quick Poison Slow Poison' by Kate Short, no Australian wide research money has been forthcoming until now.

How often over the past fifteen years have proponents of potable reuse of treated sewage effluent used and indeed boasted about Inadvertent and Unadvertised Unplanned Indirect Potable Reuse to promote planned reuse, despite knowledge that endocrine disrupters were present and that no details were available on the impacts this type of reuse was having on human health, wellbeing and the environment.

When the research money was granted only an insignificant amount was involved, because the governments had commenced their strategy to force the introduction of treated sewage effluent for human consumption in 1992 and nothing was to get in the way of its forced introduction.

Here we have one reason why potable reuse of treated sewage effluent is unacceptable. Should Australians trust organisation such as the NHMRC, NWC and Productivity Commission who have been aware for years that a number of Australians are consuming treated sewage effluent in small quantities that has passed through sewage treatment plants with water treatment plants having no processes to remove contaminants that are found in sewage with no research information available on the practices impact on human health and the environment?

Should we trust these bodies that promote the forced introduction of indirect and direct reuse of treated sewage effluent while ignoring the fact that so little is known about this type of reuse and that the planned research costing millions of dollars will not be available for many years?

THE COURIER MAIL ARTICLE 'DECLINING SPERM UNDER MICROSCOPE, BY BRENDAN O'MALLEY DATED MAY 13TH 2004:

"A major male fertility summit aiming to stop the dramatic decline in sperm counts begins in Brisbane tomorrow."

"Sperm counts are dropping so fast men in some parts of the world could be sterile in just two generations," Professor Aitkin says.

"Studies around Sydney showed its surface water was so polluted with the chemical nonyl-phenol that male mosquito fish were turning into females."

AUTHOR'S COMMENTS:

The chemical Nonylphenol has been detected exiting all sewerage treatment plants on the Sunshine Coast which are to be used for direct potable reuse.

THE AUSTRALIAN ARTICLE 'AS QLD GETS READY TO DRINK RECYCLED SEWAGE, SOME SCIENTISTS ARE NERVOUS, WRITES GREG ROBERTS-OCT 30TH 2008 EXTRACTS:

"Peter Collignon is a worried man. NOBODY IN THE WORLD HAS DONE WHAT SOUTHEAST QUENSLAND IS ABOUT TO DO," SAYS THE EMINENT MICROBIOLOGIST ANS AUSTRALIAN NATIONAL UNIVERSITY PROFESSOR OF CLINICAL MEDICINE."

"What is about to happen is the reversal of 150 years of public health policy in Australia because sewage will be put into the drinking water of more than two million people." Everywhere else in the world, the emphasis is on keeping sewage out of the drinking water. "We should be concerned about what Queensland is doing especially as it is being looked at by the rest of the country as a solution to water supply problems."

"Collignon insists that contrary to claims by the Queensland Government, the project is unprecedented. Nowhere in the world is the proportion of drinking water that is recycled sewage anything like 10 or 25%."

"He says Singapore one of the examples cited by Queensland had a "very different" system—and wastewater—pumped through a pipeline separate from the reticulated system- accounted for less than 1% of Singapore's dam capacity."

"Collignon rejects government claims that a seven stage treatment process will ensure that water is safe. <u>He raises three key health concerns</u>. The technology is not available to detect minute quantities of viruses, some potentially fatal, which may enter the water supply. "The quality of viruses must effectively be reduced 10billion –fold to make it safe. If you have a 1% leakage through a tear in the reverse osmosis membranes, then the water is not safe."

Prof Collignon cites the delay of one or more days before the results of tests for e-coli and other dangerous bacteria can become available. "By that time, you will have substantial quantities of contaminated water in the dam and, although you can do things to reduce the damage, there is potential for infections to get through."

"There will be no real time testing being done to get results immediately."

Prof Collignon also says it is inevitable some antibiotics and other natural and man made chemicals will not be filtered out. "It is of concern that if various estrogens and {other} hormones are being recycled, and it is not good if antibiotics and other drugs are being recycled," he said.

AUTHOR'S COMMENTS:

Both the NWC and Productivity Commission have stated that what is planned here is carried out worldwide and used Singapore as one example. Stop the lies, what are planned here indirect and direct potable reuse are world firsts.

EXTRACT FROM SBS TV WORLD NEWS ARTICLE 'RECYCLED WATER DEBATE, 1ST FEB 2007:

"The debate over the use of recycled water for human consumption got murkier today. A visiting Israeli scientist has warned the Qld Premier against his plans to introduce it in the State's southeast. Rami Messalem issued the warning at an international recycling conference in Wollongong. "Wastewater has been recycled in Israel too for the past 20 years but is restricted to agriculture. Scientist Rami Messalem says Queensland should think again about plans to drink recycled water."

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STOP THE LIES:

IN 2007 THE QUEENSLAND WATER COMMISSION, WITH ELIZABETH NOSWORTHY AO AS CHAIRPERSON, SENT OUT A BROCHURE TO ALL S E OLD RESIDENTS:

PART QUOTE:

BARRIER 1:

SOURCE CONTROL

"The first step involves preventing harmful chemicals from entering the wastewater system. Strict regulations prohibit the discharge of certain non domestic wastes into the wastewater system. These include business, industry, hospital, pharmaceutical, clinical, biological, and chemical wastes."

AUTHOR'S COMMENTS:

The QWC had established an INDEPENDENT EXPERT PANEL to advise the commission. The panel included Chair, Prof Paul Greenfield, another representative from CSIRO and other professionals. As the Chair of the Productivity Commission's Inquiry had been a member of the National Competition Council so to had the Qld Water Commission's Chair, Elizabeth Nosworthy AO. Chair Prof Paul Greenfield was Vice Chancellor of University of Qld. UQ had been carrying out research into direct potable reuse.

As stated above, in 1993 the Consortium for Integrated Research Management was established. It was a partnership including CSIRO, Qld DPI, EPA, DNR, University of Qld and Griffith University. CIRM had been carrying out research into Direct Reuse since 1995. Prof Greenfield had been involved in a consortium to introduce indirect and direct potable reuse at Toowoomba, since 1996. Is that independent?

EXTRACT FROM THE AUSTRALIAN ARTICLE 'EXTENT OF WASTE FOR DRINKING REVEALED, BY GREG ROBERTS DATED NOV 7TH 2008.

"More than 30 million litres a day of industrial and hospital waste will be recycled as drinking water for the residents of southeast Queensland."

"Concentrated wastes at the advanced treatment plants are solidified and disposed of in landfills. Between 120 and 250 tonnes of waste a week from the three plants are disposed of."

EXTRACT FROM THE AUSTRALIAN ARTICLE "BODY TISSUE RISK IN RECYCLED WATER."

A leading authority on infectious diseases has called -----. "The University of Sydney's Ray Kearney hit out at the Queensland Water Commission for falsely claiming that hospital waste approvals were in place when the government planned to add the effluent to drinking water supplies in February."

The Queensland Water Commission has repeatedly asserted that hospital wastes such as blood and cancer causing drugs were prohibited from entering the sewerage system and would not be recycled as drinking water because strict approvals were in place at all hospitals.

The Australian reported this week that a Queensland Health audit discovered that four major hospitals in Brisbane and Ipswich had faulty or no approvals. Professor Kearney said he was appalled by the conduct of both the water commission and Qld Health, which has refused to make public its audit report."

"It is despicable and reckless for a government authority to behave in ways that put the interests of public safety below political interest of a government," he said. "The public has a right to be well informed about these issues."

EXTRACT FROM THE COURIER MAIL ARTICLE 'BACTERIA RESISTANT SUPERBUGS FOUND IN WATER SUPPLY' BY DES HOUGHTON DATED FEB 20TH 2009.

"Flesh eating bacteria resistant to antibiotics have found their way from hospital sewers into rivers and streams throughout Queensland."

"Scientists who made the startling discovery in 2006 have expressed alarm that the government failed to follow up their report or act on their recommendations."

"Secret tests on wastewater discharged from 28 Queensland hospitals and clinics revealed the widespread presence of MRSA {Methicillin resistant Staphylococcus Aureus} and VRE {Vancomycin resistant Enterococci}."

"A central Qld University scientist who helped carry out the research told me 97% of hospital sewage discharge lines tested positive for antibiotic resistant bacteria. He said 70% of hospital discharges tested positive for both MRSA and VRE."

"The MRSA and VRE are major source of deaths from medical infections."

"As well as the deadly microbes resistant to antibiotics, the scientist led by William Sinclair, Ben Kele and Barry Hood revealed the presence of 56 chemicals and heavy metals-some highly toxic in hospital wastewater."

The report noted: "The presence of these organisms at the point of wastewater entry into the council sewerage system indicates it is likely they will routinely be washed into the general wastewater stream, which flows to the community treatment facility."

"At a recent conference on infectious diseases in Cairns the principal scientist at Royal Perth Hospital, Geoffrey Coombs, said MSRA was one of the biggest bacterial threats to humanity."

EXTRACT FROM THE AUSTRALIAN ARTICLE 'WASTE TO WATER AUDIT WITHELD FROM COUNCIL BY GREG ROBERTS DATED APRIL 8TH 2009:

"Queensland Health failed to pass on the results of a departmental audit to local councils responsible for monitoring the discharge of hospital wastes before they were to be recycled as drinking water."

"The plan was deferred in the face of community concerns about the safety of recycled water, but treated water will be added to dams when their levels fall to 40%."

EXTRACT FROM THE AUSTRALIAN ARTICLE 'HEALTH CHIEF OUT OF LOOP ON RECYCLING, DATED NOV 2008, BY GREG ROBERTS:

"The bureaucrat charged with safeguarding the health of Queenslanders was not called on to approve the adding of recycled sewage to the drinking water of the state's southeast."

"The Bligh Government left Qld Chief Health Officer Jeannette Young out of the approval loop on the Western Corridor Recycled Water Project."

"Instead, the scheme was given a health clearance by the Office of the Water Supply Regulator, an arm of the State Department of Natural Resources and Water."

"Dr Selvey said the quantity of hospital waste that was dumped into the sewerage system ---- and would therefore be recycled as drinking water ---- was not known."

"National guidelines for recycled water stipulate that some hospital contaminants including radionuclides and veterinary and laboratory wastes should not be discharged into the sewage that is recycled."

EXTRACT FROM COURIER MAIL ARTICLE 'MICK READ APPOINTED HEAD OF QLD HEALTH, DATED MAY 2008 BY DARRELL GILES.

"The bureaucrat responsible for running the Rudd Government's health reform agenda has been appointed the new Director General of Qld Health."

"Mick Read chief of staff for Federal Health Minister Nicola Roxon ----."

EXTRACT FROM COURIER MAIL ARTICLE 'CORRUPTION IS CLEAR IN QUEENSLAND HEALTH SPIN, DATED FEB 2009.

"Lying is official government policy. It says so in a bundle of leaked emails by Qld health spin doctors."

AUTHOR'S COMMENTS:

The public was told that Qld Health would decide if we were to consume treated sewage effluent, another lie.

EXTRACT FROM ARTICLE IN THE COURIER MAIL 'CHANGE THREAT TO SCIRO RESEARCH', BY MARIA MOSCARITOLO DATED JULY 2002

"Deep cracks in the nations top research body, the CSIRO' could threaten its world class scientific work according to concerned insiders."

"The management style of Chief Executive Geoff Garrett and the pace of change ----."

"There is also concern about Dr Garrett's decision to import consultants from South Africa, his former home, rather than putting contracts out to tender."

"The British born chief took up the top post at CSIRO after five years at South Africa's Council for Scientific and Industrial Research."

"One chief was concerned that Dr Garrett had a preconceived idea about CSIRO's future."

AUTHOR'S COMMENTS:

Dr Geoff Garrett was appointed CSIRO CEO in 2001. He has since resigned and surprise surprise, is now employed by the Qld Government as its Senior Scientist. I believe that person would have been involved in South Africa with Potable Reuse through his position as head of South Africa's Council for Scientific and Industrial Research. CSIRO has been involved in all attempts to force the introduction of Direct Potable Reuse through CIRM and allowed itself to be unfairly used in 2006 to promote a 'yes' vote at the Toowoomba Referendum.

impact that this type of reuse could have on their health and wellbeing

EXTRACT FROM THE AUSTRALIAN ARTICLE 'RECYCLED SEWAGE WILL HAVE BUGS', WRITTEN BY Greg Roberts and Padraic Murphy dated 29th Oct 2008:

"An authority on water infrastructure has claimed it is not possible to prevent potentially harmful organisms entering southeast Queensland's water supply when recycled sewage is added to it in Feb."

Australian National University emeritus professor Patrick Troy said it was scandalous that the region's 2-6 million residents were not offered a vote in a referendum on recycled water."

Professor Troy said the safety of recycled water had not been proved in any long term epidemiological studies.

"It will not be possible to remove all biologically active waste molecules from the system." Professor Troy said.

"The <u>probability</u> is that something like 8 per cent of these impurities will get through and that is assuming the system is working properly."

Professor Troy said residents with allergies would be particularly at risk of infection. "What's happening here is that the authorities are playing Russian roulette with the health of the population," he said.

THE AGE WEBSITE ARTICLE 'RECYCLING SEWAGE SHOULD BE A LAST RESORT EXPERT.' DATED JUNE 5TH 2007: EXTRACT:

The author of Australia's drinking water guidelines has stressed recycled sewage drinking water should be a last resort, warning that people could die if the system failed and there was an outbreak of disease.

EXTRACT FROM THE ARTICLE 'WATER FROM SEWAGE NOT SAFE ENOUGH IN THE ADELAIDE NOW WEBSITE DATED JAN 29TH 2007, BY CLAIRE PEDDIE:

The Adelaide scientist who developed Australia's drinking water guidelines says he would not drink recycled sewage and would not back its use.

Professor Bursill said complacency was the biggest danger. He said Australia's regulatory regime was not strong enough to guarantee the safety of a system sourced from sewage."

ARTICLE IN THE COURIER MAIL 'DUMPING THREAT TO OUR SEWERS', BY KOREN HELBIG, DATED NOV 8TH 2010, EXTRACTS.

"Businesses are illegally flushing oils and chemicals down city sewers and causing major network blockages, according to Qld Urban Utilities, ----."

"Mr Belz said industrial companies at Rocklea and Acacia Ridge were also at fault for flushing harsh pesticides, paints and cement into the system."

AUTHOR'S COMMENTS:

What happened to the chemicals, pharmaceuticals etc and illicit drugs that are passed through the human body as urine and end up in domestic sewage?

EXTRACTS FROM THE ARTICLE IN THE OBSERVER 'SHAMPOO IN THE WATER SUPPLY TRIGGERS GROWTH OF DEADLY DRUG RESISTANT BUGS,' BY SCIENCE EDITOR ROBIN McKIE DATED MARCH 29th 2009"

"Fabric softeners, disinfectants, shampoos and other household products are spreading drug resistant bacteria around Britain, scientists have warned. The warning has been made by Birmingham and Warwick university scientists who say disinfectants and other products washed into sewers and rivers are triggering growth of drug resistant microbes."

THE AUSTRALIAN ARTICLE 'TEACHERS CRY FOR HELP AS ALLERGY CRISIS TAKES HOLD': EXTRACTS:

"Teachers ---- in NSW public schools because nearly every classroom has a child with a life threatening allergy."

"Grace Mavrelis, 7 is at risk of dying if she comes into contact with eggs, nuts, sesame, seafood and latex."

AUTHOR'S COMMENTS:

The Draft Guidelines for using treated sewage effluent for human consumption had included statements that allergy sufferers should not consume treated sewage effluent. By the time that the final guidelines had been approved that information was missing.

Those most at risk from waterborne infections are the aged, immunosuppressives, the infirmed, sick, etc. Must they now leave Australia or will the government sell drinking water sourced from sewage with a warning to those who are most likely to suffer illness and death?

EXTRACT FROM THE ARTICLE IN THE AUSTRALIAN FINANCIAL REVIEW 'GENDER BENDING 'WATER WARNINGS, BY MARGO REYNOLDS, DATED MAY 2ND 2006:

There are fears a plan to reclaim drinking water from sewage could lead to increased cancers in men, write Margo Reynolds. Doctors have warned the Prime Minister's Parliamentary Secretary with responsibility for Water Policy, Malcolm Turnbull, that the government's support for recycled sewage as drinking water threatens to expose people to chemicals that cause infertility, cancer and genital deformities.

Without big improvements to testing procedures, governments risk hefty law suits from any victims.

AUTHOR'S COMMENTS:

The sewage entering the treatment plant, unlike water from a dam, is highly contaminated. It contains hundreds of thousands of contaminants, many unable to be

identified, most unable to be tested for their presence. In fact it is 100% contaminated, 100% infectious. The same sewage effluent that enters the plant is the same effluent that leaves the plant after treatment. The plant operators can't possibly give a guarantee that they have removed ALL of those contaminants.

Only a very small and insignificant volume - % of the treated sewage effluent leaving the plant before consumption is tested for contaminants, only a very small amount of chemicals, pharmaceuticals, some hormone disrupting drugs, pathogens, viruses bacteria etc that could be present can be tested for. No testing is done on the treated sewage effluent in water supply mains to determine the extent of the contamination.

What happens when two or more chemicals etc combine. Role the dice.

Indirect and direct potable reuse of treated sewage effluent as are planned here, sourced from hospitals, industry, homes and abattoirs in the quantities to be used here, are world firsts, as confirmed by Prof Peter Collignon.

{Reference the three pages of contaminants and related questions located at back of this submission.}

SINGAPORE:

EXTRACT FROM THE AUSTRALIAN ARTICLE, 'WARNING ON RECYCLED WATER'

"Professor Collignon rejected claims by the Qld Gov that the project was comparable with recycled water schemes overseas. Singapore one of the examples often cited by Queensland, had a "very different" system, "he said.

"Wastewater was pumped through a pipeline separate from Singapore's reticulated system – unlike in southeast Qld – and accounted for less than 1% of the city state's dam capacity."

"There is no where else in the world where a large population is being forced to accept a situation where 10 or 25 percent of their drinking water is recycled sewage."

"University of Qld vice chancellor Paul Greenfield who heads an expert government advisory panel on recycled water said that it was not possible to guarantee the safety of recycled water."

AUTHOR'S COMMENTS:

Singapore only ever treated sewage effluent sourced from 95% domestic sewage, unlike here where up to 100% is sourced from hospitals, industry, homes and abattoirs.

What is planned here, confirmed by several failed documented attempts to force the introduction of the indirect and direct reuse of treated sewage effluent sourced from hospitals, industry, homes and abattoirs is not carried out anywhere in the world.

EXTRACTS FROM ARTICLE THE COURIER MAIL, 'SECRET WATER SHOCKS' BY DES HOUGHTOND, DATED JULY 21- 2007:

"A secret report for the Queensland Water Commission proposes turning sewage effluent into drinking water on a mass scale throughout the southeast."

"It's a story the water commission does not want you to read. It fought my attempts to search for the documents under the freedom of information laws. This was a gross form of censorship against the spirit of the laws."

"Some of the documents were later released on appeal. But they arrived with dozens of pages blanked out."

"It lists a number of towns and dams that would add recycled sewage effluent to drinking water in Brisbane, and bayside towns, the Sunshine Coast, and Gold Coast."

"The report said there are other "opportunities to top up dams with recycled sewage effluent, with Sandgate supplying North Pine Dam, Merrimac and Elanora plants supplying Hinze Dam, Noosaville supplying Lake McDonald, and Cleveland and Capalaba treatment plants supplying Leslie Harrison Dam."

"Another report by Cardno Queensland also promotes recycled sewage as a "valuable alternative water resource."

AUTHOR'S COMMENTS:.

"Secret Report- On massive scale".

Originally the government told the public that treated sewage effluent was to be used for human consumption only in emergencies, now we find that it is to be introduced on a massive scale. One again proof that the Productivity Commission and NWC are getting back on track the government's strategy to force the introduction of treated sewage effluent for human consumption on a large scale and their failure to put public interest before political interests. The report was carried out in 2007.

Extract from the article 'Recycled Sewage Closer to Tap, Within Limits' by Mark Metherell {SMH –Aug 3rd 2007, already mentioned states:

"However, Mr Donlon, the technical director of the Water Services Association of Australia-which represents the biggest water utilities—joined others in expressing concern about the lack of competent staff to provide around the clock supervision of complex technologies in which a breakdown could have a disastrous, even fatal, consequences."

"Professor Collignon also expressed concern about the presence of allergy causing contaminants in recycled water that were hard to identify and contain but that could trigger serious problems for a small percentage of people."

AUTHOR'S COMMENTS:

It is with some certainty that I can suggest that those blacked out pages in the Report for the QWC include mention of DIRECT POTABLE REUSE. Maroochydore, on the SC for instance, was intended to be Direct reuse as was Caloundra, Caboolture, Toowoomba, Gold Coast and Redlands.

Experts have concerns regarding specialists for just one plant. How will they find so many other competent specialists to operate hundreds, or even thousands of other such plants?

PROOF THAT THE PRODUCTIVITY COMMISSION, NATIONAL WATER COMMISSION, ALL LEVELS OF GOVERNMENT AND COAG WERE AWARE THAT THE INTRODUCTION OF DIRECT POTABLE REUSE OF TREATED SEWAGE EFFLUENT WAS ALWAYS INTENDED, NOT INDIRECT POTABLE REUSE AS STATED:

CIRM:

As stated above:

1993 Centre for Integrated Resource Management {CIRM}. The word 'Centre' replaced with the word 'Consortium' some time later. CIRM initiated in 1993 was a partnership including CSIRO, Qld DPI, DNR, EPA, University of Queensland and Griffith University. CIRM has been carrying out research into Direct Potable Reuse since 1995.

CSIRO has been actively involved in attempts to force the introduction of Direct Potable Reuse ever since.

1995 EXTRACT FROM PLANNING FOR POTABLE REUSE IN SYDNEY BY WALLY FINK, SYDNEY WATER CORPORATION JULY 1995:

"The direct potable reuse projects involve pumping reclaimed water to major zone reservoirs closest to the source."

The paper includes a diagram illustrating direct reuse.

1995 EXTRACT FROM PLANNING ISSUES FOR POTABLE WATER REUSE, BY JOHN ANDERSON:

"At Windhoek in Namibia, where ------planed potable reuse of reclaimed water ------. A debate in Australia has now commenced in Australia about whether potable reuse should be introduced."

Windhoek was direct reuse.

AUSTRALIAN WATER AND WASTEWATER ASSOCIATION, QLD BRANCH:

1995 Australian Water and Wastewater Association co-opted Sunshine Coast Environment Council Project Officer on water and wastewater onto their Qld Board. This person had taken a leading role in the government's strategy to condemn dams and ocean outfalls while promoting the forced introduction of treated sewage effluent directly into the public's drinking water supply mains, since 1992.

The Federal President of the Australian Water Association as AWWA from 1992 until 2007 is now a National Water Commissioner. The NWC has promoted direct potable reuse since 2007.

EXTRACT FROM AUSTRALIAN WATER AND WASTEWATER ASSOCIATION'S QLD BRANCH, AUG 1995 DRAFT POLICIES: POLICIES:

"The advantages of direct potable reuse of treated wastewater should be promoted to the community through a public education campaign as a proven, safe technology"

"A demonstration scale pilot plant employing full scale process technology and located at a suitable site in SE Qld should be constructed as part of the public education program."

The \$550-000 C/MSWM Study's 1997 outcomes included the construction of direct potable reuse plants at both Caloundra and Maroochydore, the construction of AWWA's Direct Potable Reuse Project at Landsborough and introduction of AWWA's 'We All Use Water' Education Program.

EXTRACT FROM REPORT TO ENVIRONMENT INDUSTRY DEVELOPMENT NETWORK ON AWWA POTABLE REUSE DEMONSTRATION PROJECT: JULY 1996

"AWWA QUEENSLAND BRANCH DIRECT POTABLE REUSE PROJECT."

1995 Australian Water and Wastewater Association initiate their 1995 Direct Potable Reuse Demonstration Project WHICH RESULTED IN THE ABOVE REPORT.

1996 SOUTH CABOOLTURE WATER REUSE STRATEGY-EXTRACT FROM THE EXECUTIVE REPORT, BY KINHILL METCALF AND EDDY.

"Council engaged Kinhill Metcalf and Eddy to undertake an investigation into the potential to reuse the effluent from the South Caboolture Sewerage Treatment Plant including the potential for use as a source of potable water."

"—it would be proposed to discharge the treated water directly into the water reticulation network."

"As a second stage, when fully proven and accepted by the community, the reclaimed water could be injected directly into the Caboolture reticulation system."

"This will enable direct potable reuse by injection into the trunk main at Bribie Island."

1996 TOOWOOMBA WATER REUSE PROJECT JULY 1996 TAKEN FROM EIDN WEBSITE:

"A WORLD CLASS WATER REUSE FACILITY"

Toowoomba Council was in talks with a consortium that intended introducing Direct Potable Reuse.

1995-6-7 EXTRACT FROM RECOMMENDED STRATEGY OBTAINED UNDER FOI FROM QLD STATE ONBUDSMAN IN 1998.

"The strategy which was adopted by Maroochy Shire and Caloundra City Council in August 1997 recommends a mix of -----and potable reuse."

"The major reclamation plant would be constructed ----. The Maroochydore reclamation Plant will be a direct reuse scheme pumping reclaimed water directly to the Maroochy Shire drinking water supply reticulation system."

"The second stage of the Caloundra reclamation plant will provide additional ----- allowing direct potable reuse of the reclaimed water in Caloundra City. The reclaimed water will be pumped directly into the drinking water supply reticulation system."

<u>CALOUNDRA / MAROOCHY STRATEGIC WASTEWATER MANAGEMENT</u> STRATEGY:

1997 – August: Caloundra and Maroochy Councils initiate their Caloundra / Maroochy Strategic Wastewater Management Strategy. The Strategy is designed to implement the outcomes of the study which promotes the introduction of Direct Potable Reuse.

WATER EDUCATION PROJECT:

1997 The Caloundra and Maroochy Councils initiate their 'Water Education Project' To be used in schools. The Project which I believe is biased includes a Coat-hanger poster with Indirect and Direct Potable Reuse illustrated as being a part of the 'TOTAL WATER CYCLE'.

1998 EXTRACT FROM ARTICLE TAKEN FROM AWWA PUBLICATION, 'WASTEWATER' TITLED SYDNEY WATER FACTORY WHY? BY P LONGFIELD:

- "Potable reuse will need to occur if Sydney Water is to move -----"
- "Potable reuse without loss of identity, becomes viable within the planning period."
- "When the reuse water from these facilities is distributed via Prospect Reservoir---"

The Sydney Water Factory was a direct reuse demonstration project. 'Without loss of identity" is direct potable reuse.

WATER EDUCATION PROGRAM:

AWWA WE ALL USE WATER EDUCATION PROGRAM:

1998 the Water Education Project becomes the AWA 'We All Use Water' Education Program. The Education Project and Program are overseen by a steering committee including Australian Water Association, formally AWWA, Sunshine Coast Environment Council {SCEC}, Caloundra City Council, Maroochy Shire Council and Qld State Government and was part funded by the Federal Government's Natural Heritage Trust, an outcome of the 1992 United Nations Rio 'Earth' Summit.

2002 EXTRACT FROM CORRESPONDENCE FROM ROD WELFORD MLA MINISTER FOR ENVIRONMENT AND HERITAGE AND DNR DATED APRIL 1999:

"The government's current interim strategy in respect of reuse of treated water as a source of potable water is as follows:"

"2 DIRECT WATER RECYCLING FOR DRINKING PURPOSES."

"A moratorium has been put on any decision to introduce direct recycling into drinking water schemes until Jan 2005 so that my Department and Qld Health can evaluate sufficient information about the health aspects and reliability of such schemes. The moratorium is only in respect to a decision to introduce such schemes, and not on research and education aspects of direct potable recycling."

The moratorium did not include research or education because the government was already involved in research into direct reuse through CIRM and involved in education through their Water Education Project.

1999 ADVANCED WATER RECYCLING DEMONSTRATION PLANT. EXTRACT FROM CORRESPONDENCE FROM H E GIBSON, MANAGER DNR – WWP TO A/GENERAL MANAGER [WIC], ENTITLED WATER RECYCLE DEMONSTRATION PLANT – COSTING, DATED JAN 1999. FOI.

"The design was to be based on the original AWWA concept."

EXTRACT FROM CORRESPONDENCE FROM HOWARD GIBSON, DNR TO BOB REILLY, GENERAL MANAGER WIC ENTITLED FUNDING FOR WATER REUSE PROCESSES PILOT PLANT DATED DEC 1998. FOI.

"It is now proposed that a pilot plant be constructed to the basic design as put forward by AWWA and construction completed prior to June 1999."

AUTHOR'S COMMENTS:

The Qld State Government changed the name of the AWWA plant to the \$1 million 'Advanced Mobile Water Recycling Demonstration Plant' in order to hide the true purpose of the plant, that is direct potable reuse from the public. The plant is no longer and the research and testing results seem to have disappeared with the plant .

SERVICES SYDNEY:

2004 Services Sydney applied to the National Competition Council requesting access to Sydney Water's sewerage mains intending to introduce Direct Potable Reuse.

TOOWOOMBA REFERENDUM:

2006 Toowoomba Council held a referendum which resulted in a 68% NO vote. While the referendum was about Indirect Potable Reuse the council had intended introducing Direct Potable Reuse and had, unbeknown to the public, been working with a consortium since 1996 to do so.

SEP 2006 EXTRACT FROM SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT REFERENCES COMMITTEE – WATER POLICY INITIATIVES INTERIM REPORT SEP 2006.

"The committee held a public hearing in Toowoomba, a city -----and the only city to have considered a serious direct potable reuse proposal----."

"Direct potable reuse is only one of a range of approaches to water recycling."

The Senate also believed that what was planned in Toowoomba was direct potable reuse. In order to mislead the public they incorrectly stated that Toowoomba was the only city to have considered a serious direct potable reuse proposal when in 1996 and 1997 Caboolture and then Caloundra and Maroochydore direct was planned.

MARCH 2007 ARTICLE 'RECYCLED WATER ON AGENDA AS CHEAP ALTERNATIVE', IN THE CABOOLTURE SHIRE HERALD.

"Recycled wastewater from Caboolture South's water treatment plant could be added to the shire's drinking supply, a council report has revealed."

SOUTH EAST QLD:

2007 Queensland State Government intended introducing Direct Potable Reuse in SE Qld in 2007.

EXTRACT FROM THE AUSTRALIAN ARTICLE 'AS QUEENSLAND GETS READY TO DRINK RECYCLED SEWAGE, SOME SCIENTISTS ARE NERVOUS, WRITES GREG ROBERTS.

"Nobody in the world has done what southeast Old is about to do."

"Collignon insists that contrary to claims by the Qld Government the project is unprecedented, nowhere in the world is the proportion of drinking water that is anything like 10 or 25%

EXTRACT FROM COURIER MAIL CAPS OFF RECYCLED LIMITS BY STEVEN WARDILL AND ROSEMARY ODGERS DATED JAN 2007:

"A maximum limit to the amount of recycled water that could be pumped into southeast Qld's drinking supplies has been ditched by the State Government."

"Acting Premier Anna Bligh yesterday revealed there would be no percentage cap to recycled water----."

EXTRACT FROM YAHOO 7 NEWS TITLED 'RECYCLED WATER PLAN FOR ARMAGEDDON SCENARIO, DATED JAN 2007:

"Acting Qld Premier Anna Bligh has revealed residents of the State's southeast could be drinking 100% recycled water if dams levels reach critical levels."

EXTRACT IN COURIER MAIL ARTICLE RECYCLED COMPONENT TO FEATURE HIGH IN MIX, BY TUCK THOMPSON.

"Southeast Qld could have the highest percentage of recycled water in its drinking supply of any place in the world if the drought continues."

EXTRACT FROM THE AUSTRALIAN ARTICLE SUPPORT WAVERS FOR USE OF RECYCLED SEWAGE WATER, BY ANDREW FRASER DATED NOV 2008:

"The process of sewage and waste recycling being used in southeast Qld is not used anywhere else in the world and ---."

EXTRACT FROM THE TOOWOOMBA CHRONICLE ARTICLE QLD MAY IMPLEMENT 100% RECYCLED DRINKING WATER, DATED JAN 2007:

"But Mr Bligh yesterday said the government is prepared to use up to 100% recycled sewage in an emergency ----.:

EXTRACT FROM COURIER MAIL ARTICLE RECYCLED WATER 'OPTION' REVEALED, BY CHRIS GRIFFITH DATED MAY 2007:

"—a shorter pipeline releasing the recycled water into Mt Crosby Weir ----. This means that the recycled water would not be diluted by mixing with fresh water in the Wivenhoe Dam."

EXTRACT FROM COURIER MAIL ARTICLE GUINEA PIGS FOR TREATED WATER, BY TUCK THOMPSON, DATED AUGUST 2007.

"Gold Coast residents could be drinking the highest concentration of recycled water in the world if some city councillors get their way."

PRODUCTIVITY COMMISSION'S AUSTRALIAN URBAN WATER SECTOR DRAFT PROPOSES TO FORCE THE INTRODUCTION OF INDIRECT POTABLE REUSE.

EXTRACT FROM CORRESPONDENCE FROM QLD GOVERNMENT MINISTER FOR ENVIRONMENT DATED AUG 2002 TO MYSELF.

"The government endorsed strategy clearly states the Government's position on the issue of direct potable recycling, which is "the government does not support the use of treated effluent for direct potable purposes, and does not intend to change this position."

EXTRACT FROM CORRESPONDENCE FROM DEPUTY PREMIER, TREASURER AND MINISTER FOR INFRASTRUCTURE, TO ME, DATED MAY 2007:

"Contrary to the view indicated in your letter that the Government intends to introduce direct potable reuse, I can confirm that is not the case."

AUTHOR'S COMMENTS:

The above proves that all three levels of government, Productivity Commission, NWC, NCC, COAG and industry groups with members involved in all of the above attempts to force the introduction of direct reuse continue to lie and deceive the public on this issue.

REASONS WHY THE PUBLIC SHOULD NOT TRUST OR HAVE CONFIDENCE IN GOVERNMENTS OR THEIR COMPETENCE TO INTRODUCE INDIRECT OR DIRECT POTABLE REUSE OF TREATED SEWAGE EFFLUENT WITHOUT CAUSING HARM TO HEALTH AND THE ENVIRONMENT.

EXTRACTS FROM ARTICLE IN GREENDAY TODAY 'CORRUPTION JUST CONFESSED BY FDA SCIENTISTS –INTERNET:

"Group of FDA Scientists sent letter to President – elect Barack Obama's transition team "pleading with him – managers have ordered, intimidated and coerced scientists to manipulate data in violation of the law".

EXTRACT FROM ARTICLE IN THE SUNDAY TELEGRAPH 'SICK FROM TOXIC WASTE', MAY 2011:

"Human waste fertiliser is being used on farms without proper monitoring by health or environmental authorities, leaving several workers distributing the recycled sewage seriously ill."

AUTHOR'S COMMENTS:

The Federal Government was well aware over 10 years ago that sewage sludge was highly contaminated and highly infectious but failed to stop its use as fertiliser, instead, promoting its use Australia wide, in the same way as they are doing with potable reuse of treated sewage effluent.

EXTRACTS FROM ARTICLE IN COURIER MAIL 'SCIENTISTS 'CRUMBLING' IN FACE OF POLITICAL CENSORS', BY BRENDAN O' MALLEY DATED AUG 2006:

"The Howard Government has politicised research so much that the nation's best scientists are forced to resign, work overseas or censor their findings, a leading Queensland academic claims. Griffith University emeritus professor Ian Lowe ---said CSIRO scientists, in particular, were "doing a pre-emptive crumble" because of management interference."

EXTRACTS FROM COURIER MAIL ARTICLE 'BRISBANE WATER FLUORIDE BUNGLERS WARNED BY STEPHEN ROBERTSON', BY ROSEMARY ODGERS, DATED JUNE 2009:

"A series of bungles that caused a fluoride overdose had dented public confidence in the drinking water supply, the State Government conceded yesterday."

EXTRACT FROM COURIER MAIL ARTICLE, 'CABOOLTURE COUNCIL'S THREE YEAR COVER UP OF CANCER COMPOUNDS IN WATEWATER, DATED SEP 2007:

"Caboolture Council has been exploring recycled water for drinking for a number of years and is fully behind Peter Beattie's Wivenhoe Dam plan. They have a test plant.

Now they have been caught out knowing for three years extreme levels of carcinogenic toxins {PCB's} have been entering the sewers."

"Caboolture Council knew a Narangba waste company was leaking potentially cancer causing chemicals for three years but did not notify authorities."

"---emission of polychlorinated biphenyls 11 times above agreed levels was allowed into the sewage system."

EXTRACT FROM ARTICLE IN THE GOLD COAST SUN 'FLUORIDE LEVEL 'FAR TOO HIGH', DATED AUGUST:

"Tap water containing twice the recommended level of fluoride has sparked calls for an immediate halt to the addition of poison' to the city's drinking supplies."

EXTRACT FROM ARTICLE IN THE AUSTRALIAN 'SPILT SEWAGE IN QLD FUELS FEARS ON RECYCLED WATER BY GREG ROBERTS, DATED JAN 2009:

"Treated sewage and industrial effluent have been spilled on four occasions over the past two weeks—including three times in one day at different sites----in another blow to southeast Qld's \$2-5 billion recycled water scheme."

"The Australian reported two weeks ago that state authorities had covered up an accident in which more than 500-000 litres of wastewater were spilled at the Bundamba Advanced Water Treatment Plant west of Brisbane."

EXTRACTS FROM ARTICLES FROM GOLD COAST NEWSPAPERS: 'QUALITY SURETY NOT IN PIPELINE', by Bridie Jabour.

'Gold Coast Water can not unequivocally guarantee that all water on the Gold Coast is uncontaminated."

EXTRACTS FROM ARTICLE "HEALTH FEARS OVER DIRTY HOME WATER, BY KATRINA JONES.

"Residents in more than 630 homes at Coomera have been told not to drink tap water after recycled water was mistakenly piped to them."

EXTRACTS FROM ARTICLE 'COUNCIL DRIPS' NO COMPO FOR POISONED WORKERS, BY GEOFF CHAMBERS.

"At least 73 people became ill after hundreds of workers were exposed to contaminated water at the Gold Coast City Council's controversial \$80 million Pimpama Wastewater Treatment Plant, confidential documents reveal."

"Workers drank and showered in dirty recycled water for nine weeks and ----."

EXTRACTS FROM ARTICLE 'EXCLUSIVE: RECYCLED H2O WRONGLY PIPED TO 630 HOMES -TOXIC WATER, BY KATRINE JONES.

"Some Coomera residents have been drinking diluted recycled water meant for flushing toilets."

WHAT FOLLOWS IS A LIST OF THREE PAGES OF CONTAMINANTS THAT COULD BE PRESENT IN SEWAGE. I ASK THE PRODUCTIVITY COMMISSION JUST HOW MANY OF THESE CONTAMINANTS WILL BE TESTED FOR IN RECYCLED EFFLUENT FOR HUMAN CONSUMPTION?

isociochomeronate (MGK Repellent 326), Direct Black 38 (technical grade), Direct Blue 6 (technical grade), Direct Brown 95 (technical grade), Discollum (cyanodithiolimidocarbonate, Disperse Blue 1, Disron, Doxoroubicin hydrochloride, Doxycycline (internal use), Doxycycline hyciate (internal use), Eddin , Epichlorohydrin, Epichlorohydrin, Ergotamine tartrate , Erionite, Estradiol 178, Estragole, Estrogens, steroidal, Estrone, Estropiaste , Ethinylenstadiol, Ethionamide , Ethoprop, Ethyl acrylate, Ethyl alcohol in alcoholic beverages, Ethylbenzene, Ethyl dipropylthiocarbamate , Ethylene, 4,4"-dichlorobenzilate, Ethylene dibromide , Ethylene renoxycarb, Filgrastim, Fluaziflop butyl, Flunisolide, Fluorouracii, Fluorymesterone, Flurazipeni hydrochloride, Flurbiprofeo, Flutamide, Huticasone propionate, Fluvalinate, Fluorouracii, Glasswool fibers (airborne particles of respirable size), Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole), Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole), Glu-P-2 (3-Aminodipyrido[1,2-a:3',2'-d]imidazole), Glycidaldehyde, a: 5, 2-ginnoazore), Gru---z (z-Armoorpynoof), z-a: 5, 2-ginnoazory, Grycialdelydd, Glycidol, Goserelin acetate, Griseofulvin, Gyromitrin (Acetaklefrydde methylformyfhydraxone), , , Halazepam, Halobetasol propionate, Haloperidol, Halothane, HC Blue 1, Heptachlor, Heptachlor, Heptachlor epoxide, Herbal remedies containing plant species of the genus Aristolochia, Hexachlorobenzane, Hexachlorobenzane, Hexachlorocyclohexane (technical grade), Hexachlorodiberzodioxin, Hexachloroethane, resoccinorocyconesiane (aschinical grade), necicliforociderzodioxin, riesachiorocciane, 2,4-Hecadenal (89% trans, trans isomer; 11% cis, trans isomer), Hecamethylphosphoramide, Hexamethylphosphoramide, Histrelin acetate, Hydramethylnon, Hydrazine, Hydrazine sulfate, Hydrazobenzene (1,2-Diphenylhydrazine), 1-Hydroxyanthraquinone, Hydroxyures, , idarubici hydrochloride, Ifosfamide, Jodine-131, Indeno (1,2,3-cd)pyrene, Indium phosphide, IQ (2-Amino-3-methylinidazold 5-th ushodino). Torodloros from diserta consister. Enductus internamethylimidazo[4,5-f] quinoline), Iprodione, Iron dextran complex, Isobutyl nitrite, Isoprese, Isosafrole, Isotretinoin, Isoxaflutole, , , Luctofen, Lasiocarpine, Lead, Lead and lead compounds, Lead acetate, Lead phosphate, Lead subacetate, Leuprolide acetate, Levodopa, Levonorgestrel implants, Lindane and other hexachiorocyclohexane isomers, Linuron, Lithium carbonate, Lithium citrate, Lorazepam, Lovastatin, Lynestrenol, . , Mancozeb, Maneb, Me-A-alpha-C (2-Amino-3-methyl-9ti-pyrido[2,3-b] Lynestrenol, , Mancozeb, Maneb, Me-A-alpha-C (2-Amino-3-metriy-94-pyriolig.2-9) indole), Mebendazole, Medroxyprogesterone acetate, Medroxyprogesterone acetate, Megostrol acetate, MelQ(2-Amino-3,4-dimetrylimidazol/4,5-f]quinosaline), Melphalan, Melphalan, Menotropiro, Merobamate, Mercaptopurine, Mercury and mercury compounds, Merphalan, Mestranol, Methacycline hydrochloride, Methan sodium, Metham sodium, Methamole, Methimazole, Methodrocate, Metho Methylazoxymethanol, Methylazoxymethanol acetate, Methyl bromide, as a structural fumigant, Methyl carbamate, Methyl chloride, 3-Methylcholanthrene, 5-Methylchrysene fumigant, Methyl carbamate, Methyl chloride, 3-Methylcholanthrene, 5-Methylchrysene, 4,4"-Methylene bis(2-chloroaniline), 4,4"-Methylene bis(N,M-dimethyl)benzenamine, 4,4"-Methylene bis(2-methylaniline), 4,4"-Methylenedianiline, 4,4"-Methylenedianiline dihydrochloride, Methylenenol, Methylhydrazine and its salts, Methyl loidide, Methyl mercury, Methylmercury compounds, Methyl methanesulfonate, 2-Methyl-1-nitroanthraquinone (of uncertain purity), N-Methyl-N-nitro-N-nitrosoguanidine, N-Methylolacrylamide, N-Methylpyrrolidone, Methyltestosterone, Methyltainuracil, Metiram, Metram, Metroaidazole, Michier's ketone, Midazolam hydrochloride, Minocycline hydrochloride (internal use), Mirax, Mesoprostol, Minomycin C, Mitoxantrone hydrochloride, Menocrotaline, 5-(Morpholinomethyl)-3-((5-nitrofurfurylidene)-amino]-2-cozzolidione, Mustard Gas, MX (3-chloro-4-dichloromethyl-5-hydroxy-2(5H)-furanone), Myclobutanil, , , Nabam, Nafarelin aostate, Nafenopin, Nalidoxic acid, Naphthalene, 1-Myclobutanii, , , Nabam, Nafareina acetate, Nafenopin, Malidicic acid, Naphthalene, 1-Nephthylamine, 2-Naphthylamine, Neomycin sulfute (internal use), Netilmicin sulfute, Nickel (Metallic), Nickel acetate, Nickel carborute, Nickel carbonyl , Nickel carbonyl , Nickel compounds, Nickel hydroxide, Nickelocene, Nickel oxide, Nickel refinery dust from the pyrometallurgical process, Nickel subsulfide, Nicotine, Nifediploe, Nimodiplae, Niridazole, Nitrapyrin, Nitrillotriacetic acid, Nitrillotriacetic acid, trisodium salt monohydrate, 5-Nitroacenaphthene, 5-Nitro-o-anisidine, o-Nitroanisole, Nitrob Nitrobiphenyl, 6-Nitrochrysene, Nitrofen (technical grade), 2-Nitrofluorene, Nitrofurantoin, Nitrofurazone, 1-[(5-Nitrofurylidene)-amino]-2-imidazolidinone, N-[4-Netrouramon, netrourazione, 1-[(3-Nitro-2-furyl)-2-finalzonimone, (4-(5-Nitro-2-furyl)-2-finalzonimone, Nitrogen mustard (Mechlorethamine), Nitrogen mustard (Mechlorethamine), Nitrogen mustard hydrochloride (Mechlorethamine hydrochloride), Nitrogen mustard N-oxide hydrochloride, Nitrogen mustard N-oxide hydrochloride, Nitromethame, 2-Nitropropase, 1-Nitropyrese, 4-Nitropyrese, N-Nitrosodi-n-butylarnine, N-Nitrosodiethanolamine, N-Nitrosodiethylamine, N-Nitrosodiethylamine, p-



Nitrosodiphenylamine, N-Nitrosodiphenylamine, N-Nitrosodi-n-propylamine, N-Nitroso-Nethylamea, 3-(N-Nitrosomethylamino) propionitrile, 4-(N-Nitrosomethylamino)-1-(3pyridyl)3-butanone, N-Nitrosomethylamine, N-Nitrosom methykurethane, N-Nitrosomethylvinylamine, N-Nitrosomorpholine, N-Nitrosomornicotine, N-Nitrosomornicotine, N-Nitrosomornicotine, N-Nitrosomornicotine, N-Nitrosomornicotine, N-Nitrosomornicotine, Norethisterone (Norethisterone), Norethisterone (Norethisterone), Norethisterone (Norethisterone), Norethisterone (Norethindrone), Norethisterone, Norethi percent chlorine by molecular weight), Polychlorinated dibenzo-p-dicaris, Polychlorinated percent chlorine by molecular weight), Polychlorinated dibenzo-p-diodris, Polychlorinated dibenzo-p-diodris, Polychlorinated dibenzo-p-diodris, Polychlorinated dibenzo-p-diodris, Polychlorinated dibenzo-p-diodris, Polychlorinated dibenzo-p-diodris, Polychlorinate, Polychlorinate, Polychlorinate, Proparative, Procarbazine, Procarbazine, Proparative, Propythiouracil, Propythlouracil, Propy Rs strong acid salts, Quizaloop-ethyl, , Radionuclides, Reserpine, Residual (heavy) final oils, Resmethrin, Retiool/retinyl estars, when in daily dosages in excess of 10,000 TU, or 3,000 retinol equivalents. (NOTE: Retinol/retinyl estars are required and essential for maintenance of normal reproductive function. The recommended daily level during pregnancy is 8,000 TU.), Ribavirin, Ribaviria, Ribaviria, Riddelline, Rifampin, Safrole, Salicytazosufapyridine, Secobarbital sodium, Selenium sulfide, Sermorelin acidate, Siliate-oils, Siliac, crystalline (airborne particles of respirable stre), Sodium discontante, Sodium fluoroacetate, Soots, turs, and mineral oils (untrasted and mildly treated oils and used engine oils), Spironotactone, Stanozoloi, Streptomychin sulfidate, Streptomotocine, Tentocine and illustrate, Streptomotocine, Tentocine and illustrate, Streptomotocine, Testosterone explanation, Tentocine (TCDD), 2,3,7,8-Tetrachiorocithylene), p-a,2,3-Tetrachiorocithylene, Tetracycline (Pertaliorocithylene), p-a,2,3-Tetrachiorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene), p-a,2,3-Tetrachiorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene), p-a,2,3-Tetrachiorocithylene, Tetracycline (Pertaliorocithylene, Tetracycline (Pertaliorocithylene), p-a,2,3-Tetrachiorocithylene, Tetracycline (Pertaliorocithylene, Tetracycli dibromopropyl)phosphate, Trp-P-1 (Tryptophan-P-1), Trp-P-2 (Tryptophan-P-2), Trypan blue (commercial grade), , , Unleaded gasoline (wholly vaporized), Uracil mustard, Uracil

... plus a bit of poo and wee apparently.



What's sewage in

Benzodiazepines, Benzo[b]fluoranthene, Benzo[j]fluoranthene, Benzo[k]fluoranthene, Benzofuran, Benzo[a]pyrnee, Benzotrichloride, Benzohetamine hydrochloride, Benzyl chloride, Benzyl violet 48, Beryllium and beryllium compounds, Betal guid with tobacco, 2,2-Bis(bronomethyl)-1,3-propanediol, Bis(2-chloroethyl)ether, N,N-Bis(2-chloroethyl)-2-napitchylamine (Chlorosapazine), Bischloroethyl nitrosourea (BCNU) (Carmustine), Bischloroethyl nitrosourea (BCNU) (Carmustine), Bischloroethyl)ether, Bis(2-chloro-1-methylethyl)ether, bechnical grade, Bitumens, extracts of staam-refined and air refined, Bracken fern, Bromaci lithium salt, Bromaci lithium salt, Bromate, Bromodichloromethane, Bromodorm, 1-Bromopropane, 2-Bromopropane, Bromocyniii, Bromocyniii octanoate, Butabarbital sodium, 1,3-Butadiene, 1,3-Butadiene, 1,4-Butanediol dimethanesulfonate (Busulfan), 1,4-Butanediol dimethanesulfonate (Busulfan), Butylated hydroxyanisoile, beta-Butyrolactone, , , Cacodylic acid, Cadmium, Cadmium and cadmium compounds, Caffeix acid, Captafol, Captan, Carbernacepine, Carbao, Carbon black (airborne, unbound particles of respirable size), Carbon dissulfide, Carbon monoxide, Carbon tetrachloride, Carbon-black extracts, Carbonolain, N-Carboxymethyl-N-nitrosourea, Catechol, Ceramic fibers (airborne particles of respirable size), Cartain combined chemotherapy for lymphomas, Chenodiol, Chinomethionat (Oxythioquinox), Chlorambucki, Chiorambucki, Chioramphenicol, Chlorockidee, Chlordiane, Chlordecone (Kepone), Chlorodecone hydrochloride, Chlordane, Chlordecone (Kepone), Chlordecone (Kepone), Chlordazepoxide, Chlordazepoxide hydrochloride, Chlordineform, Chlorendic acid, Chlordiazeposide, Chlordiazeposide hydrochloride, Chlordimeform, Chlorendic acid, Chlorinated paraffins (Average chain length, C12; approximately 60 percent chlorine by weight), p-Chloroaniline, p-Chloroaniline hydrochloride, Chloroethane (Ethyl chloride), 1-(2-Chloroathyl)-3-cyclohexyl-1-nibrosourea (CCNU) (Lomustine), 1-(2-Chloroethyl)-3-(4-cyclohexyl-1-nibrosourea (CCNU) (Lomustine), 1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nibrosourea (Methyl-CCNU), Chloroform, Chloromethyl methyl ether (technical grade), 3-Chloro-2-methylpropene, 1-Chloro-4-nibrobenzene, 4-Chloro-o-benylenediamine, Chloropene, Chlorothalonii, p-Chloro-o-bulsidine, p-Chloro-o-bul methykcycloikezyi)-1-nikrosoursa (Methyl-CCNU), Chloroform, Chloromethyl methyl ather (bochnical grade), 3-Chloro-2-methylpropene, 1-Chloro-4-nikrobenzene, 4-Chloro-o-bhenylenediamine, Chloropyrene, Chlorothalonii, p-Chioro-4-nikrobenzene, 4-Chloro-o-bhenylenediamine, Chloroscotocia, Chlorothalonii, p-Chioro-o-buladine, p-Chloro-o-buladine, strong acid salts, Chlorothaloscope, Chloroscotocia, Chlorosilluron, Chrominum (bezarvalent compounds), Chlorothaloscope, Cal Checker, Chloroscope, Coloberane, Comparato, Chloroscope, Coloberane, Co Diphenythydantoin (Phenytoin), Diphenythydantoin (Phenytoin), sodium salt, Di-n-propyl

