



Ministry of
Environment

Proposed improvements to Protocol 6

Eligibility of Applications for Review by Approved Professionals

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**CSAP Society Professional Development Workshop
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Key topics

- Why does Protocol 6 exist?
- What is Protocol 6's history?
- How does version 7.0 work?
- Why is Protocol 6 being updated again?
- What changes are proposed in version 8.0?
- What would be the effects of version 8.0?
- What are the next steps?
- Are there additional challenges?

Why does Protocol 6 exist?

- Key strategy of the Ministry of Environment Service Plan:

“Managing the remediation of high risk contaminated sites and regulating the remediation of all contaminated sites.”

- The ministry does not have the capacity to provide detailed review of all applications
- Protocol 6 requires Approved Professional support for reviewing non-high risk sites
- Enabling provisions in sections 42 and 64 of the *Environmental Management Act*

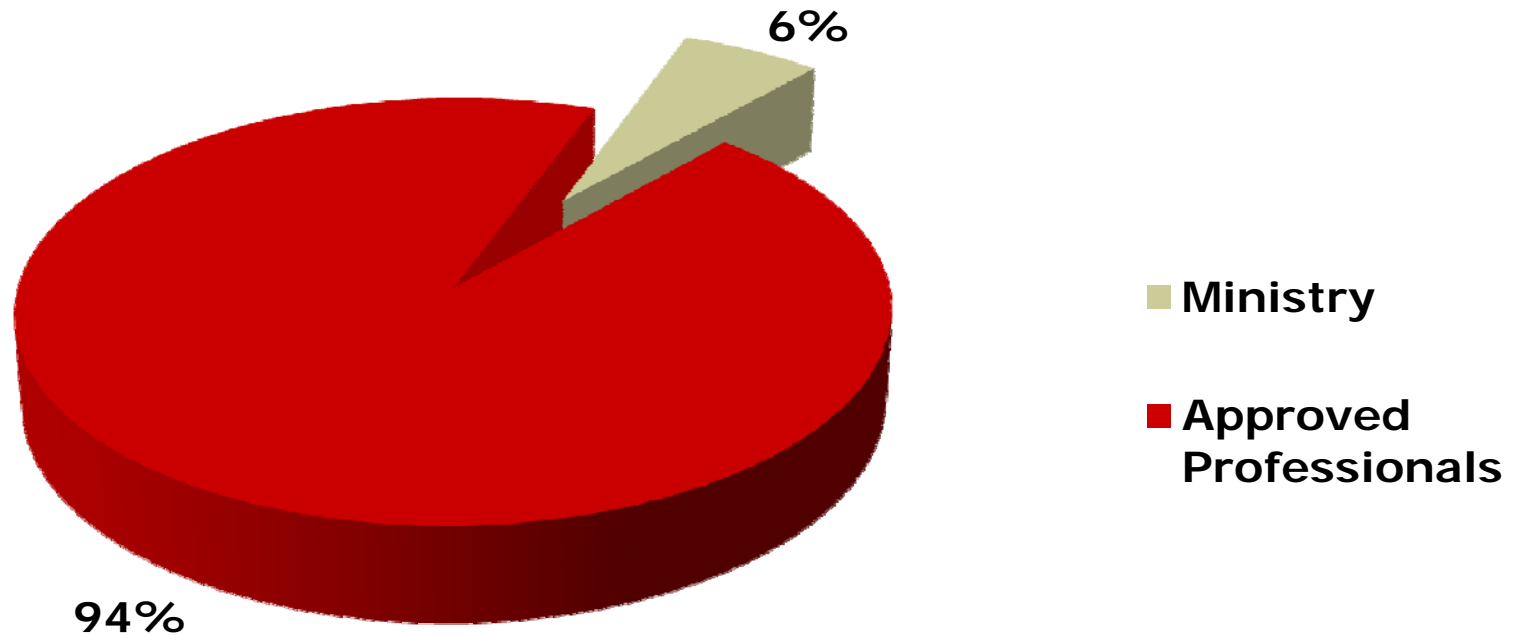
Why does Protocol 6 exist?

Sites risk classification

- Protocol 12, "Site Risk Classification, Reclassification and Reporting" in effect June 1, 2011
- As of October 5, 2011, 468 sites have site risk classifications
 - 6% (30 sites) high risk
 - 89% (415 sites) non-high risk
 - 5% (23 sites) pending classification
- 2 reclassified from high risk to non-high risk

Why does Protocol 6 exist?

Our goal for instrument application reviews



What is Protocol 6's history?

Version 1.0 – July 19, 1999

- Simple scoring system to identify those which are not low or moderate risk sites

Version 2.0 – January 13, 2001

- Table indicating which types of standards may be reviewed by Roster and ministry for each type of instrument
- Concept of addressing entire extent of contamination introduced

Version 3.0 – not published

What is Protocol 6's history?

Version 4.0 – July 28, 2004

- Approach in version 2 refined
- Provisions for entire extent of contamination expanded to deal with part sites and measures to prevent recontamination

Version 5.0 – not published

Version 6.0 – September 1, 2007

- Footnotes expanded to deal with risk assessments, site monitoring
- Entire extent of contamination footnotes explained more completely

What is Protocol 6's history?

Version 6.1 – October 1, 2008

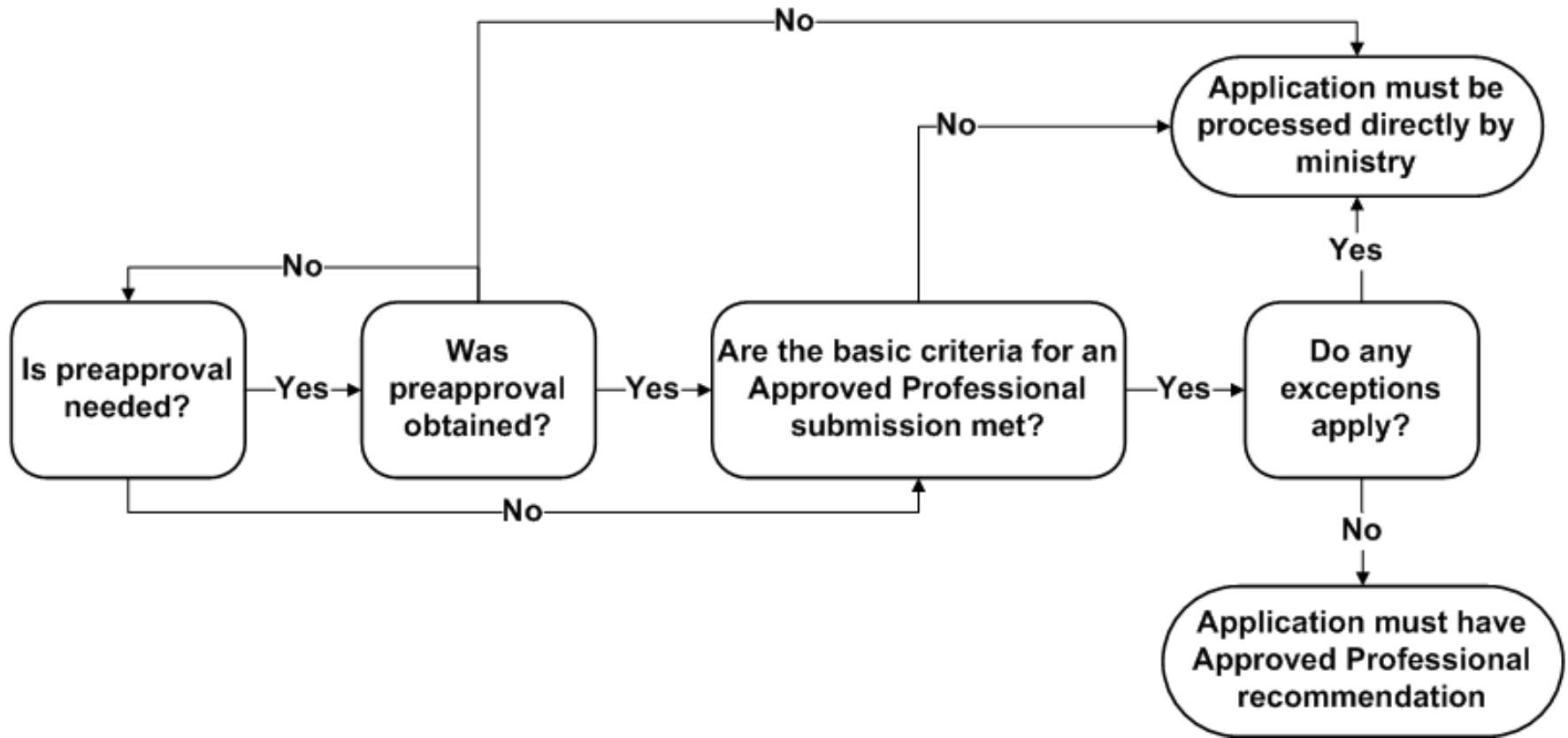
- Added site vapour assessment and air concentration criteria

Version 7.0 – June 16, 2010

- New table indicating when preapprovals required
- Table updated to indicate site risk classifications and which ones require an Approved Professional recommendation

Version 8.0 – under development

How does version 7.0 work?





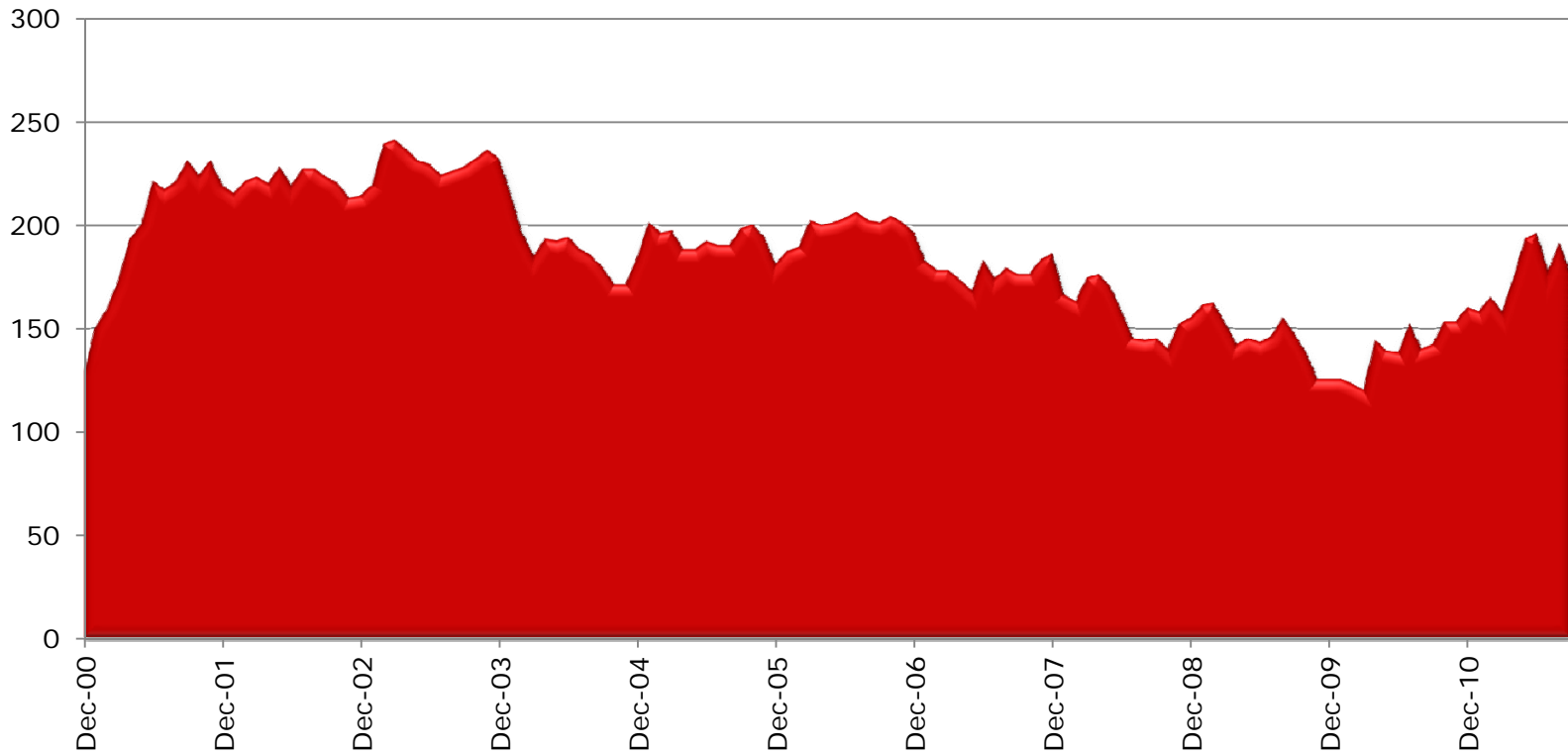
How does version 7.0 work?

Applications needing preapproval

- Site is subject to an order under EMA
- Site has a covenant under *Land Title Act*
- Local background soil concentrations derived not following Protocol 4
- SLRA to be applied to hazardous waste site
- Application based on a risk assessment with
 - Probabilistic analysis
 - Food chain modelling
 - Toxicity testing
 - Weight-of-evidence arguments
 - Modification of TRV
 - Aquatic receiving environment assessments

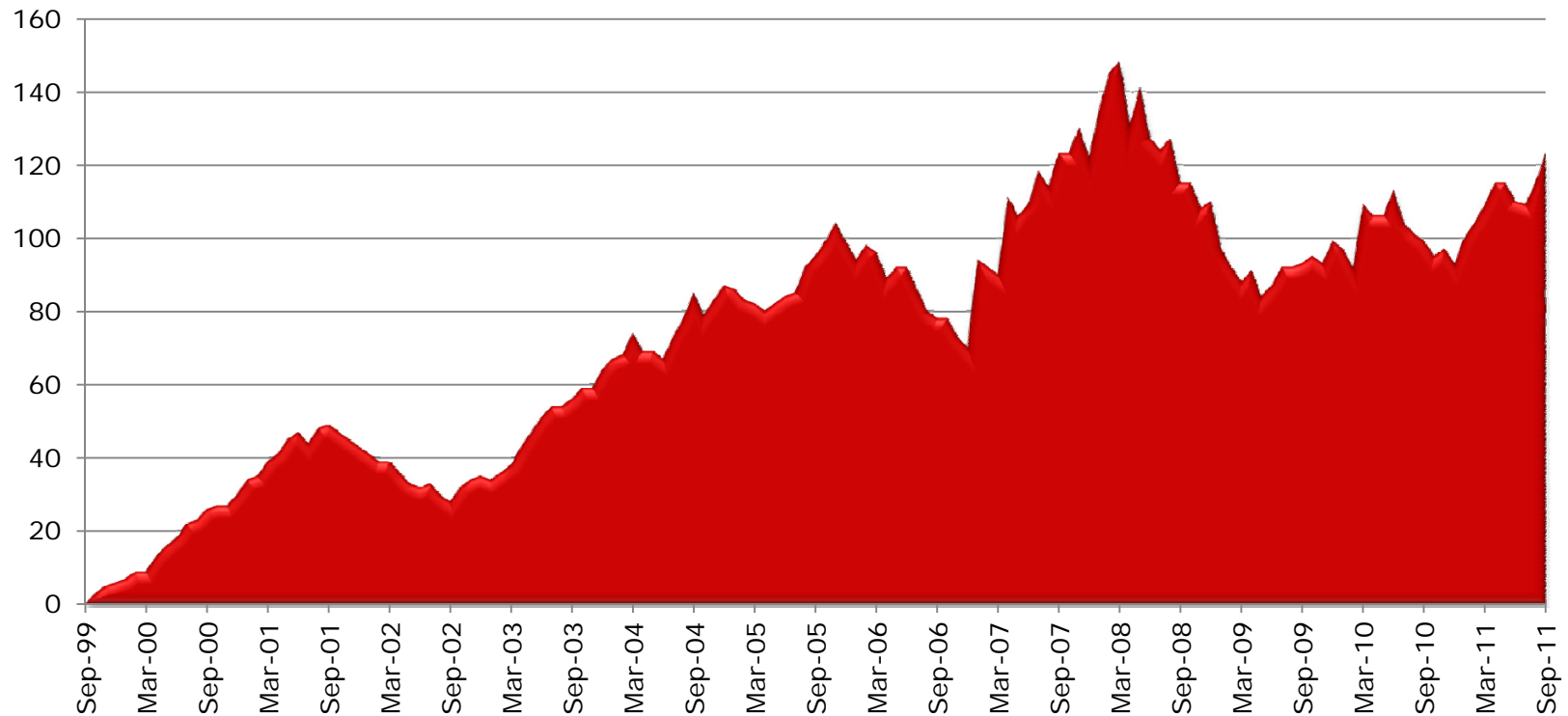
Why is Protocol 6 being updated again?

**Annual Total Instruments Issued
(Based on Moving 12 Month Totals)**



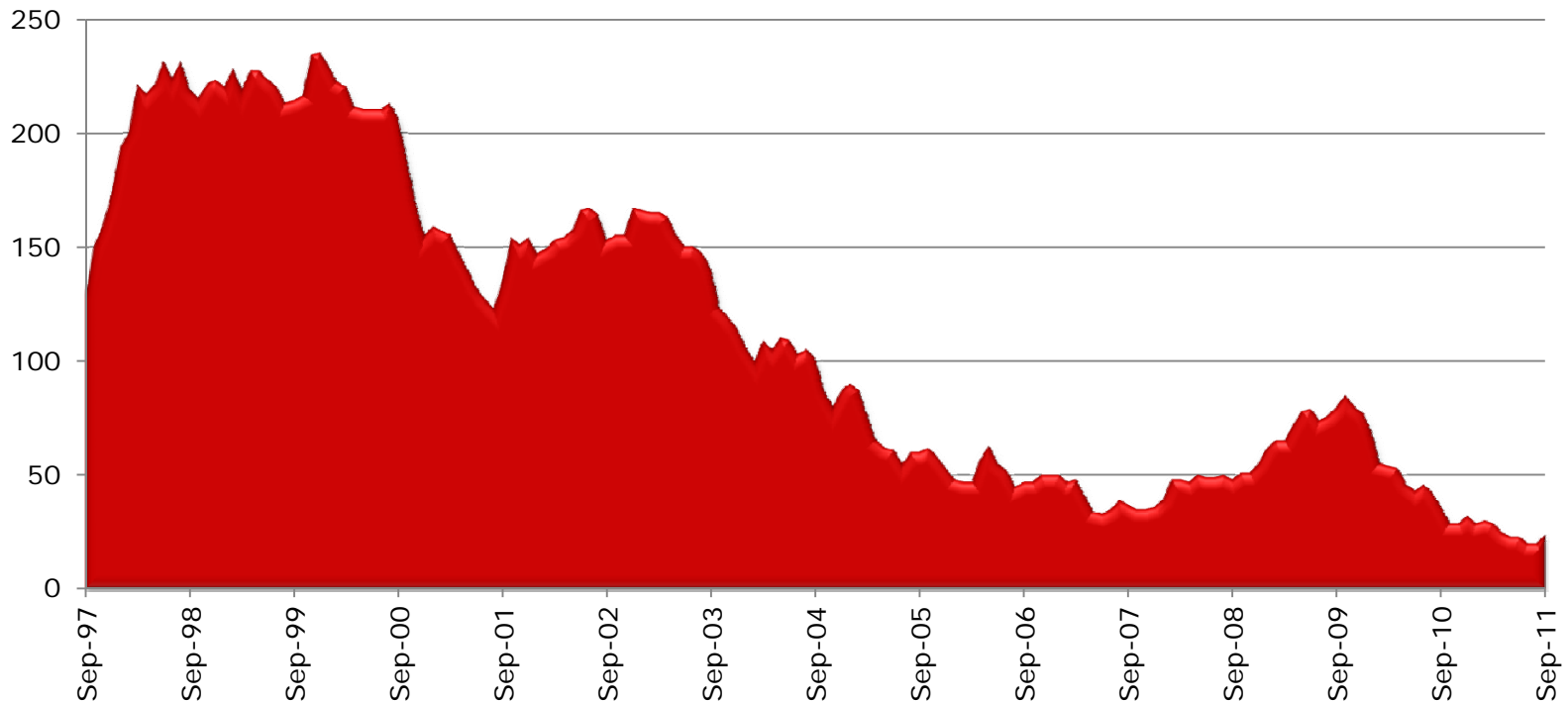
Why is Protocol 6 being updated again?

Annual Number of Instruments Issued Based on Roster Recommendations (Based on Moving 12 Month Totals)



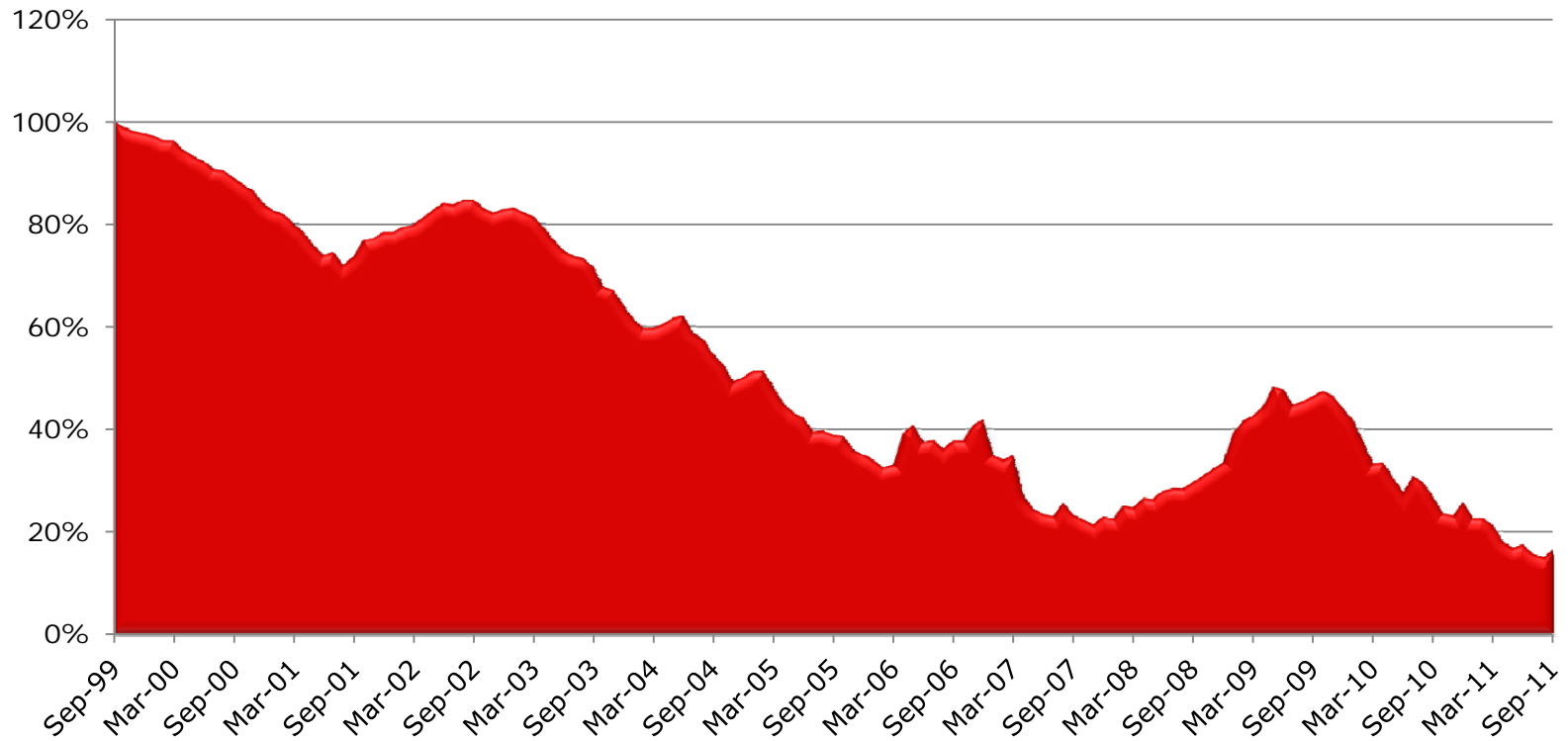
Why is Protocol 6 being updated again?

Annual Number of Instruments Issued Based on Ministry Recommendations (Based on Moving 12 Month Totals)



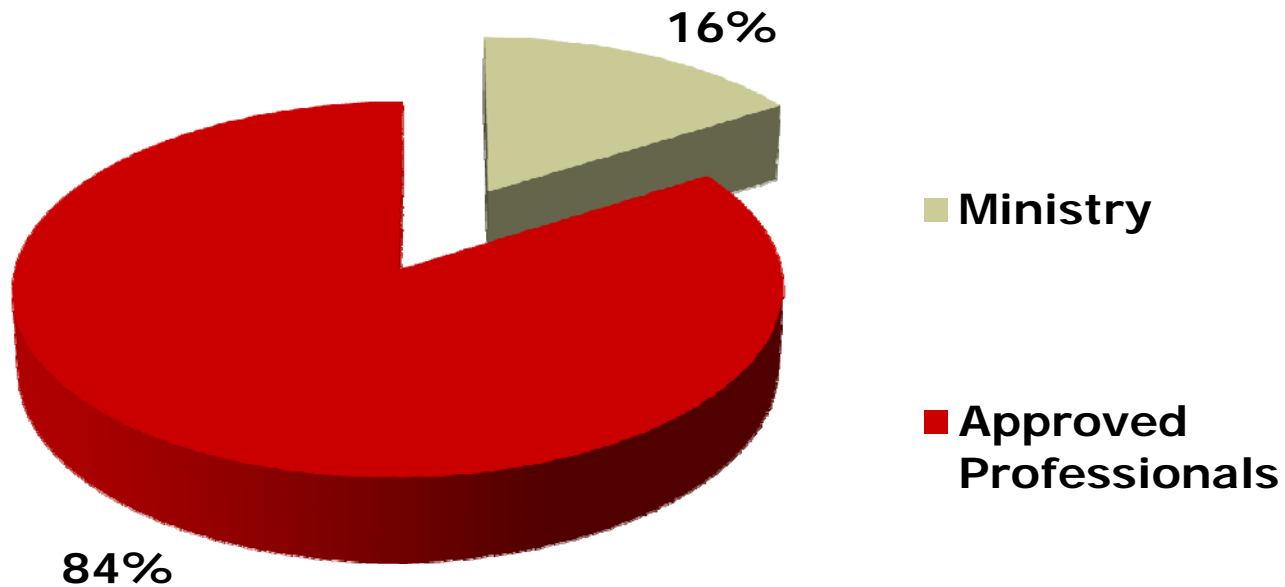
Why is Protocol 6 being updated again?

Percentage of Instruments Issued Via Direct Ministry Submission (Based on Moving 12 Month Totals)



Why is Protocol 6 being updated again?

Today's data



Why is Protocol 6 being updated again?

Why is there a gap?

- Many sites are sources of contaminant migration to neighbouring parcels
 - Ministry receives over 100 Notifications of Offsite Migration per year
 - Some Approved Professionals are unable to address the full extent of contamination
 - Even though they are for non-high risk sites, applications come to the ministry without an Approved Professional recommendation

Why is Protocol 6 being updated again?

Other issues with version 7.0

- Process is too complicated
- Areas of concern include
 - Getting affected parcel owner agreement to risk-based remediation on affected parcels
 - Lack of clear rules for communications
 - Requirement for non contaminated portions of affected parcels to be addressed
 - Combining parcels with different owners

What changes are proposed for version 8.0?

- Eligibility matrix for Approved Professional review simplified
- Determination of Approved Professional eligibility and preapproval order switched
- Exceptions eliminated
- Items requiring preapproval expanded to 18
 - All 5 preapproval items from version 7.0
 - All 5 exceptions in Table 2 of version 7.0 recast as preapproval items
 - 8 new preapproval items
- New preapproval application form

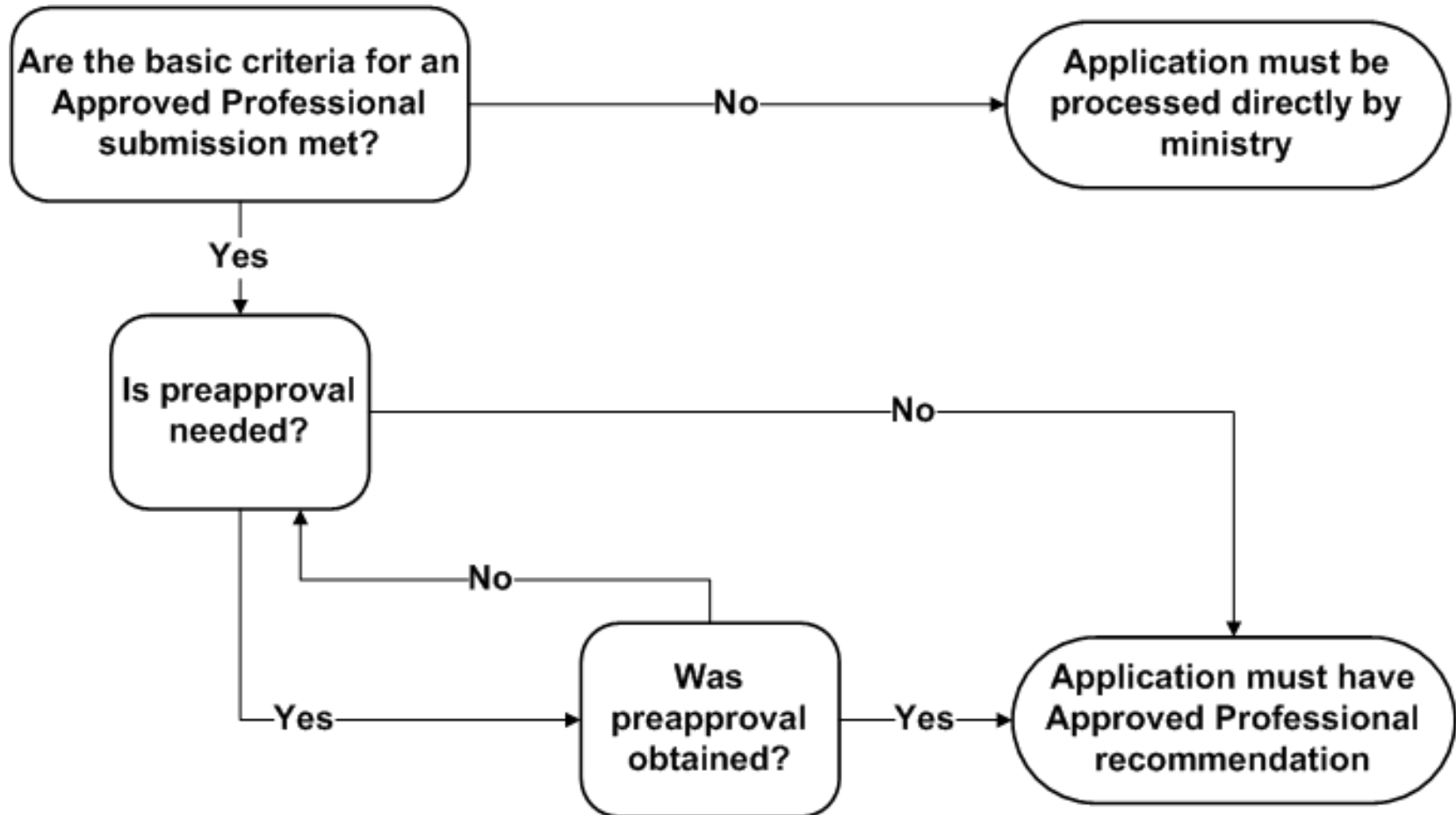
What changes are proposed for version 8.0?

Approved Professional eligible applications

| Legal Instrument | Site Risk Classification |
|---|------------------------------------|
| Determination of Contaminated Site | high risk non-high risk |
| Approval in Principle | non-high risk |
| Certificate of Compliance | non-high risk |
| Contaminated Soil Relocation Agreement | high risk non-high risk |

All exceptions to be deleted

What changes are proposed for version 8.0?



What changes are proposed for version 8.0?

Exceptions recast as preapproval items

- If detailed risk assessment does not comply with Technical Guidance 7
- If screening level risk assessment does not comply with Protocol 13
- No statements from Approved Professional, source parcel owner and affected parcel owner committing to preventing recontamination of affected parcel

What changes are proposed for version 8.0?

Exceptions recast as preapproval items

- Affected parcel owner does not agree with risk-based remediation at affected parcel
- Remediation under an Approval in Principle (numerical standards) will not be completed in 5 years

What changes are proposed for version 8.0?

New preapproval items

- Combination of parcels with different owners into one site
- Derivation of site-specific standards
- Instrument covers a subset of
 - Contaminants
 - Potential contaminants of concern
- Instrument covers an area of an affected parcel not contaminated by a source parcel
 - Entire area of affected parcels need not be addressed

What changes are proposed for version 8.0?

New preapproval items

- Local background water concentrations derived by any methods
- The site is (or is likely) the source of substances migrating to three or more neighbouring parcels
- Failure to address full extent of contamination
 - Deals specifically with offsite migration

What would be the effects of version 8.0?

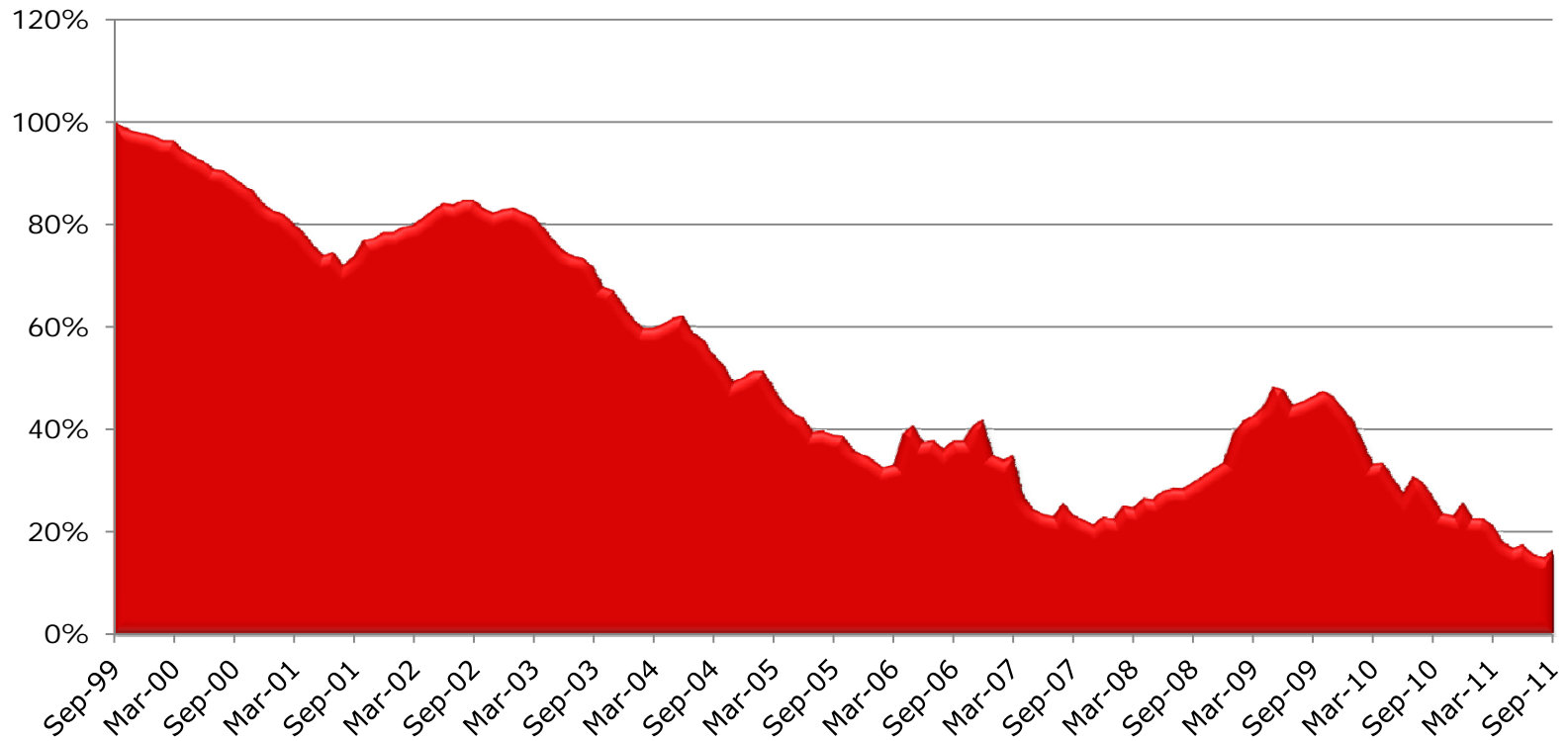
- More applications to Approved Professionals
 - Fewer non-high risk sites coming to ministry
 - Greater focus of ministry on high risk sites
 - Consistent with our Service Plan
- Increased flexibility, simpler process
 - Significant new focus on preapprovals
 - Area of affected parcel may be restricted to contaminated portion
 - Contamination addressed at affected parcel may be restricted to that from source parcel
- Fees for preapprovals
 - Service applications required, first hour free

What are the next steps?

- Version 8.0 was sent to CSAP Society for review and comment
 - Changes made in response
- Post on Land Remediation website for public review and comment
 - Release at same time as other draft documents
 - 6 – 8 week window for comments

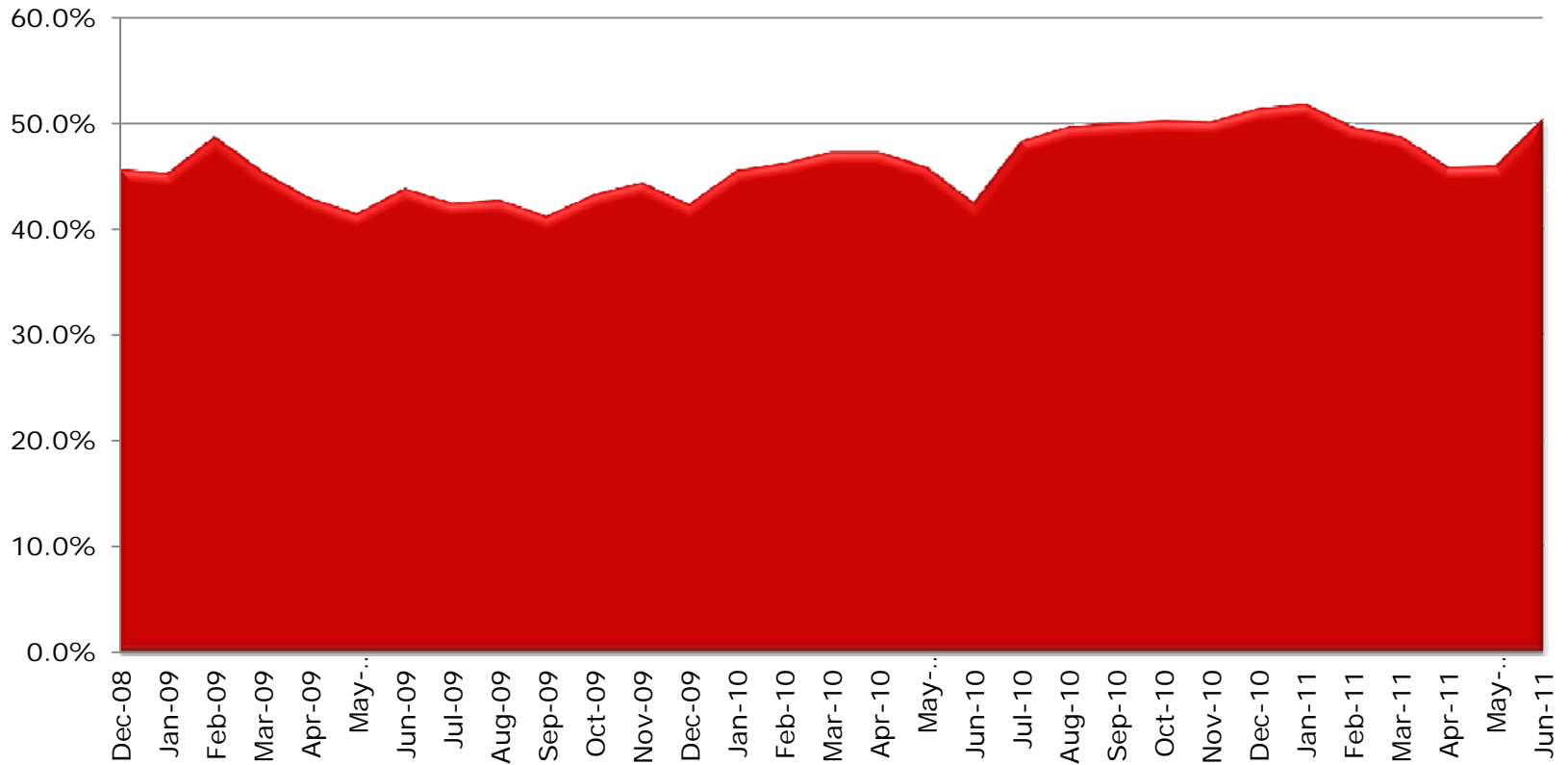
Are there additional challenges?

Percentage of Instruments Issued Via Direct Ministry Submission (Based on Moving 12 Month Totals)



Are there additional challenges?

Ministry submissions
Percentage of total
12 month moving average



Are there additional challenges?

Instrument issuance vs. total applications

- Decreasing number of instruments being issued via direct application to ministry
- Increasing applications for non-instrument services
 - Preapprovals under Protocol 6
 - Applications to establish uses at sites
 - Submission of monitoring reports
 - Applications for instrument amendments

Are there additional challenges?

Ideas to minimize total applications

- Release preapproval application advice on website
 - Advice can be adopted without need for new preapprovals
- Shift some preapproval types to requirements
 - e.g., combining parcels with different owners
- Change the thresholds defining when a site is considered high risk

Thank you!

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<http://www.env.gov.bc.ca/epd/remediation/>