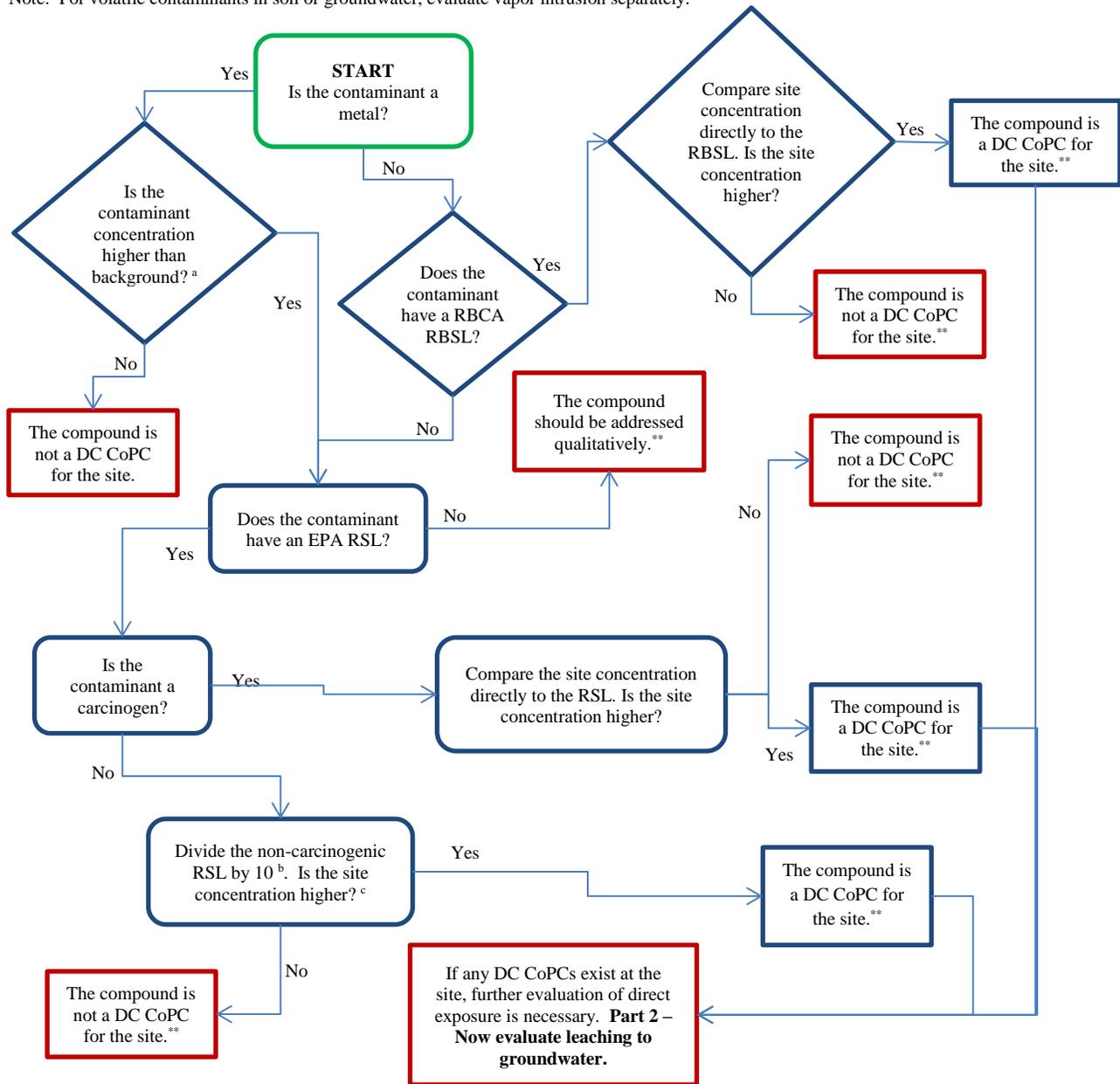


**Surface and Subsurface Soil Screening Flowchart - Part 1 – Direct Exposure**  
**For Complete Screening Process Please Complete Parts 1 and 2**

Note: For volatile contaminants in soil or groundwater, evaluate vapor intrusion separately.



**\*\*Now Evaluate Leaching to Groundwater**

- a = 2013 MT DEQ Inorganic Background Study Background Threshold Values (BTVs) Table 4-4 applies to both surface and subsurface soil
  - b = Assumes use of the HQ=1 version of the RSL table and should be performed for all non-carcinogenic compounds except for lead (see footnote c). If using the HQ=0.1 RSL table, do not divide by 10.
  - c = For lead do not use the RSL: DEQ uses a 5µg/dL blood lead level endpoint for the IEUBK model. For residential soil use 154 mg/kg, and for commercial/industrial and construction scenarios use 696 mg/kg.
- CoPC = contaminant of potential concern  
 DC = Direct contact (i.e., ingestion, inhalation, and dermal exposure)  
 EPA = Environmental Protection Agency  
 RBCA = Montana Risk-Based Corrective Action Guidance for Petroleum Releases  
 RBSL = Most current risk-based screening level from the Master Table  
 RSL = Most current EPA regional screening level for residential soil applies to both surface and subsurface soil

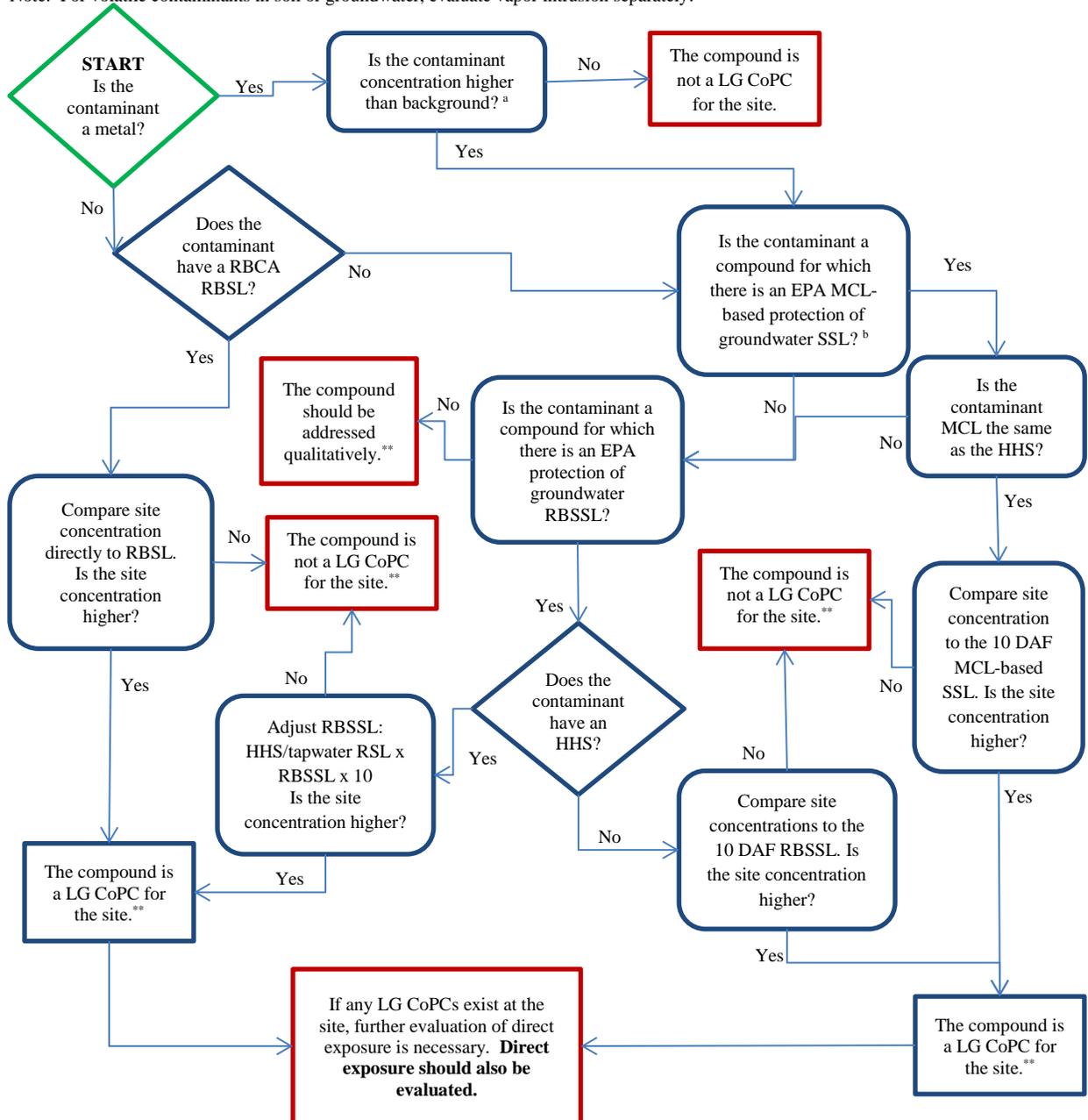
Revised November 2018

**References:**

- [http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/FAQ/Table\\_4-4.pdf?ver=2018-11-09-093304-977](http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/FAQ/Table_4-4.pdf?ver=2018-11-09-093304-977)
- <https://www.epa.gov/risk/regional-screening-levels-rsls>
- [http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/rbca/rbca\\_table\\_4.pdf?ver=2018-05-14-160913-830](http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/rbca/rbca_table_4.pdf?ver=2018-05-14-160913-830)
- [http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/DEQ-7\\_Final\\_May2017.pdf?ver=2017-05-30-132523-520](http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/DEQ-7_Final_May2017.pdf?ver=2017-05-30-132523-520)
- <http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/FAQ/2018LeadMemo.pdf>

**Surface and Subsurface Soil Screening Flowchart - Part 2 – Leaching to Groundwater**  
**For Complete Screening Process Please Complete Parts 1 and 2**

Note: For volatile contaminants in soil or groundwater, evaluate vapor intrusion separately.



**\*\*Direct exposure should also be evaluated**

- a = 2013 MT DEQ Inorganic Background Study Background Threshold Values (BTVs) Table 4-4 applies to both surface and subsurface soil
- b = for PCBs the total concentration of PCBs for each sample is compared to the most current 10 DAF MCL-based SSL.
- CoPC = contaminant of potential concern
- DAF = dilution attenuation factor
- EPA = Environmental Protection Agency
- HHS = Most current DEQ-7 human health standard
- LG = leaching to groundwater
- MCL = EPA maximum contaminant level
- RBCA = Montana Risk-Based Corrective Action Guidance for Petroleum Releases
- RBSSL = Most current risk-based screening level from the Master Table
- RBSSL = Most current EPA risk-based soil screening level
- RSL = Most current EPA regional screening level
- SSL = Most current EPA soil screening level found in the RSL HQ-1 table

Revised November 2018

**References:**

- [http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/FAQ/Table\\_4-4.pdf?ver=2018-11-09-093304-977](http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/FAQ/Table_4-4.pdf?ver=2018-11-09-093304-977)
- <https://www.epa.gov/risk/regional-screening-levels-rsls>
- [http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/rbca/rbca\\_table\\_4.pdf?ver=2018-05-14-160913-](http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/rbca/rbca_table_4.pdf?ver=2018-05-14-160913-)
- [http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/DEQ-7\\_Final\\_May2017.pdf?ver=2017-05-30-132523-520](http://deq.mt.gov/Portals/112/Land/StateSuperFund/Documents/DEQ-7_Final_May2017.pdf?ver=2017-05-30-132523-520)