Understanding the MRBCA Program

UST Program Implications

Petroleum Storage Tank Insurance Fund

May 2004

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MO's "Old" Cleanup Req'ts for Tank Sites:

- DNR has issued "No Further Action Letters" for about 9500 sites where tanks were removed or leaks/spills occurred and cleanups have been completed.

- Though the cleanup numbers varied some, depending on the site, the majority of those used the same "default cleanup standards" for BTEX & TPH.

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MO's "Old" Req'ts, cont.

- At some sites, it was impossible to clean up the shallow water to meet those requirements.

- At others, the cost of meeting the TPH number was very high and the cleanup standard was lower than necessary.

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Every cleanup is/has been "risk based."

Site Characterization

Regulations and Guidance

Corrective Action or Risk Management

Risk Assessment

Every cleanup is/has been "risk based."

What's There?

Regulations and Guidance

Is It A Problem?

What Shall I Do About It?

Major Changes under the "New System" for Tank Site Cleanups:

- Site-specific and exposure pathway-specific cleanup targets
- Chemicals of Concern
- Sampling/Lab methods
- Need to determine land use

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Major Changes, cont.

- Closure sampling & groundwater assessment
- Order of tasks/reports
- Software & Report formats
- Analysis -- not just reporting of data
- NFA Letter format/content

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2. Chemicals of Concern:

Under Old Guidance:

- BTEX
- MTBE
- TPH-GRO
- TPH-DRO

Under New Guidance:

- BTEX
- All oxygenates
- TPH - GRO
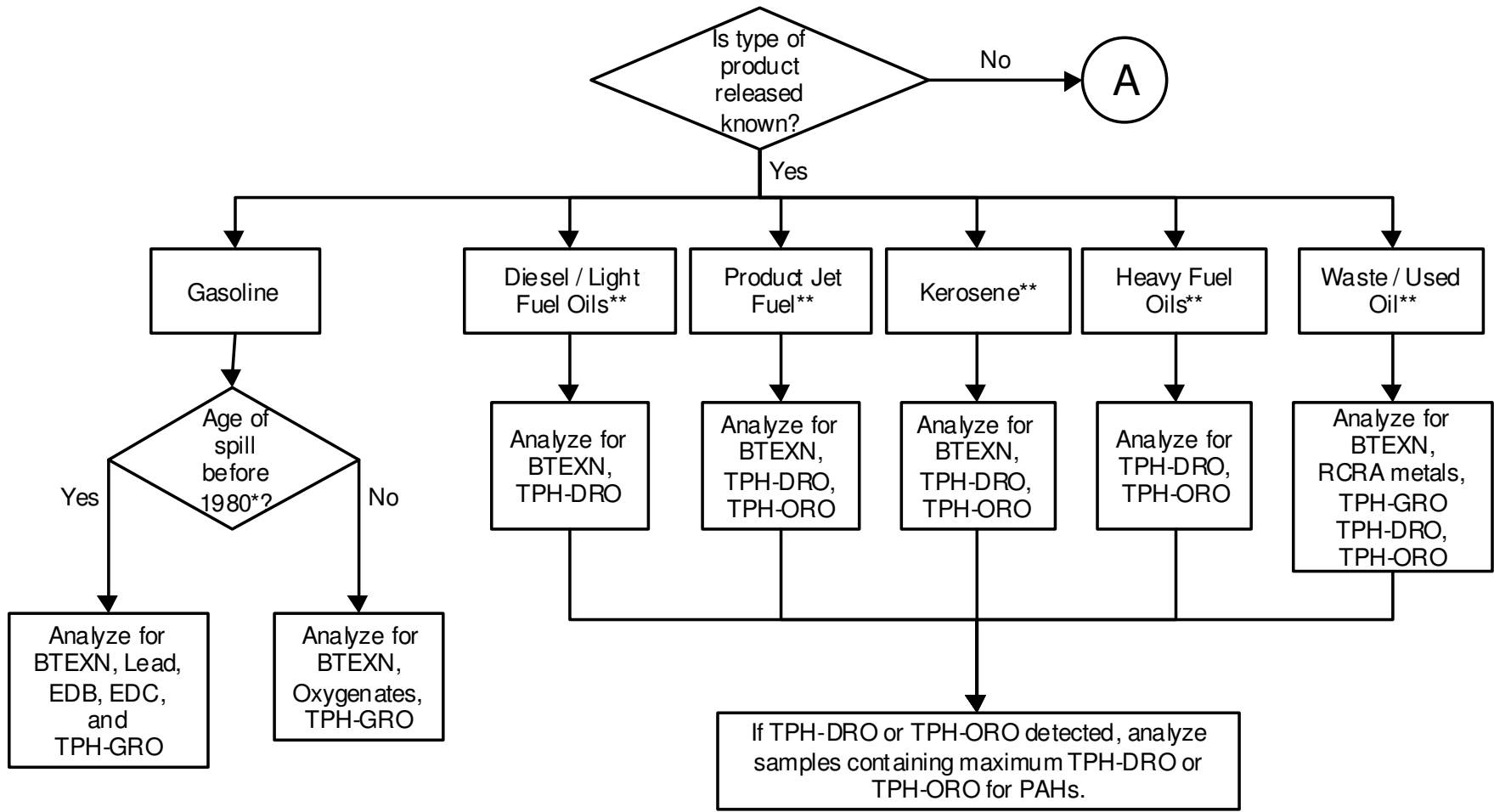- TPH - DRO
- TPH-ORO
- PAHs
- EDB, EDC

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FIGURE 5-1: Chemicals of Concern Selection and Analysis *(page 1 of 2)*

Notes:

*: If the age of the spill is unknown it should be assumed that the spill was prior to 1980, unless site information suggests otherwise (i.e. station operation began only in 1990).

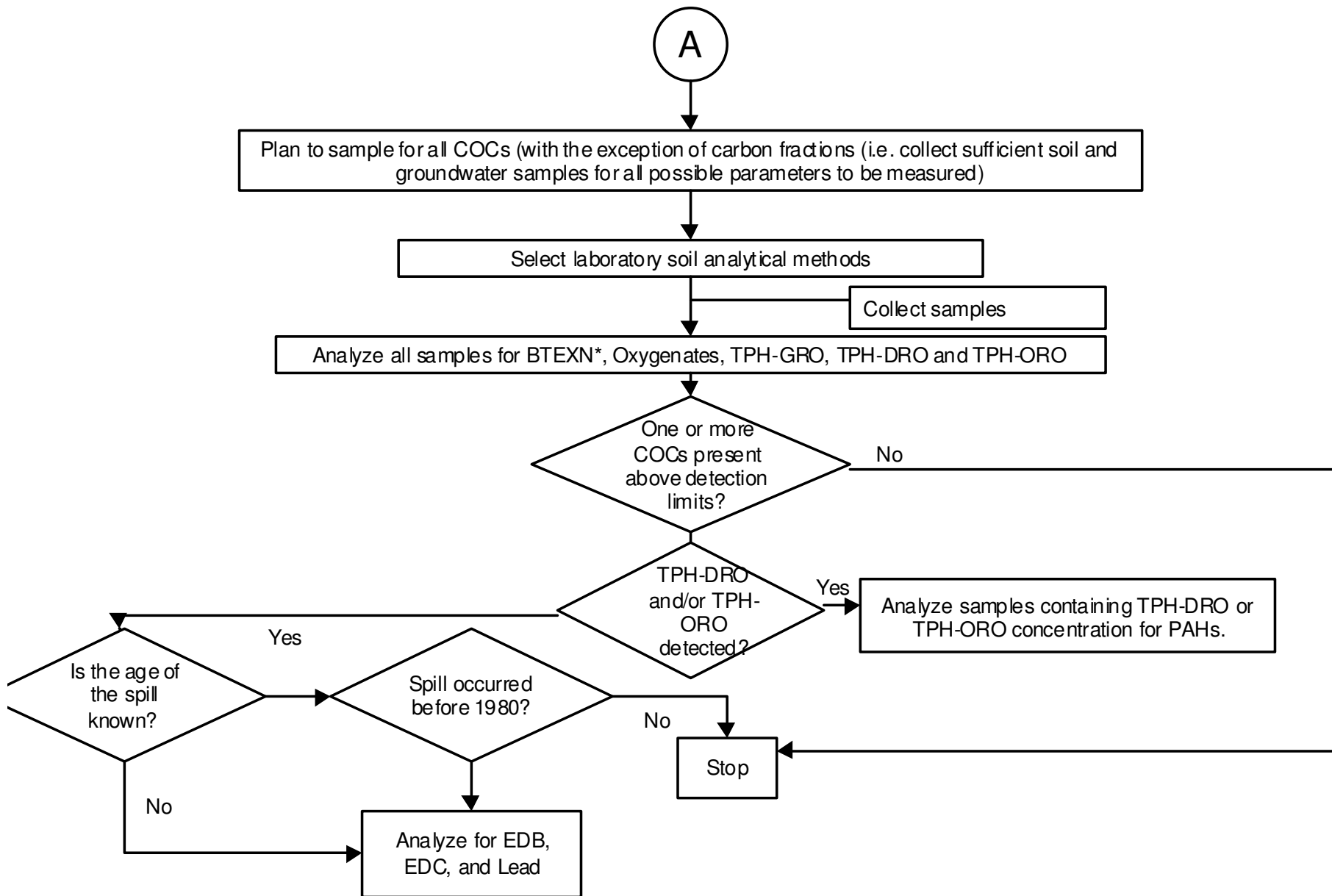**: Sufficient sample volume should be collected to allow for PAH analysis. if needed.

A

Plan to sample for all COCs (with the exception of carbon fractions (i.e. collect sufficient soil and groundwater samples for all possible parameters to be measured)

Select laboratory soil analytical methods

Collect samples

Analyze all samples for BTEXN*, Oxygenates, TPH-GRO, TPH-DRO and TPH-ORO

One or more COCs present above detection limits?

No

TPH-DRO and/or TPH-ORO detected?

Yes

Analyze samples containing TPH-DRO or TPH-ORO concentration for PAHs.

Is the age of the spill known?

Yes

Spill occurred before 1980?

No

No

Stop

No

Analyze for EDB, EDC, and Lead

FIGURE 5-1: Chemicals of Concern Selection and Analysis *(page 2 of 2)*

A caution...

- In some cases, you will want to evaluate whether it makes sense to use the new COC list, or stick with the old.
- E.g., If the tanks were removed some time ago, and/or considerable work has been done already, it may not be necessary to expand the COCs.

3. Sampling/Lab Methods

Under Old Guidance:

- Glass jars
- Lab Method 8015 (OA1/OA2)

Under New Guidance:

- Encore/Terra Core Samplers (method 5035)
- Lab Methods 8260B, 8270C (GC/MS)

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A caution…

Be thoughtful about whether to use the new methods, especially if you only need limited additional data and you have considerable data collected with the old methods.

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Another caution...

- Pay attention to what you report to the DNR and PSTIF, depending on what other activities have been conducted on the site.

- I.e., It may not be in your client's best interest to report all volatile organics.

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4. Land Use

Under Old Guidance:

- No difference in cleanup targets, regardless of land use

Under New Guidance:

- Current land use and "reasonably anticipated future use" (RAFU) must be determined & documented
- May vary for different portions of site

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What is "RAFU?"

Reasonably Anticipated Future Use --

"Future use of a site that can be predicted with a reasonably high degree of certainty given historical use, current use, development or use plans, local government planning & zoning, regional trends and community acceptance."

A misperception...

■ Cleaning up a site to non-residential standards *does not* require a "deed restriction."

■ Only the pathways of concern must be addressed - either via remediation or an AUL. If the exposure pathway is not of concern, it need not be addressed.

A caution…

- The policy on "Activity and Use Limitations" is *different* for tank sites than for other types of cleanups.

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5. Samples at UST Closure:

- See Chapter 4 in RBCA Tanks Guidance
- More samples required
- Some or all may not be paid by PSTIF, depending on results
- Groundwater assessment may be required

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A caution…

- In some locations, the need for groundwater sampling after tank removal may not be necessary
- Evaluate, then communicate with DNR and PSTIF

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6. Order of Tasks

Under Old Guidance:

- Often removed tanks first, then Site Characterization, then Corrective Action

Under New Guidance:

- May now do Tier 1 & 2 Risk Assessment first to establish site cleanup targets, then Site Characterization, then remove tanks

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A caution…

- How do you maximize PSTIF benefits for your client?
- Document evidence of release early in process with lab data

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7. Software & Reports

Under Old Guidance:

- Software was not typically used
- Report format varied more

Under New Guidance:

- Excel Forms on DNR website for organizing and formatting information
- Software for calculating site-specific targets

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A caution…

- PSTIF will not pay to recreate maps, data tables, etc. for those sites where that information already exists.
- You may have to photocopy and resubmit some of this information

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Another caution…

Be smart in how you plan and prepare reports. Just because there are many separate reports described in the Guidance Document *does not* mean you must prepare that many, and *does not* mean PSTIF will pay for that many! (We like smart, thoughtful, efficient consultants!)

8. Consultant Analysis

Under Old Guidance:

- Too many reports simply presented data
- Too few analyzed what the data meant
- Too few had a plan for NFA

Under New Guidance:

- Consultants must exercise more professional judgement
- More effort required for communications

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A caution...

- PSTIF will not pre-approve costs for activities unless the *purpose* of the work is made clear
- PSTIF will not pay for reports that only present data, and do not contain analysis

What Has NOT Changed:

- Costs must be pre-approved.
- PSTIF adjusters will be onsite.
- PSTIF will only pay for the most cost-effective solution.
- PSTIF may require owner to evaluate other alternatives than initially proposed.

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One final thought…

At some sites with "old claims," you may have enough data to do a Tier 1 or Tier 2 risk analysis to determine whether there is any need for further action, without any additional field work.

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