

Agenda item 4.1.(a)

Paragraph 36 of the annotated agenda

Standard for sampling and surveys for CDM project activities and PoAs

CDM EB 65

Durban, South Africa, 21-25 November, 2011



Sampling Standard: Background

EB 63 requested the following:

- Re-structuring to separate mandatory requirements from the rest of the document;
- A separate section for DOEs sampling;
- Consultation with DOEs and PPs (public inputs, teleconferences) to collect inputs.



Revised Draft Sampling Standard: Table of Contents

Requirements

I	Background
II	Scope and Applicability
III	Sampling Requirements
IV	Sampling Requirements for PoAs
V	Validation and Verification of Sampling plans of Project Activities and PoAs

Appendix

1	Essential Sampling Terminology
2	Common Types of Sampling Approaches
3	Recommended outline for a Sampling Plan
4	Recommended practices for unbiased estimates of sampled parameters
5	Recommended evaluation criteria for DOE Validation



Revised Draft Sampling Standard

Section IV: Sampling Requirements for PoAs

- Allows a single sampling plan covering a group of CPAs
 - Populations of all CPAs are combined and a single survey is undertaken to collect data;
 - PoAs applying large scale meth not eligible pending further analysis.

Section V: Criteria for Validation and Verification of Sampling Plans

- Adequate to achieve confidence/precision requirements?;
- Samples are randomly selected and are representative?
- DOEs may apply sampling when PPs have not applied sampling provided predefined level of assurance is met.



Section V: Validation and Verification of Sampling Plans

DOE shall use acceptance sampling i.e.:

- a) Take a random sample of the PPs sample records;
- b) Check, using professional judgment and field visits, the acceptability of the PP records
- c) Determine **n**: the size of the sample and **c**: the acceptance number

Acceptable Quality Level (e.g. 1%): Chosen by DOE

Unacceptable Quality Level (e.g. 10%): Chosen by DOE

Producer Risk i.e. chance that the DOE will wrongly reject the PPs records, 5% proposed: Decision by the Board

Consumer Risk i.e. chance that the DOE will wrongly accept the PPs records, 5% proposed: Decision by the Board



Section V: Validation and Verification of Sampling Plans

AQL	UQL	Producers = 5% Consumers = 5%		Producers = 5% Consumers = 10%		Producers = 10% Consumers = 10%		Producers = 5% Consumers = 20%	
		Sample Size (n)	Accept. number (c)	Sample Size (n)	Accept. number (c)	Sample Size (n)	Accept. number (c)	Sample Size (n)	Accept. number (c)
1%	10%	61	2	52	2	38	1	29	1
1%	15%	30	1	25	1	25	1	19	1
1%	20%	22	1	18	1	18	1	14	1
0.5%	10%	46	1	38	1	38	1	29	1
0.5%	15%	30	1	25	1	15	0	10	0
0.5%	20%	22	1	18	1	11	0	8	0



Sampling Standard: Public comments

General

- Consultation with stakeholders via telecon following a call for inputs welcomed
- DOE validation/verification section generally acceptable (DOE forum)

Some concerns and suggestions:

- DOEs validation should be limited to desk review (PD forum)
- Requirements on grouping of CPAs for single sampling plan should be part of main text (not footnote).
- Sampling standard should take precedence over methodology requirements
- “Materiality” should be considered to reduce PP’s cost burden
- PoA requirements should be changed to 90/10 precision from the present 95/10.



Sampling Standard: Decision by the Board

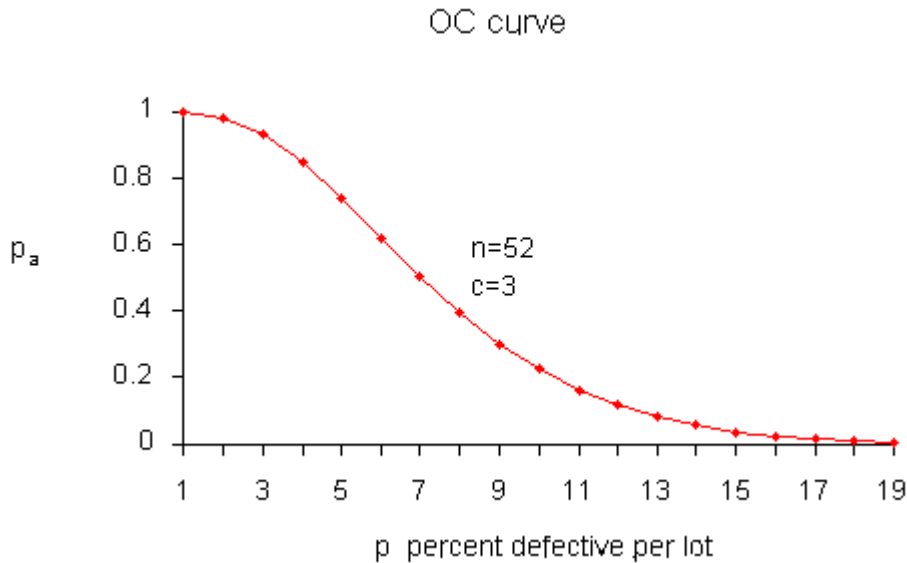
- Board may wish to approve the standard
 - a) With proposed producer and consumer risks of 5%; OR
 - b) With alternate values for producer and consumer risks



EXTRA SLIDE



Section V: Validation and Verification of Sampling Plans



$$1 - \alpha = \sum_{d=0}^c \frac{n!}{d!(n-d)!} p_1^d (1-p_1)^{n-d}$$
$$\beta = \sum_{d=0}^c \frac{n!}{d!(n-d)!} p_2^d (1-p_2)^{n-d}$$

p_1 - Acceptable quality level; p_2 - unacceptable quality level; p_a -probability of acceptance

Alfa- producers risk, Beta- consumers risk

