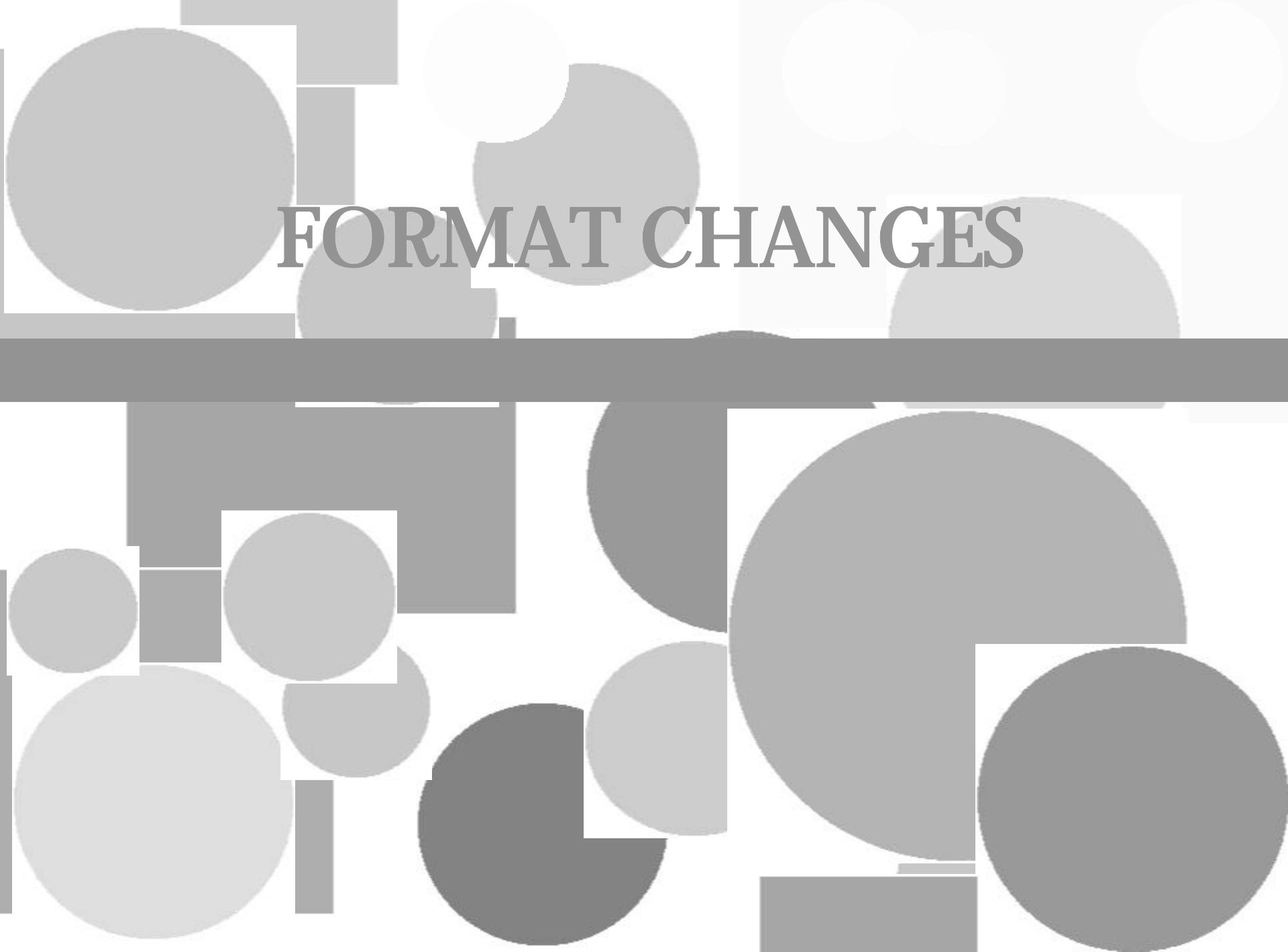


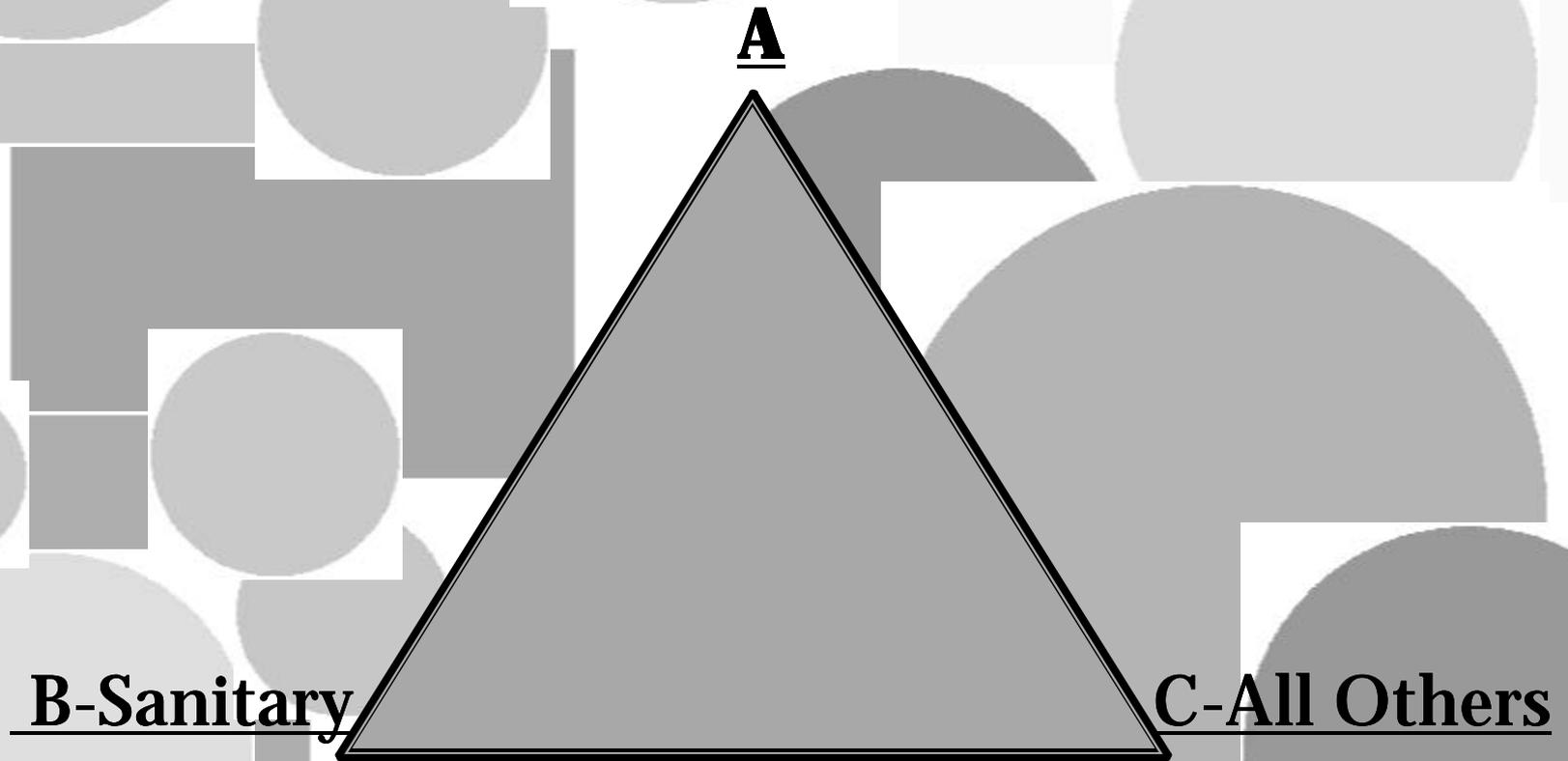
GROUNDWATER CHANGES IN VSWMR AMENDMENT - 7



FORMAT CHANGES

Removal of Content Redundancies

General Requirements applicable to all LF types



Removal of Content Redundancies

20-81-250. Groundwater monitoring program

- **A. General requirements.**
 - **A.1. Applicability**
 - **A.2. General Requirements**
 - **A.3. Groundwater Monitoring System**
 - **A.4. Sampling and Analysis**
 - **A.5. Alternate Source Demonstrations [Am3]**
 - **A.6. Groundwater Protection Standards [Am7]**

Removal of Content Redundancies Tables 5.5/5.1

Column A – Common Name ^{1,2}	Column B – Common Name ^{1,2}	CAS RN ³
	Acenaphthene	83-32-9
	Acenaphthylene	208-96-8
Acetone	Acetone	67-64-1
	Acetonitrile; Methyl cyanide	75-05-8
	Acetophenone	98-86-2
	2-Acetylaminofluorene; 2-AAF	53-96-3
	Acrolein	107-02-8
Acrylonitrile	Acrylonitrile	107-13-1

**No more separate constituent tables with
out-of-sequence nomenclature!!!**

Ease of Read [Addition of Topic Headers]

- **c. Assessment**. Within 90 days, initiate an assessment of corrective measures or a proposal for presumptive remedy.
- **d. Financial assurance**. Within 120 days, provide additional financial assurance in the amount of \$1 million to the department using the mechanisms required in 9VAC20-70-140 of the Financial Assurance Requirements for Solid Waste Disposal, Transfer, and Treatment Facilities.
- **e. Public meeting**. Prior to submitting the document required under subdivision 1 f of this subsection, schedule and hold a public meeting to discuss the draft results

Process Streamlining [ACL]

- **(4)** For constituents for which no MCL has been promulgated, a risk-based alternate concentration levels; may be used if approved by the director as long as:

No more:

- 1. ACL Variance ,**
- 2. \$390 fee, or**
- 3. newspaper notice involved**

Process Streamlining

- **e. Alternate concentration level revisions.** ..., if the department-approved alternate concentration levels change based on information released by EPA, to the extent practical, the department will issue revisions to the alternate concentration levels for facility use no more often than an annual basis.

The facility shall use the alternate concentration levels listing in effect at the time the sampling event takes place when comparing the results against the groundwater protection standards under subdivision B 3 f or C 3 e of this section.



MONITORING CHANGES

1] Replacement of Phase I & Modified programs

- **2.** First determination monitoring program.
- **a.** Sampling requirements. A first determination monitoring program shall consist of a background-establishing period followed by semi-annual sampling and analysis for the constituents shown in Table 3.1 Column A at all wells... .

Scope similar to Detection Monitoring at sanitary LFs

Implementation

- Phase I monitoring program ceases to exist upon the effective date of Amendment 7.
- All affected landfills are already monitoring under a semi-annual sampling schedule, so ... First Determination monitoring (FDM) would initiate at the next regularly scheduled semi-annual event.
- Sites which have already completed a First Determination process under the current Regulation will not have* to redo the procedure under Am7.

Those who already have background

- **c. Semi-annual sampling and analysis.** ... at least semi-annually thereafter, sample each monitoring well in the compliance network for analysis of the constituents in Table 3.1 Column A.
- **d. Evaluation and response.** ..., the results of all subsequent first determination monitoring events shall be assessed as follows: **d.(1)** If no Table 3.1 Column A constituents are found to have entered the groundwater at statistically significant levels over background, the owner or operator shall: **d.(1).(a)** Remain in first determination monitoring; and ...

First timers

- **b. Development of background.** Within 360 days of the initial first determination sampling event:

(1) Establish background concentrations for any constituents detected pursuant to subdivision 2 a of this subsection .

(1).(a) A minimum of four independent samples from each well (background and downgradient) shall be collected and analyzed to establish background concentrations for the detected constituents ...

First timers

- **b.(2)** Within 30 days of completing the background calculations required under subdivision 2 b (1) (a) of this subsection, submit a first determination report, signed by a qualified groundwater scientist, to the department which must include a summary of the background concentration data developed during the background sampling efforts as well as the statistical calculations for each constituent detected in the groundwater during the background sampling events.

2] Add Verification sampling /Data validation

- **A.4.i** Verification sampling The owner or operator may at any time within the 30-day SSI period ... obtain verification samples Verification sampling is a voluntary action on the part of the owner operator and shall not alter the timeframes associated with determining or reporting an SSI ...
- **A.4.j** Data validation The owner or operator may at any time within the 30-day SSI period ... undertake third-party data validation of the analytical data Validation efforts is a voluntary action on the part of the owner operator and shall not alter the timeframes associated with determining or reporting an SSI



REPORTING CHANGES

1]Annual Report submission timeframes

- **a.(1)** An Annual Groundwater Monitoring Report shall be submitted by the owner or operator to the department no later than 120 days from the completion of sampling and analysis conducted under subdivision A 4 h of this section for the second semi-annual event or fourth quarterly event during each calendar year and shall be accompanied by:...

No more MARCH 1st mandated deadline!!!

2]Semi-annual/Quarterly report timeframes

- **b.** Semi-annual or quarterly report (all LF types).
- **b.(1)** After each sampling event has been completed for the 1st semi-annual or first, second and third quarterly groundwater sampling events, a semi-annual or quarterly monitoring report shall be submitted under separate cover by the owner or operator to the department no later than 120 days from the completion of sampling and analysis...
- DEQ has standardized Submission Instructions for the SA and Qtrly reports.

'How-to're: reporting timeframes

Report submission compliance tracking will be based on:

Date *SA* or *Qtrly* lab report is issued + 120 days = 'due' date expected at DEQ

Within those 120 days, you have 30 days to do stats and/or verification sampling and an 14 additional days to report exceedances followed by 76 days to finalize the report content. If you are still working on an ASD, note so in the report.

Allowance for reduction in reporting

2nd Semi-annual and 4th Quarterly GW reports may simply be included in the Annual Report.

- For facilities sampling GW on a *Semi Annual* basis that means two GW monitoring reports per year.
- For facilities sampling GW on a *Quarterly* basis that means four GW monitoring reports per year.



REMEDIATION CHANGES

1] Close Presumptive Remedy Loophole

SubD 'loophole' closed

- **c. Restrictions.** Presumptive remedies are not applicable to:
- **c.(1)** Landfills monitoring groundwater under the Federal Subtitle D equivalent program defined under 9VAC20-81-250 B when the use of the presumptive remedy will be the sole remedy applied to the groundwater release; or

2] Remove Continual NES Sampling

NES requirements now moved into the Corrective Action section.

- **250.C.1.a** Within 90 days, install additional monitoring wells as needed including the installation of at least one additional well at the facility boundary in the direction of contaminant migration sufficient to define the vertical and horizontal extent of the release of constituents at statistically significant levels exceeding the groundwater protection standards.
- Requirement to continually sample these wells has been removed, and will be applied, if necessary, on a case by case basis.

3] Clarify Remedy Incompletion Actions

- **260.H.4.** If the director, based on the review of information presented under subdivision H 3 of this section, determines that:
 - **a.** The corrective action remedy has been completed in accordance with the requirements of the Corrective Action Plan, ...; or
 - **b.** The remedy has not yet achieved completion, the owner or operator shall remain in corrective action and meet the financial assurance requirements until such time as a successful demonstration and certification can be made.