

# OMNIBUS UPDATING OF CSR STANDARDS

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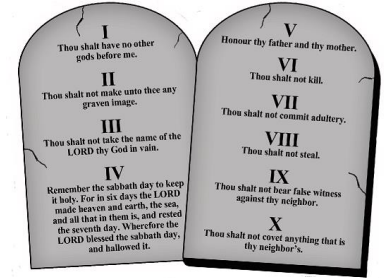


Ministry of  
Environment

# CSR STANDARDS – WHY UPDATE ?

## Many CSR standards have never been updated:

- Soil/water standards date from 1996/97,
- Sediment standards date from 2004,
- Vapour standards date from 2009.



## *Ad hoc* amendments to standards have focused on:

- Updating for “high profile” substances (arsenic, iron/manganese, lead),
- Keeping drinking water standards current with Canadian drinking water guidelines,
- Introducing standards for “new” categories of substances (non-prescribed substances – Schedule 10) and,
- “new” environmental media (vapours – Schedule 11).



# CSR STANDARDS – NEW ISSUES FOR STANDARDS

## Need to address new science related to the derivation of standards



- new groundwater model,
- new toxicology (bioaccumulation, genotoxicity, immunoactive/hormonal agents, toxic interactions),
- new TRVs (cadmium, dioxins & furans/PCB TEQs, lead, TCE),
- new routes of exposure (dermal, lactation, humoral),
- new toxicity derivation protocols (CCME, US EPA, WHO/EU),
- new exposure/landuse scenarios (high density residential, occupational, wildlands).

# CSR STANDARDS – NEW ISSUES FOR STANDARDS

## Need to address new emerging toxicants of concern:

Class	Substance	Toxicity
Antibacterials	triclosan	Aquatic toxicity
Antioxidants/preservatives Heterocyclic/organosilicons	1,4-dioxane, siloxanes, alkylated PAHs	Carcinogens
Endocrine disruptors	E2, BHA/BHT, nonoxinol, paraben alkylates, TBT	Infertility, intersex, congenital defects
Fire retardants	PBDEs, PFCs (e.g. PFOS)	Immunosuppression, neonatal mortality, thyroid/estrogen disruption
Plasticizers	Bisphenol A, alkylated phthalates	Estrogen mimic, neurotoxin, leukemia
Nanomaterials	nanosilver, nanocopper, carbon nanotubes	Physical/chemical toxicity at: molecular, cell, organ and physiological system levels

# CSR STANDARDS – NEED FOR SCHEDULED MAINTENANCE



## **Need to provide certainty for maintenance of standards**

Incorporate a fixed schedule for standards updating into the CSR (e.g. 5 year cycle?) to provide:

- Regulatory commitment to ensure standards are maintained, and
- Temporal certainty for responsible persons, environment consultants and public regarding when changes to standards would occur

# CSR STANDARDS - UPDATING PROPOSED PLAN

LRS staff	CSR Schedule	Updating elements
GRF	Project lead	Overall responsibility - project & implementation
Lizzy	4 (Generic soil)	“Dual column” Sch 4 (discrete Human and Ecological Health stds) “migrate” Sch 4 substances into Sch 5
Lizzy Remi George  Peter	5 (Matrix soil)	Human Health std revisions - recent TRVs, update D&F for WHO TEQs Ecological Health std revisions - develop protocol for Wildlands Re-calc Sch 5 soil to water stds using new GW model, consider need for new soil to water stds Develop protocol for High Density Residential stds
Heather	6 (Water)	Derive DW stds for substances lacking Can. DW Guidelines, Update AQ Life, Livestock and Irrigation stds
GRF	7 (CSRA	Consider major revision, replacement or elimination
Lizzy	9 (Sediments)	Convert criteria into standards, Update existing standards, consider adding new substances
Peter/GRF	10 (generic soil/ water)	Update/add new substances and standards
Peter	11 (vapour)	Update existing substances – recent TRVs, Consider need for new standards to address semi-volatile substances

# CSR STANDARDS UPDATING – PROPOSED TIMELINE

**Goal - Implement omnibus revisions to standards by Spring 2016**

**Proposed timeline:**

Date	Task to be completed
April – Sept 2014	Schedule revision “proposal papers” - LRMT approved
Oct – Dec 2014	Proposal papers - focussed stakeholder review
Jan – March 2015	Proposal papers finalized to incorporate stakeholder review
April – Sept 2015	Calculate revised/updated standards for Minister’s approval
Oct – Dec 2015	Minister’s amendment package for new CSR Standards
Jan – March 2016	CSR Standards amendment – implemented and in effect

# CSR STANDARDS UPDATING – IMPLICATIONS

**LRS staff will be busy doing standards work over next 18 months!**



Expect delays:

- RA reviews,
- RA Protocol 6 preapprovals,
- Background release approvals  
(soil, sediment, vapours),
- Communication & assistance



# QUESTIONS ?

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