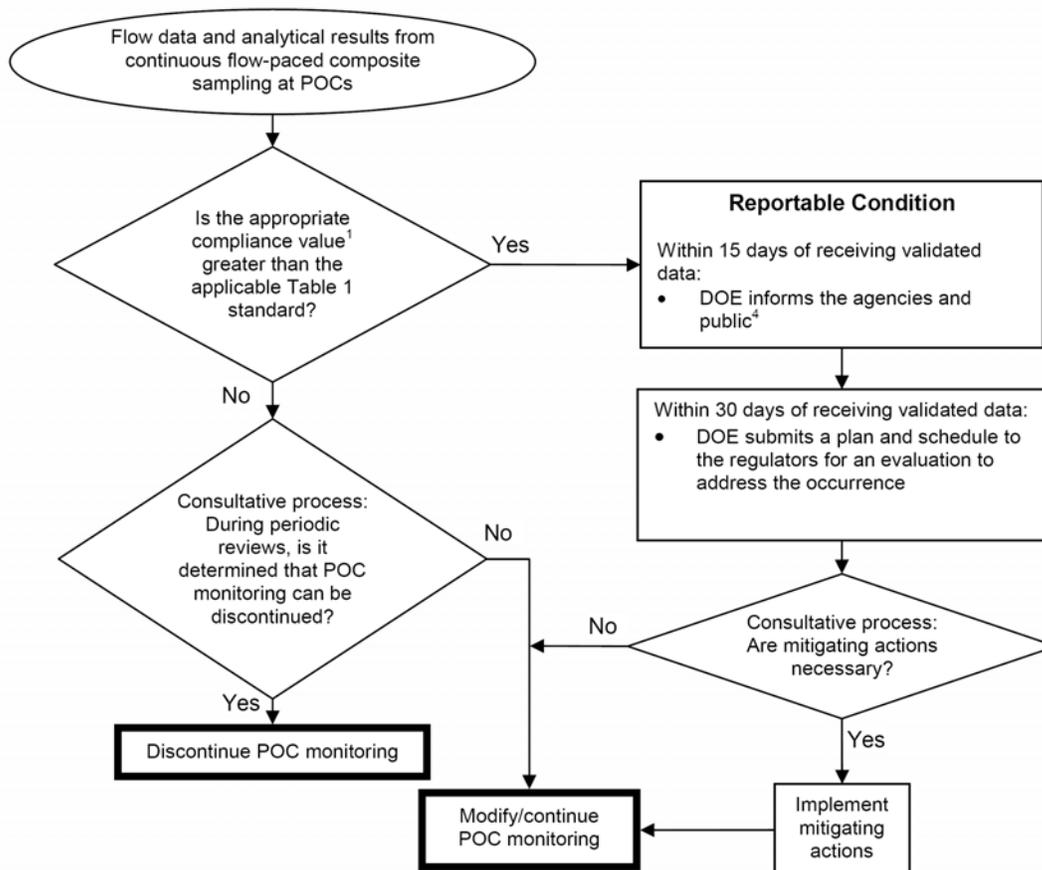


Appendix D: Data Evaluation Flowcharts Reproduced from RFLMA and the RFSOG

D.1 Points of Compliance

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT



Notes: see Fig. 1 and Tables 1 and 2 for locations, standards, and sampling criteria.

¹ Appropriate Compliance Values by locations and analytes (see Table 2 for reference)

- All Indiana Street POCs:
 - plutonium, americium, uranium → 30-day average²
- All Terminal Pond POCs:
 - plutonium, americium, uranium → 12-month rolling average³
- Walnut Creek at Indiana Street POCs:
 - nitrate → 85th percentile of 30-day averages³ for previous calendar year
- Walnut Creek Terminal Pond POCs:
 - nitrate → 12-month rolling average²

² The 30-day average for a particular day is calculated as a volume-weighted average of a "window" of time containing the previous 30 days with measurable flow. Each day has its own discharge volume (measured with a flow meter) and activity/concentration (from the sample carboy in place at the end of that day). Therefore, there are 365 30-day moving averages for a location that flows all year. At locations that have intermittent flows, 30-day averages are reported as averages of the previous 30 days of greater than zero flow. For days where no analytical result is available, either due to failed laboratory analysis or non-sufficient quantity (NSQ) for analysis, no 30-day average is reported.

³ The 12-month rolling average for the last day of a particular month is calculated as a volume-weighted average of a "window" of time containing the previous 12 months. Each 12-month "window" includes daily discharge volumes (measured with a flow meter) and daily activities/concentrations (from the sample carboy in place at the end of that day). Therefore, there are twelve 12-month rolling averages for a given calendar year. Days with no flow or no analytical result, either due to failed laboratory analysis or NSQ for analysis, are not included in the average. When no flow has occurred in the previous 12 months, no 12-month rolling average is reported.

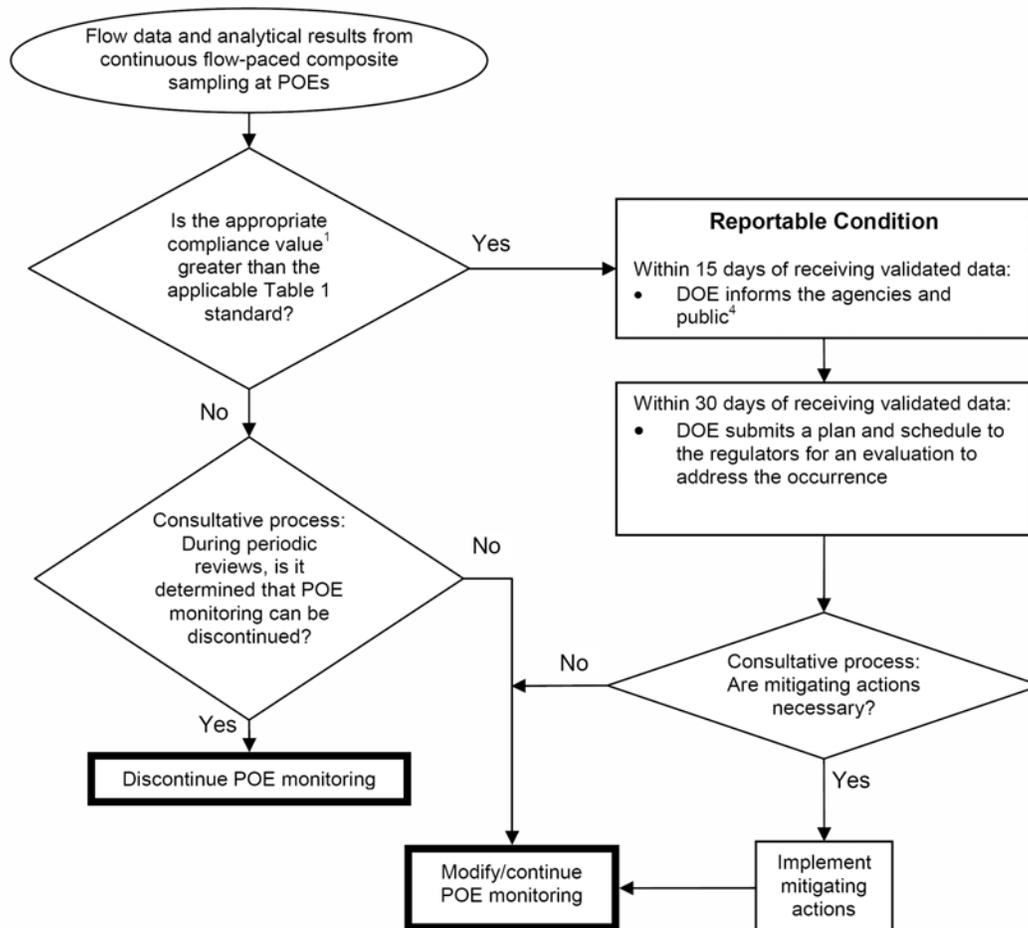
⁴ Agencies: EPA, CDPHE, and USFWS

Public: Cities of Broomfield, Northglenn, Thornton, and Westminster; Rocky Flats Stewardship Council (RFSC)

Figure 5. Points of Compliance

D.2 Points of Evaluation

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT



Notes: see Fig. 1 and Tables 1 and 2 for locations, standards, and sampling criteria.

¹ Appropriate Compliance Values by analytes (see Table 2 for reference)

- plutonium, americium, uranium → 12-month rolling average²
- dissolved Cd and Ag, total Be and Cr → 85th percentile of 30-day averages³ for previous calendar year

² The 30-day average for a particular day is calculated as a volume-weighted average of a "window" of time containing the previous 30-days with measurable flow. Each day has its own discharge volume (measured with a flow meter) and activity/concentration (from the sample carboy in place at the end of that day). Therefore, there are 365 30 day moving averages for a location that flows all year. At locations that have intermittent flows, 30-day averages are reported as averages of the previous 30 days of greater than zero flow. For days where no analytical result is available, either due to failed laboratory analysis or NSQ for analysis, no 30-day average is reported.

³ The 12-month rolling average for the last day of a particular month is calculated as a volume-weighted average of a "window" of time containing the previous 12 months. Each 12-month "window" includes daily discharge volumes (measured with a flow meter) and daily activities/concentrations (from the sample carboy in place at the end of that day). Therefore, there are twelve 12-month rolling averages for a given calendar year. Days with no flow or no analytical result, either due to failed laboratory analysis or NSQ for analysis, are not included in the average. When no flow has occurred in the previous 12 months, no 12-month rolling average is reported.

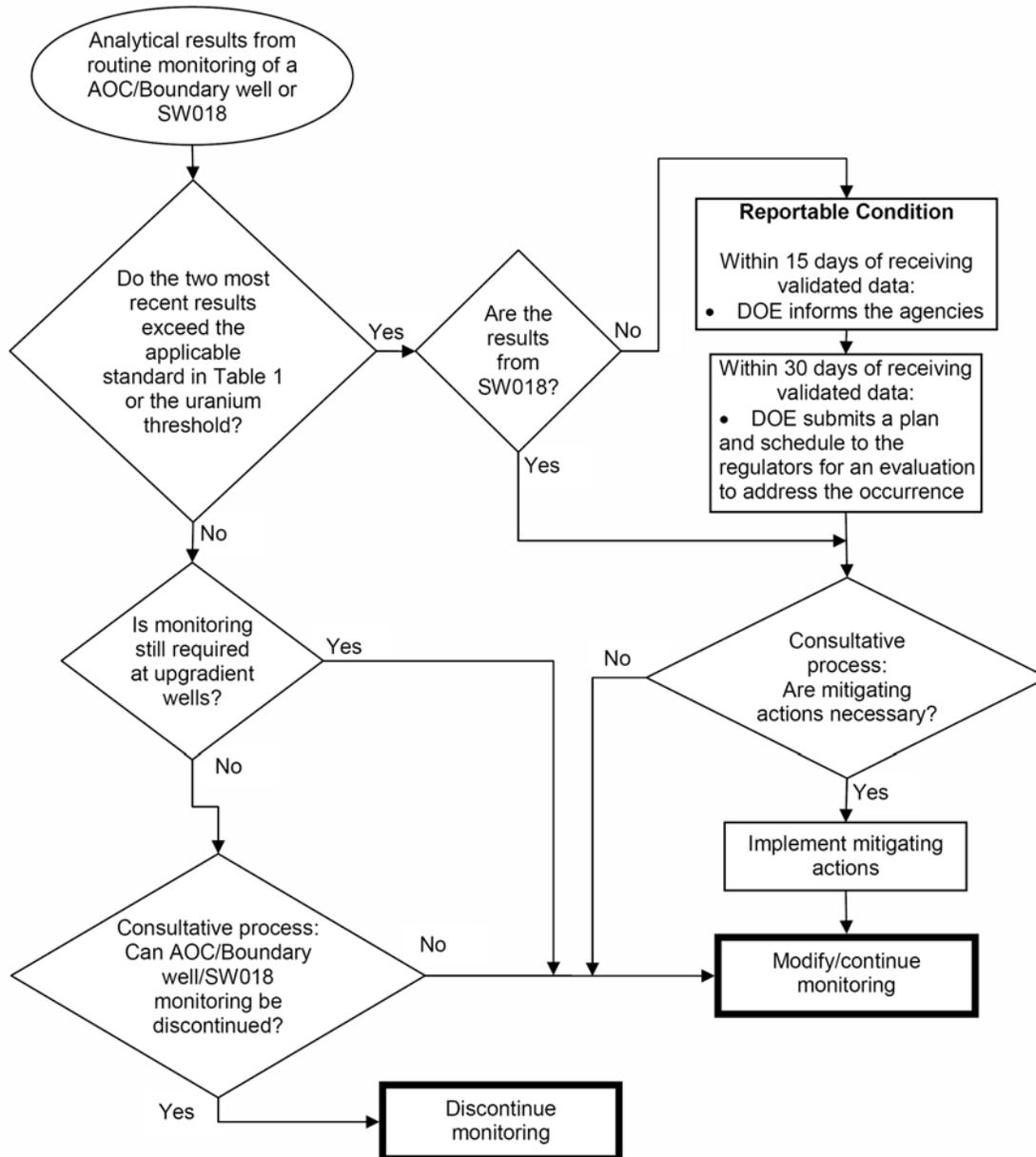
⁴ Agencies: EPA, CDPHE, and USFWS

Public: Cities of Broomfield, Northglenn, Thornton, and Westminster; Rocky Flats Stewardship Council (RFSC)

Figure 6. Points of Evaluation

D.3 Area of Concern Wells, Boundary Wells, and SW018

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT



Notes: see Fig. 1 and Tables 1 and 2 for locations, standards, and sampling criteria.

- AOC wells and location SW018 are sampled twice each year; see Table 2.
- Boundary wells are sampled once each year; see Table 2. These wells are not part of the remedy, but are a component of operational monitoring.
- Decisions related to uranium in ground water are based upon a 16 ug/L threshold for Boundary wells (basis: the 11 pCi/L standard) and a 120 ug/L threshold for AOC wells (basis: a grand mean of results from Site-wide high-resolution uranium analyses performed in the late 1990s through mid-2000s), rather than the standard in Table 1.

Figure 7. Area of Concern Wells, Boundary Wells, and SW018

D.4 Sentinel Wells

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT

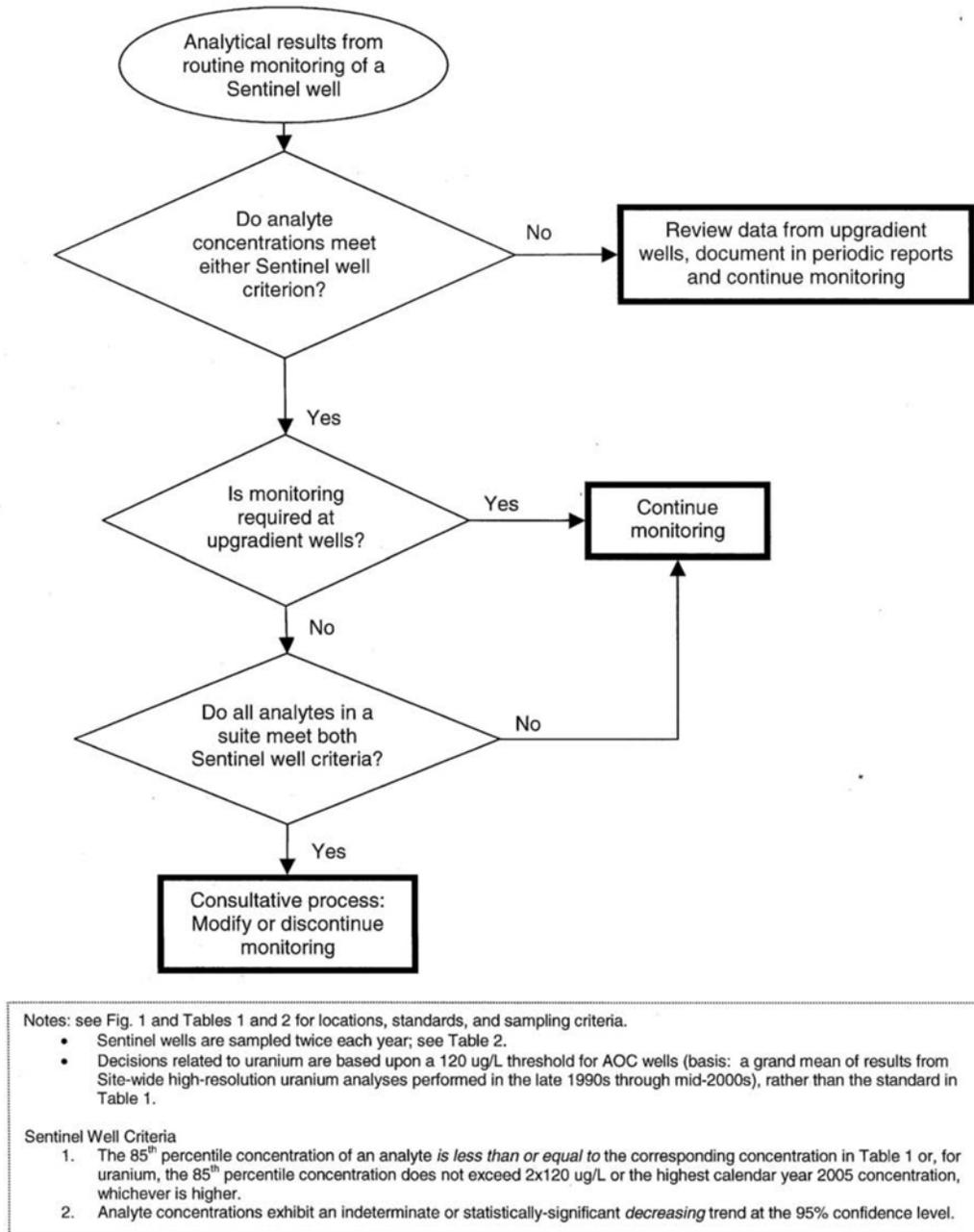
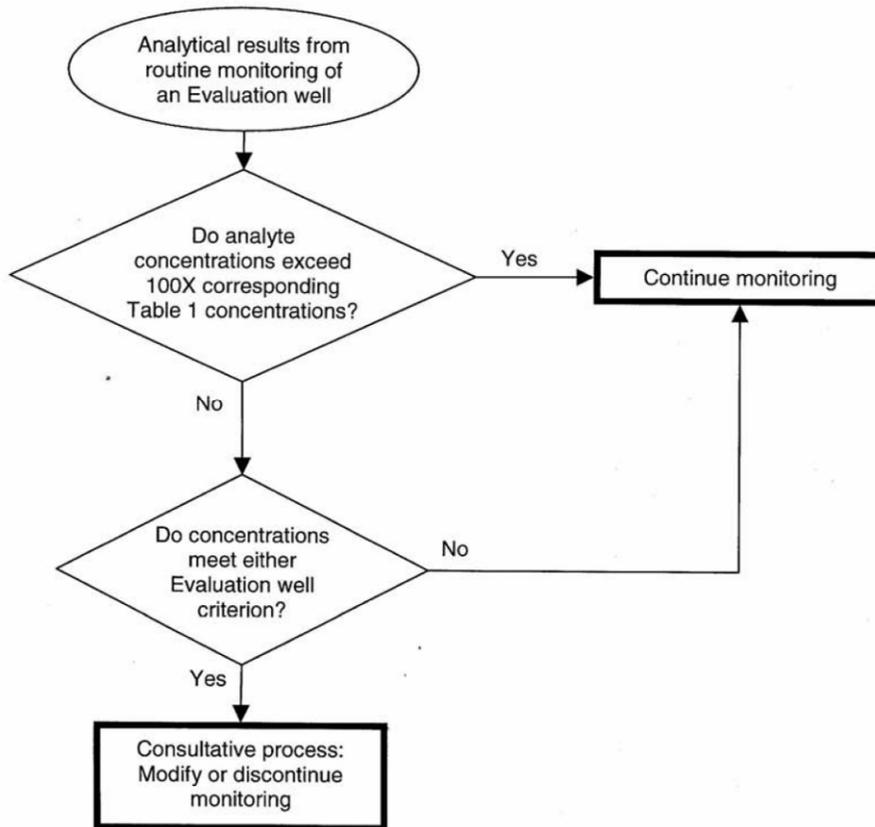


Figure 8. Sentinel Wells

D.5 Evaluation Wells

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT



Notes: see Fig. 1 and Tables 1 and 2 for locations, standards, and sampling criteria.
• Evaluation wells are listed in Table 2.

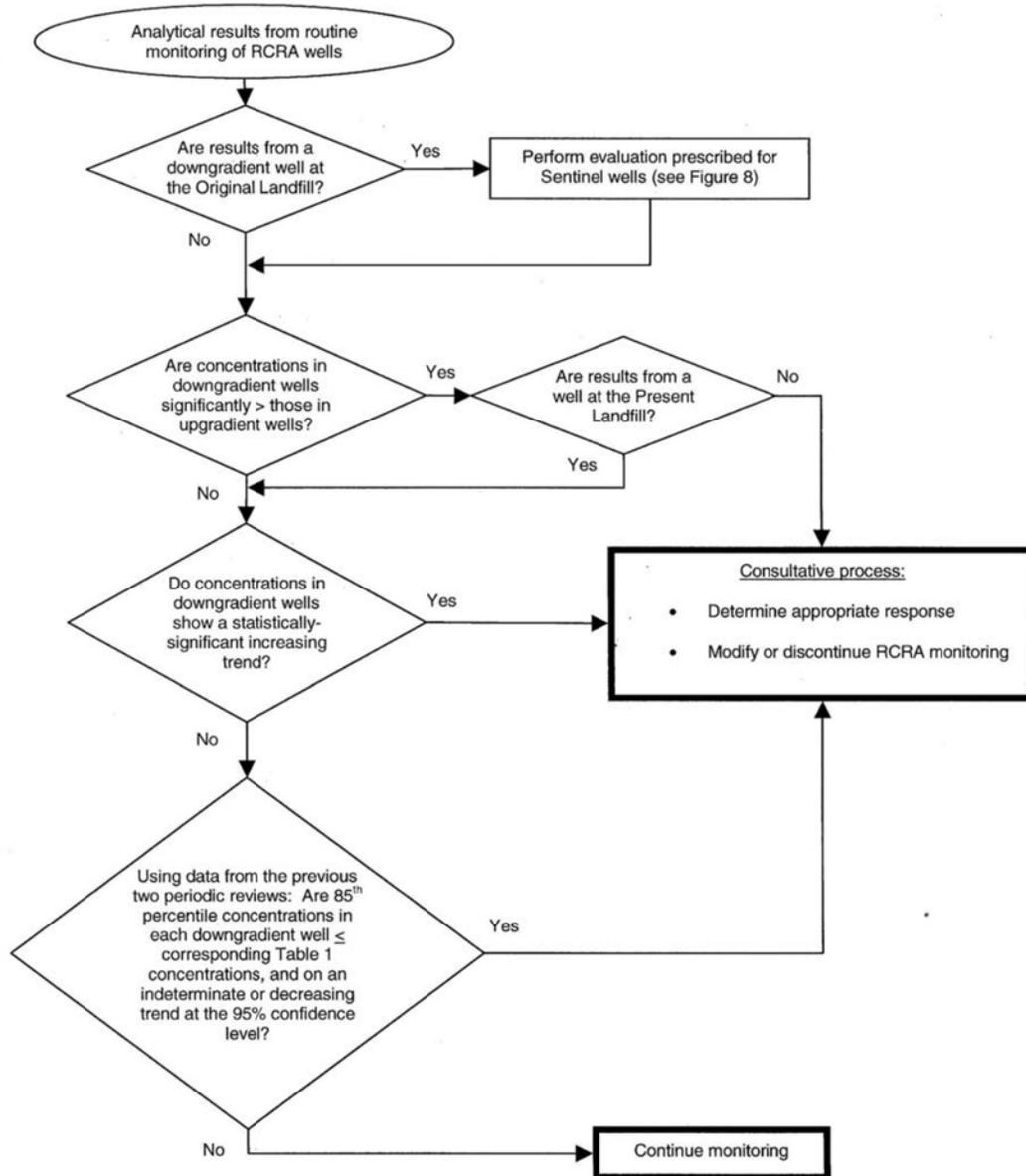
Evaluation Well Criteria:

1. The 85th percentile concentration of an analyte *is less than or equal to* the corresponding concentration in Table 1, or, for uranium, 240 ug/L or highest pre-CY05 concentration, whichever is higher.
2. Analyte concentrations exhibit an indeterminate or statistically-significant *decreasing* trend at the 95% confidence level.

Figure 9. Evaluation Wells

D.6 RCRA Wells

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT



Notes: see Fig. 1 and Tables 1 and 2 for locations, standards, and sampling criteria. RCRA wells are sampled quarterly; see Table 2.

Figure 10. RCRA Wells

D.7 Groundwater Treatment Systems

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT

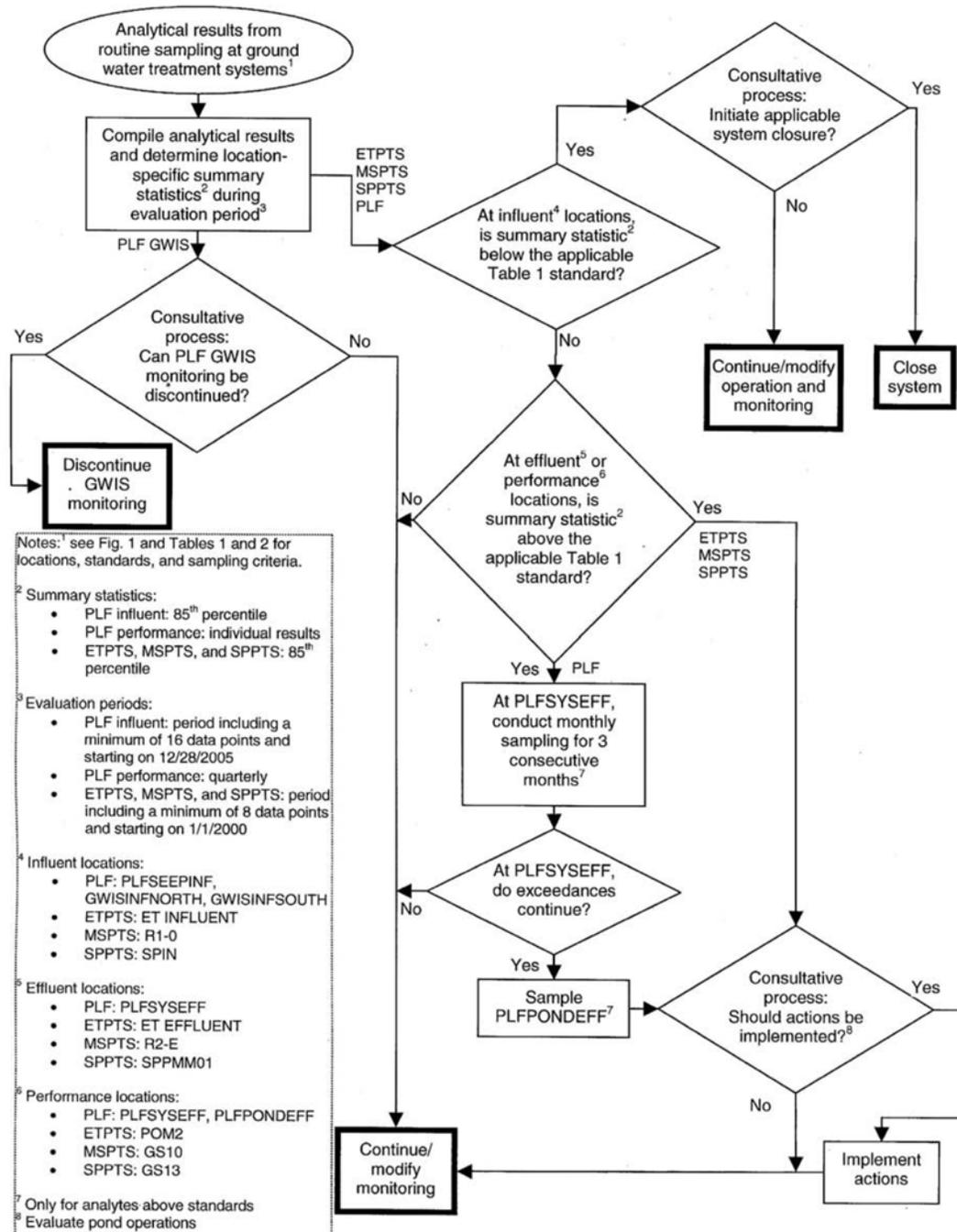


Figure 11. Groundwater Treatment Systems

D.8 Original Landfill Surface Water

ROCKY FLATS LEGACY MANAGEMENT AGREEMENT

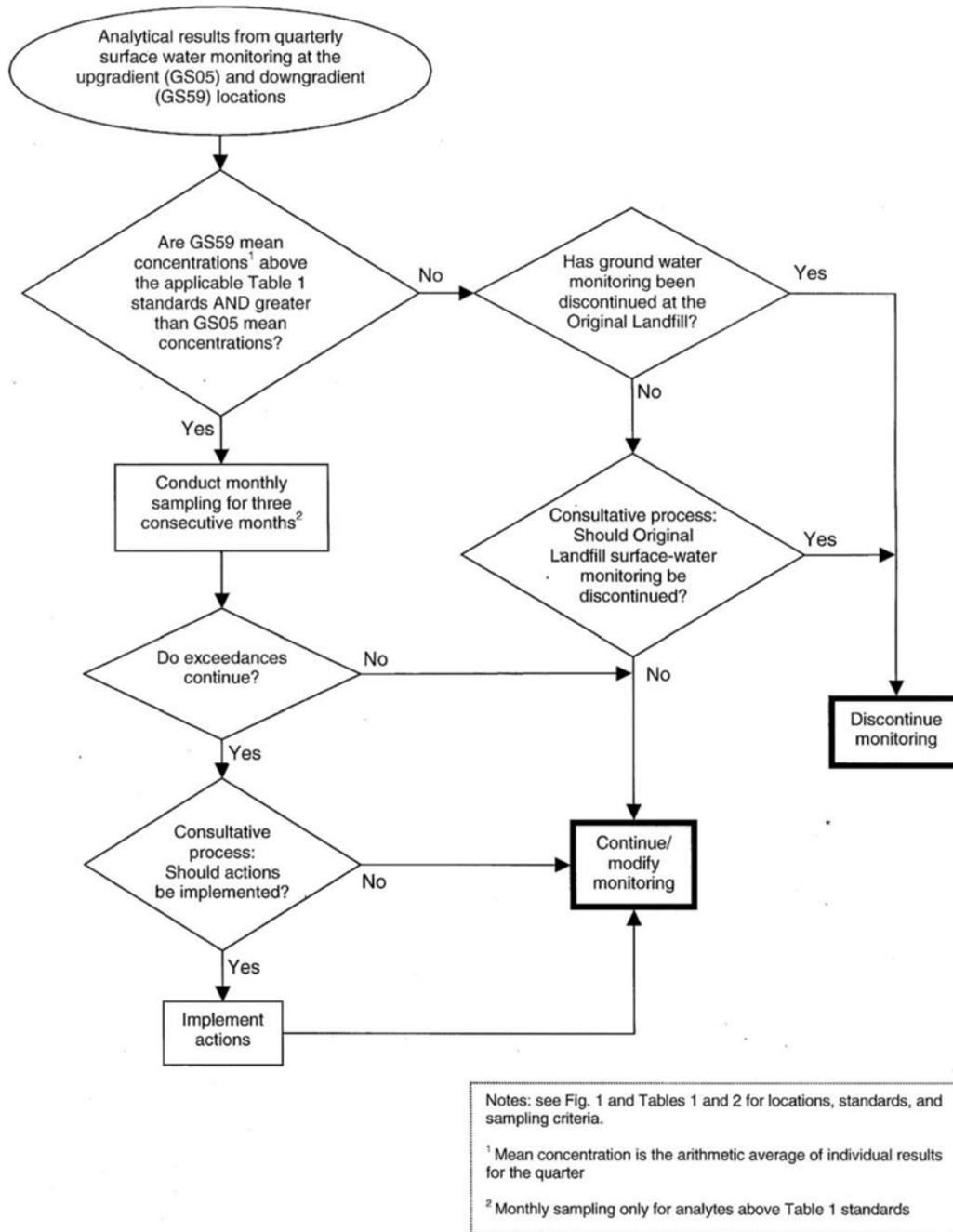


Figure 12. Original Landfill Surface Water

D.9 Pre-discharge Pond Sampling

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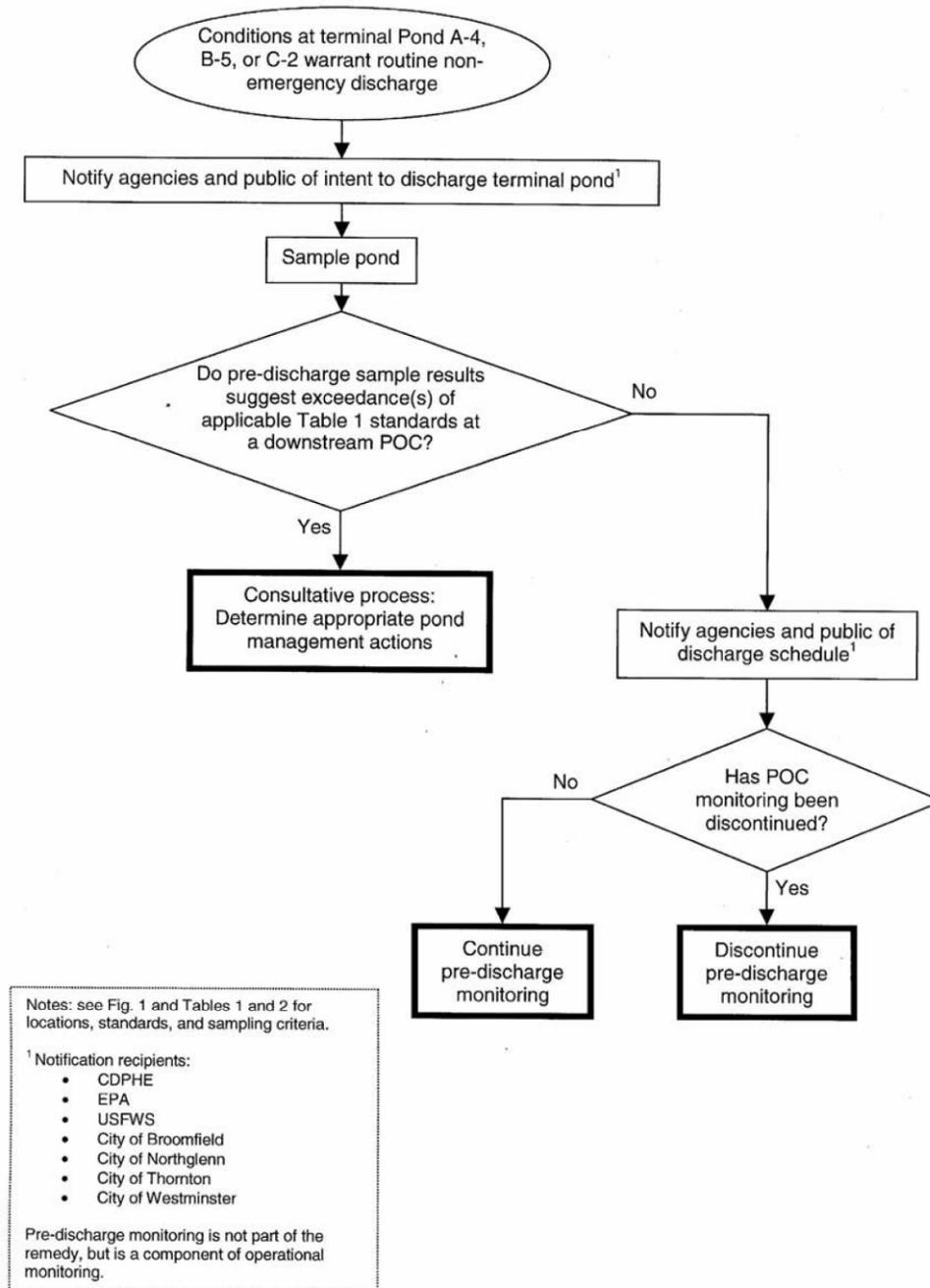


Figure 13. Pre-discharge Pond Sampling

D.10 Investigative Monitoring

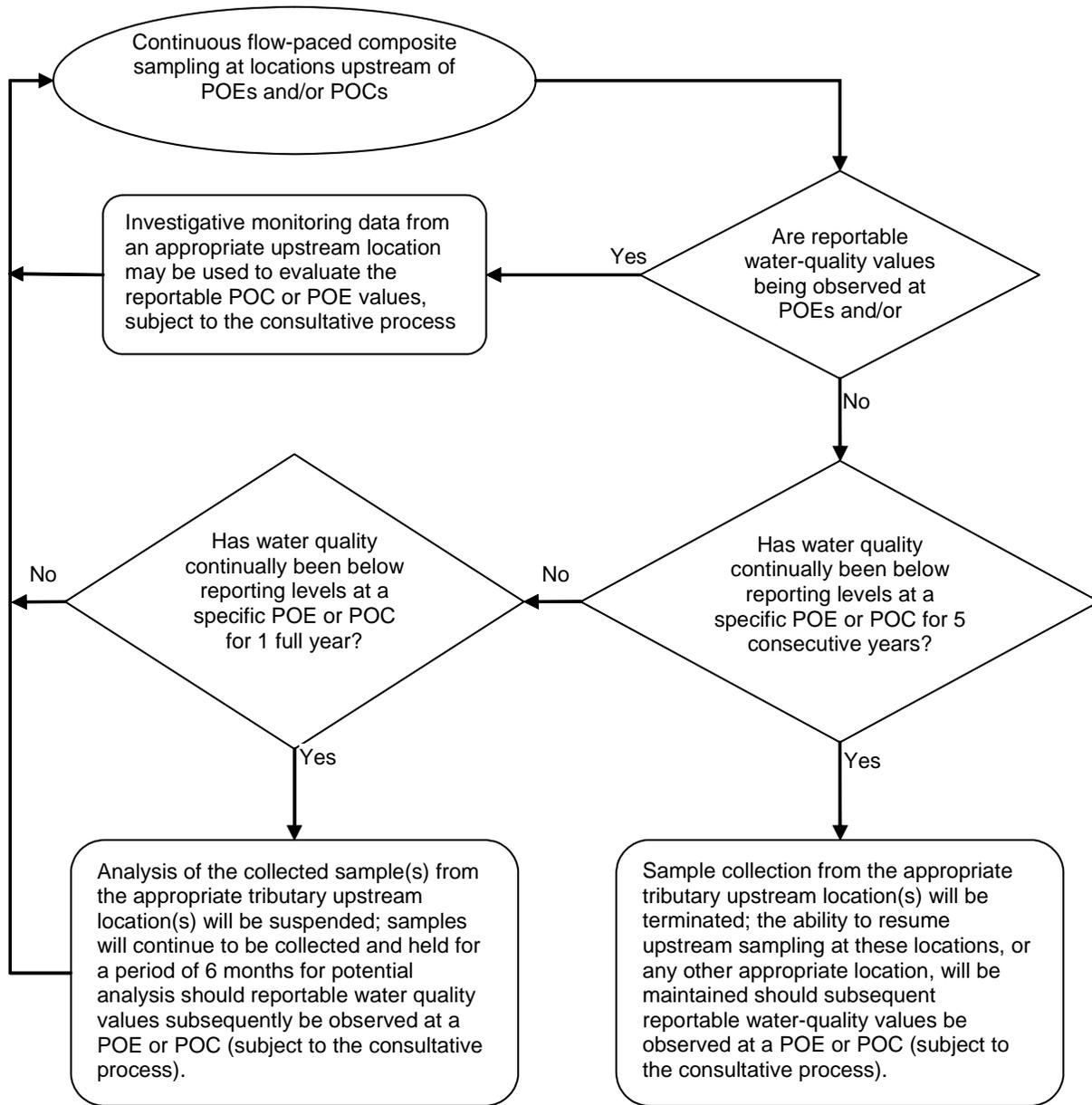


Figure 6-15. Investigative Monitoring Flowchart (from the RFSOG)