

SB 737 and BEYOND

It's the little things that matter

SB 737 and BEYOND

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- *Source Control Coordinator*
- *Clackamas County*



<http://www.co.clackamas.or.us/wes/>

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DEQ

Develop A List of Priority Pollutants
Report to Legislature by June 1, 2009

DEQ

Report on Sources & Pathways of
Priority Pollutants
Report to Legislature by June 1, 2010

POTW

Sample & Analyze Effluent
Develop Pollutant Reduction Plan
Submit to DEQ by July 1, 2011

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TIER I POLLUTANTS

Persistent Pollutants (69)

- ✱ Pesticides & Herbicides
Chlorpyrifos, Diazinon
- ✱ Consumer-Related Products
Diethylstilbestrol, Triclosan, Terphenyl
- ✱ Halogenated Flame Retardants
- ✱ Industrial Chemicals
- ✱ Poly Aromatic Hydrocarbons (PAH)
Pyrene
- ✱ Metals
- ✱ Perflourinated Surfactants

• TIER II POLLUTANTS

Legacy Pollutants (49)

- ✱ Pesticides & Herbicides
DDT
- ✱ Polychlorinated Napthalenes
- ✱ Dioxins / Furans
- ✱ Polychlorinated Biphenyls (PCB)

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The sampling and analysis is done -

What did we find ????

- ✿ Although 118 compounds in the P₃ list, over 400 analyzed
- ✿ Of the 118 P₃ compounds, only 33 detected
- ✿ All 52 Plants exceeded PIL for Cholesterol
- ✿ 49 plants exceeded PIL for Coprostanol
- ✿ Of the remaining 31 compounds, 5 facilities exceeded the PIL for :
 - ✿ Beta-Sitosterol (2)
 - ✿ Pyrene (1)
 - ✿ Arsenic (2)

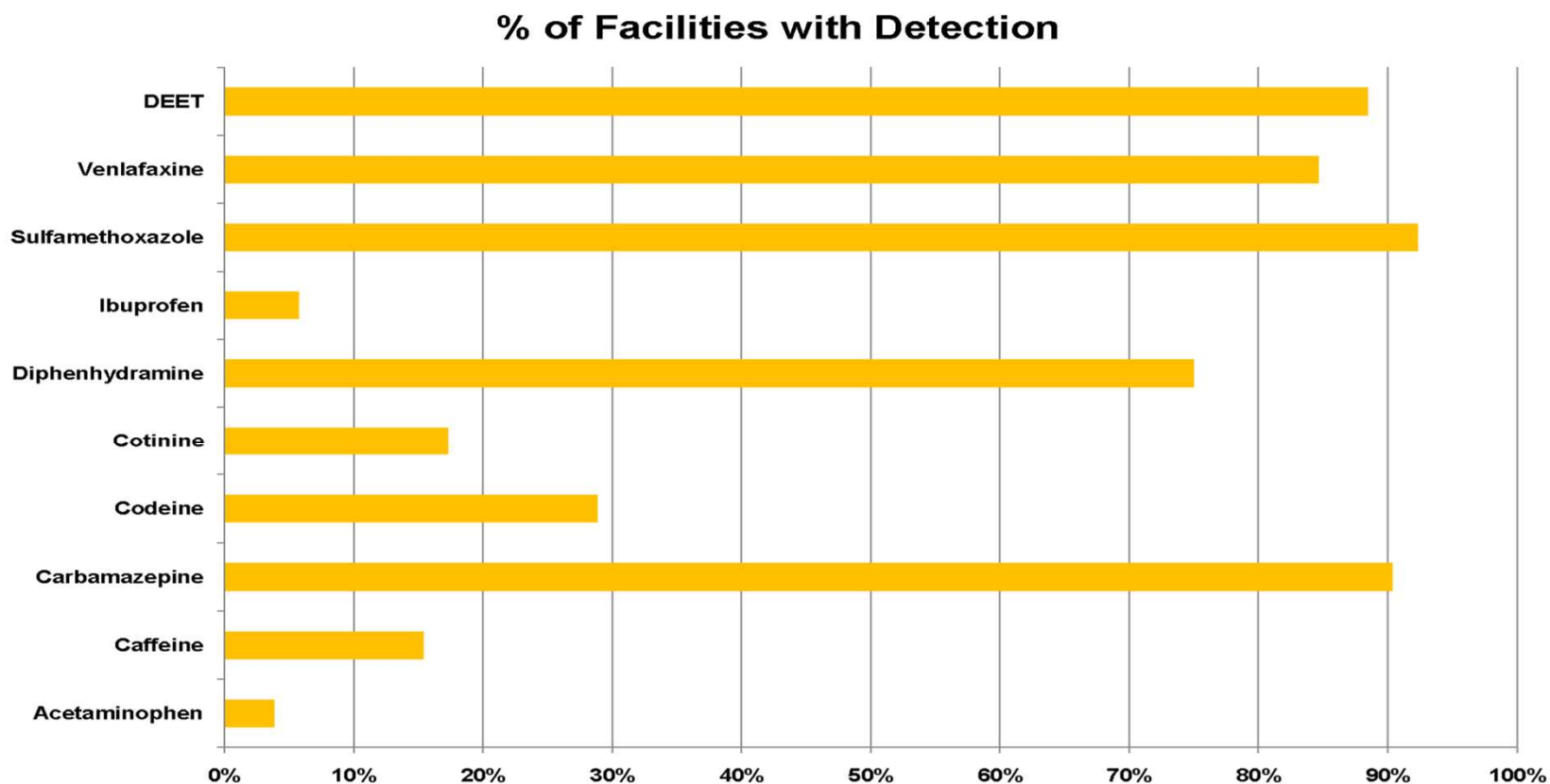
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	08/23/2010 Plant #1	11/29/2010 Plant #1	08/23/2010 Plant #2	11/29/2010 Plant #2	City #1	City #2	PIL	Units
Cholesterol	34,799	27,400	9,458	38,500	1,894	19,204	60	ng/L
Coprostanol	31,976	46,900	9,556	43,300	1,872	28,952	40	ng/L
beta-Sitosterol	10,819	8,430	3,249	9,280	--	8,727	25,000	ng/L
Stigmastanol	2,221	3,740	595	2,050	--	--	75,000	ng/L
Arsenic	0.97	0.50	0.73	0.98	--	0.85	10	µg/L
Lead	0.23	--	0.33	--	--	0.36	15	µg/L
Methyl Mercury	--	--	--	0.077	--	0.025	4	µg/L
Flouranthene	22.0	--	--	--	--	15.0	40	ng/L
Pyrene	20.5	--	8.9	--	--	--	30	ng/L
2,4,6 Trichlorophenol	50.9	34.5	63.8	38.2	138	62.0	2000	ng/L
PBDE-47	8.1	--	5.62	5.42	--	--	700	ng/L
PBDE-99	5.12	--	--	--	--	--	700	ng/L

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SB 737 Data Review

Pharmaceuticals & Personal Care Products



SB 737 Data Review



Pharmaceuticals



Compound	Concentration range (ng/L)	Total # of detections (max N=102)	# of Facilities
Caffeine	1230 - 81500	15	8
Carbamazepine	113 - 577	84	47
Diphenhydramine	139 – 2610	78	39
Sulfamethoxazole	136 – 5280	94	48
Venlafaxine	123 – 749	87	44

SB 737 Data Review

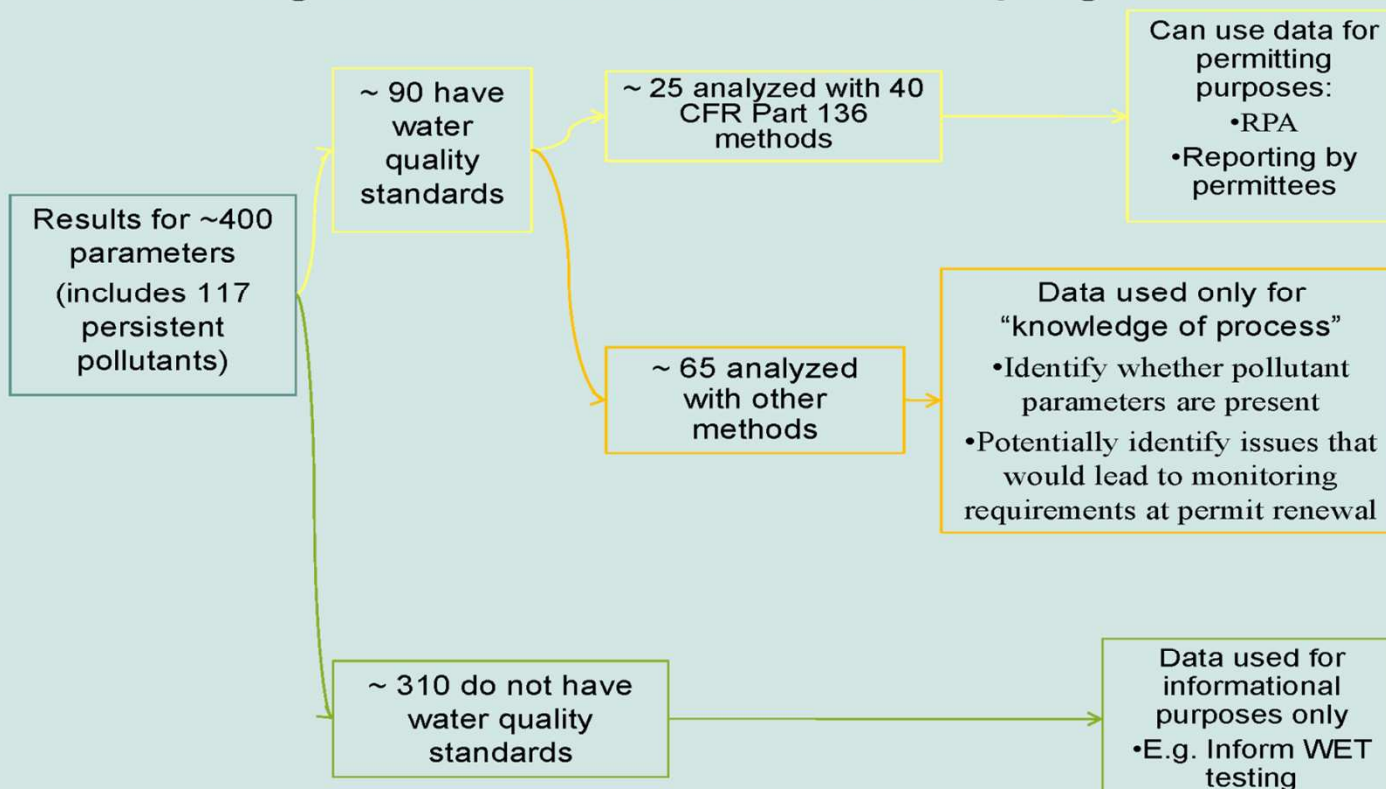


Not Detected

- Legacy pesticides (chlorinated) – DDT, etc.
- Triclosan
 - Level of Quantitation based on PIL, higher than detected levels in other studies
- Dioxins / Furans
- Musks
- Polychlorinated naphthalenes

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Using Data from SB 737 Effluent Sampling



4/25/11

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Next Up

Human Health Criteria Based Water Quality Standards

Fish Consumption Rate

Currently based on 6.5 grams of fish consumed daily

Proposal to change WQ Standards based on 175 grams of fish consumed daily

DEQ developing an overall Toxics Reduction Strategy

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TAKE-BACK PROGRAM

- Drug Take-Back
- Mercury Collection Event
- Household Pesticides



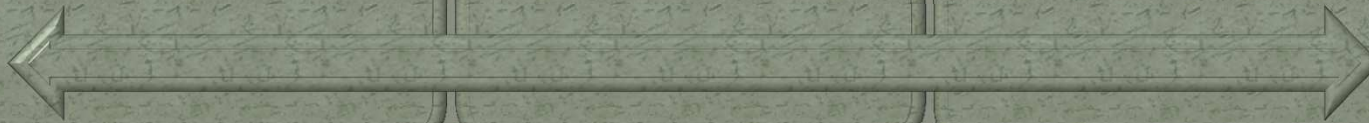
RECYCLING PROGRAMS

- E -Cycle
- Paint Recycle

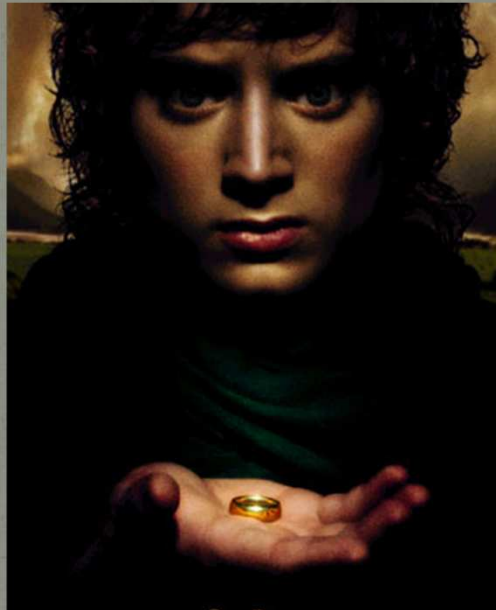


LABELING

- Design for the Environment
- Eco-Certification
- Eco-Biz



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FOR MORE INFORMATION CHECK OUT

<http://www.deq.state.or.us/wq/SB737/index.htm>

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How are we
going to get
out of this
one ????

Join me at
the break-
out session
after break
and we'll
figure this
out

