NPDES Permitting Process for HHC chemicals

Simplified Current Approach: *Existing* discharge

Draft for discussion purposes only **9/6/13**

START

1 **NPDES Permit application received for renewal of existing discharge**

2 Is receiving water listed as impaired for HHC chemical? (Category 4 – TMDL) or (Category 5 – 303(d) list)

YES → 9

NO → A

A

3 Is the facility considered a major facility? **OR** Do effluent or process data indicate probable discharge of HHC chemicals?

NO → 4

4 No further consideration of HHC for this permit cycle; **issue permit** with monitoring to be reviewed in next permit cycle — END

Discharges in this category are at lower-risk of discharging HHC chemicals, or are in the process of installing technology-based treatment. Such discharges include:

1. Facilities under-going an upgrade or treatment modifications
2. Non-process cooling water without biocides
3. Gravel mining w/out asphalt operations
4. Facilities with process or effluent data which indicates none of the 91 HHC chemicals are present.

5

YES → **Perform Reasonable Potential Determination**

- **If RPD = yes**: Issue permit with effluent limits and compliance monitoring (**using 40 CFR 136 methods**) . Compliance schedule and source control as necessary.
- **If RPD = no:** Issue permit, require effluent monitoring for HHC chemicals.

6 — END

9 **Is TMDL completed and approved? (Category 4A)**

YES → C

NO → B

B

10 Is the HHC chemical of concern detected in the effluent? (using 40 CFR 136 methods)

NO → 11 Reissue permit with effluent monitoring for this chemical of concern (using 40 CFR 136 methods). Re-evaluate at next permit cycle. Wait for TMDL. — END

YES → **Perform Reasonable Potential Determination**

- **If RPD = yes:** Issue permit with
  (1) final effluent limit and monitoring requirements, **or**
  (2) interim effluent limit, 10-year compliance schedule, and monitoring and compliance actions requirements, **or**
  (3) Interim and final effluent limits, 5-year compliance schedule, and monitoring and compliance actions requirements.
- **If RPD = no:** Issue permit, require effluent monitoring for HHC chemicals.

12 — END

C

13 Calculate draft permit limits to meet allocations in TMDL (these will in almost all cases be limits to meet criteria at the end-of-pipe), or without limits if chemical not present in effluent.

Can discharger meet final TMDL-based limit at permit reissuance?

YES → 17 **Issue permit** with final effluent limit and monitoring requirements — END

NO → 14 **Is compliance with final limits** expected within the allowed compliance schedule time-frame (up to 10-years)?

YES → **Issue permit** with:
(1) interim **and final** effluent limits, **5**-year compliance schedule, and monitoring and compliance actions; **or**
(2) interim effluent limit, **10**-year compliance schedule, and monitoring and compliance actions/ requirements.

18 — END

NO → 15 **Stop: Permit cannot be reissued under current use.**
•Consider administratively extending the permit; or
•Investigate **designated use change** (as per 40 CFR 131.10(g)

END

16 *Note: **Variances** are not available for use in HHC permitting while Washington remains under the federal National Toxics Rule. (Washington cannot make a rule change that changes a federal rule). Thus, in the box to the left, variances are not a consideration.*

NPDES Permitting Process for HHC chemicals

Possible Future Approach: *Existing* discharge

Draft for discussion purposes only **9/6/13**

START

1 **NPDES Permit application received for renewal of existing discharge**

Is receiving water listed as impaired for HHC chemical?
(Category 4 – TMDL) or
2 (Category 5 – 303(d) list)

NO

A

Do effluent or process data indicate probable discharge of HHC chemicals?
3

NO

No further consideration of HHC for this permit cycle; **issue permit** with monitoring to be reviewed in next permit cycle
4

END

YES

Perform Reasonable Potential Determination

Incorporate **INTAKE CREDIT** if:
(1) Discharge and intake are in the same waterbody, AND
(2) Waterbody exceeds HHC (or groundwater intake w/hydraulic connection) exceeds HHC.
(Modeled on Oregon's intake credit rule)

- **If RPD = yes**: Issue permit with effluent limits and compliance monitoring (using 40 CFR 136 methods).

- **If RPD = no:** Issue permit, require effluent monitoring for HHC chemicals.

6

END

If unable to meet limits at end of compliance schedule, then consider **VARIANCE**
7 **(See Slide #4)**

Definition of Major Facility
Any NPDES facility or activity classified as such by the Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the State Director. Major municipal dischargers include all facilities with design flows of greater than one million gallons per day and facilities with EPA/State approved industrial pretreatment programs. Major industrial facilities are determined based on specific ratings criteria developed by EPA/State.
http://cfpub.epa.gov/npdes/glossary.cfm#M

Changes from current approach are shown in dark yellow

NPDES Permitting Process for HHC chemicals

Possible Future Approach: *Existing* discharge

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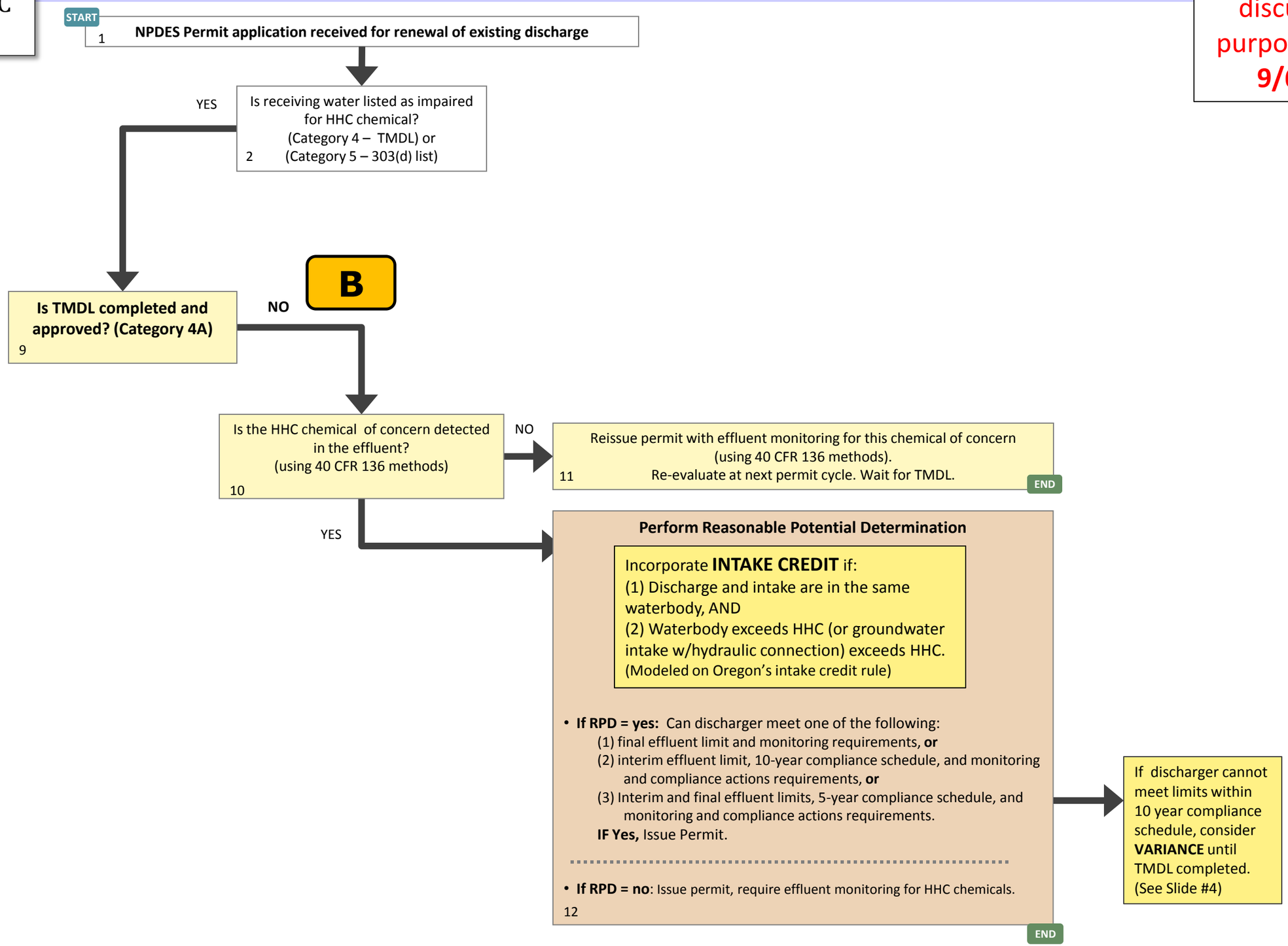


NPDES Permitting Process for HHC chemicals

Possible Future Approach: *Existing* discharge

Draft for discussion purposes only **9/6/13**

START

1 **NPDES Permit application received for renewal of existing discharge**

2 Is receiving water listed as impaired for HHC chemical? (Category 4 – TMDL) or (Category 5 – 303(d) list)

YES

C

9 **Is TMDL completed and approved? (Category 4A)**

YES

10A Do modeling or data indicate that (1) the load and persistence of the HHC, and/or (2) uncontrollable inputs **preclude meeting designated use** within the allowable variance time (up to 40 years)?

YES

10B **INVESTIGATE:**
(1) designated use change (per 40 CFR 131.10(g));
(2) Site-specific criteria (e.g., different risk level or hazard quotient (?) for a specific waterbody)
(3) State-specific criteria (e.g., different risk level or HQ (?) for a specific pollutant, for statewide application).

10C If (1), (2) , or (3) is approved, remove waterbody from 303(d) list if new WQS are attained, or keep on list and use compliance schedules or variances to attain new WQS.

RCW 90.48.605: The department shall amend the state water quality standards to authorize compliance schedules in excess of ten years for discharge permits issued under this chapter that implement allocations contained in a total maximum daily load under certain circumstances. Any such amendment must be submitted to the United States environmental protection agency under the clean water act. Compliance schedules for the permits may exceed ten years if the department determines that:
(1) The permittee is meeting its requirements under the total maximum daily load as soon as possible;
(2) The actions proposed in the compliance schedule are sufficient to achieve water quality standards as soon as possible;
(3) A compliance schedule is appropriate; and
(4) The permittee is not able to meet its waste load allocation solely by controlling and treating its own effluent.
[2009 c 457 § 1.]
3

NO

13 Calculate draft permit limits to meet allocations in TMDL (these will in almost all cases be limits to meet criteria at the end-of-pipe), or without limits if chemical not present in effluent.
Can discharger meet final TMDL-based limit at permit reissuance?

YES

17 **Issue permit** with final effluent limit and monitoring requirements

END

NO

14 **Is compliance with final limits** expected within the allowed compliance schedule time-frame (up to **10-years**)?

YES

18 **Issue permit** with:
(1) interim **and final** effluent limits, **5**-year compliance schedule, and monitoring and compliance actions; **or**
(2) interim effluent limit, **10**-year *(up to **20 years** if RCW 90.48.605 is satisfied)* compliance schedule, and monitoring and compliance actions/ requirements.

END

NO

14A Does discharger meet legislative language for compliance schedule in excess of 10 years? **(See: RCW 90.48.605)** **AND** Can discharger meet limits within allowed compliance time frame?

YES

NO

16 **VARIANCE PATHWAY**: Administratively extend permit (timeline is critical) and proceed to variance process, using factors listed in 40 CFR 131.10(g).
•Identify actions to be taken to get known and identifiable reductions
•Determine variance pathway (facility or waterbody)
•Determine required time (up to 40 years)
•Modify WQS to add the variance, submit to EPA for approval.
<u>If approved by EPA</u>: Issue permit with effluent limits, monitoring, and additional pollution control requirements. Remove waterbody from 303(d) Category 5 and move to Category **4(b).**

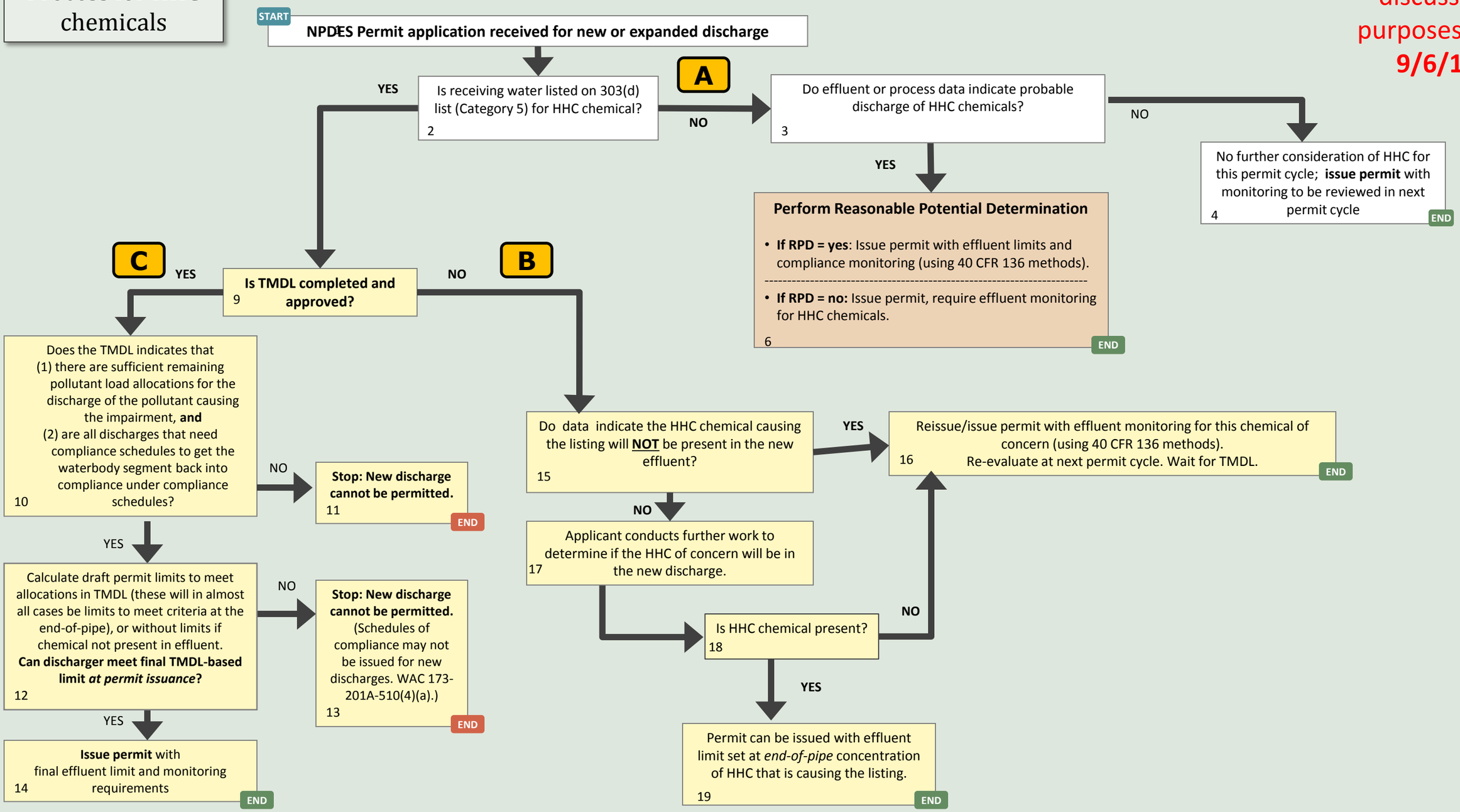
END

<u>If NOT approved by EPA</u>:
Go to "INVESTIGATE" (See Box 10B).

NPDES Permitting Process for HHC chemicals

Simplified Current Approach: *New or expanded* discharge

Draft for discussion purposes only
9/6/13



NPDES Permitting Process for HHC chemicals

Possible Future Approach: *New or expanded* discharge

Draft for discussion purposes only **9/6/13**

START

NPDES Permit application received for new or expanded discharge

Is receiving water listed on 303(d) list (Category 5) for HHC chemical?
2

NO

A

Do effluent or process data indicate probable discharge of HHC chemicals?
3

NO

No further consideration of HHC for this permit cycle; **issue permit** with monitoring to be reviewed in next permit cycle
4

END

YES

Perform Reasonable Potential Determination

Incorporate **INTAKE CREDIT** if:
(1) Discharge and intake are in the same waterbody, AND
(2) Waterbody exceeds HHC (or groundwater intake w/hydraulic connection) exceeds HHC.
(Modeled on Oregon's intake credit rule.)

- **If RPD = yes**: Issue permit with effluent limits and compliance monitoring (using 40 CFR 136 methods).

- **If RPD = no:** Issue permit, require effluent monitoring for HHC chemicals.

6

END

WAC 173-201A-510(4)(a)
"…schedules of compliance may not be issued for new discharges."

Changes from current approach are shown in dark yellow

NPDES Permitting Process for HHC chemicals

Possible Future Approach: *New or expanded* discharge

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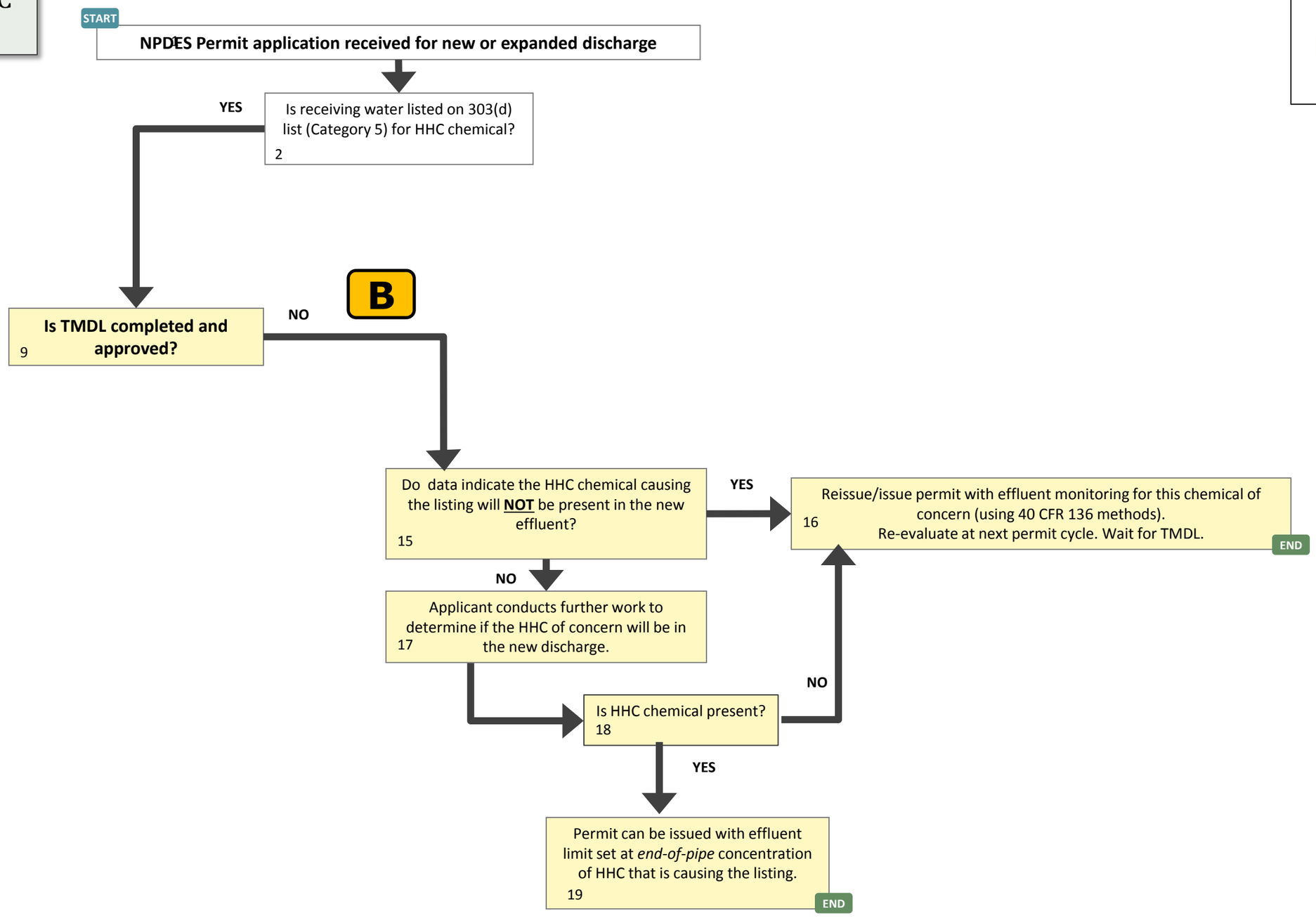
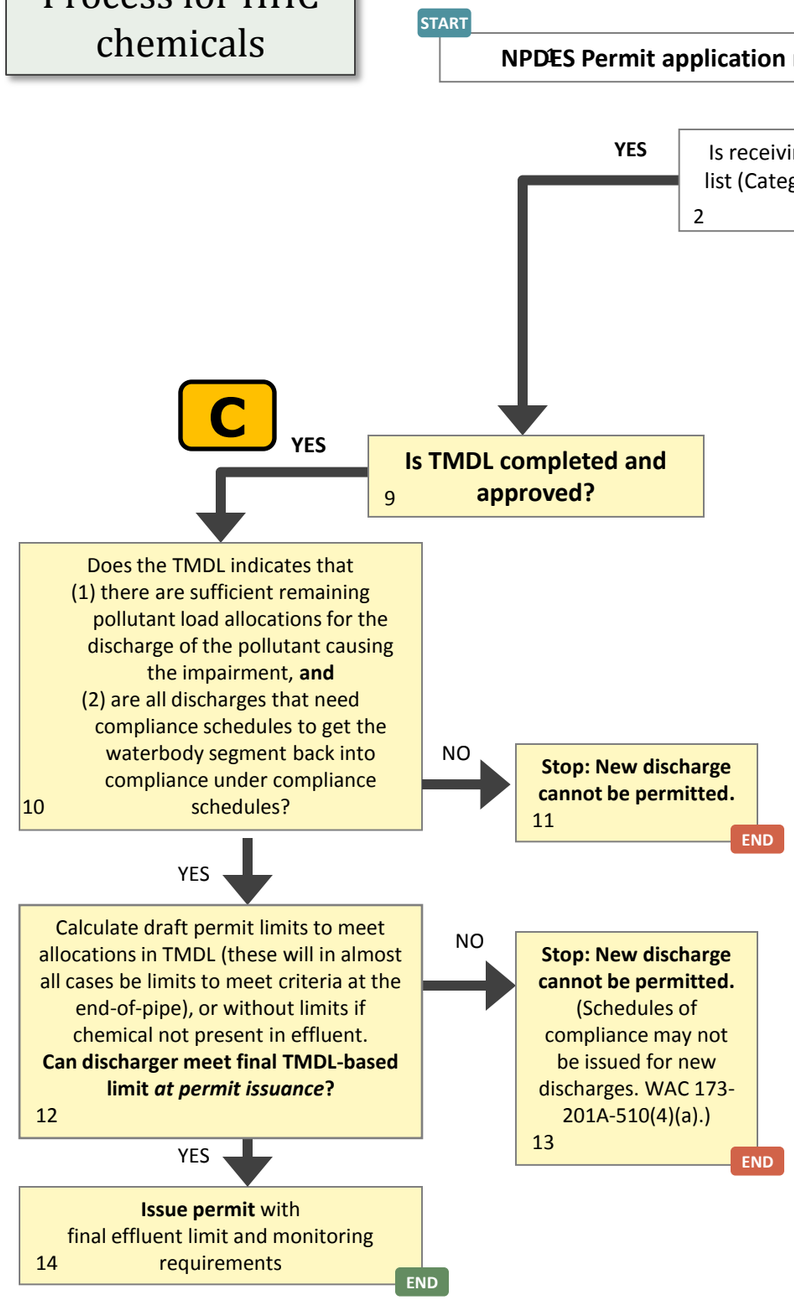


NPDES Permitting Process for HHC chemicals

Possible Future Approach: *New or expanded* discharge

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