

Chemical Reporting System Architecture Outline

Components:

1. Public-facing pre-reporting website. A website that guides the regulated business customer to the appropriate reporting forms by presenting the customer with a series of pick list and menu choices to determine what they need to report on. Also provides information on current regulations & regulated chemicals.
2. Authentication component. Single log-in and account management for chemical reporting by the regulated business customer. Ability to update and maintain user account with contact and business information. This component may leverage an existing authentication service.
3. Forms platform. Software or service that allows for development of online forms including electronic signature, document upload, and payment processing where fees are collected. This component presents a menu of web-based dynamic chemical reporting forms available to the regulated business customer. Forms are pre-populated where applicable with customer account information.
 - a. File upload option. Functionality that allows a standardized file to be uploaded by regulated business customer to provide form information where feasible.
 - b. Web service. Ability that allows a regulated business customer to transmit data via a web service.
4. Forms Database. Database that stores data from online forms.
 - a. Administrative console provided to allow state customer to QA/QC data before data is loaded to local agency databases. Ability to monitor regulated business customer reporting activity and automate reminders on reporting deadlines.
5. Extract Transform Load (ETL) process from forms database to local Agency databases or vice versa to allow local database values to pre-populate forms.
6. Local Agency databases. Local Agency databases that store chemical reporting data. Data standardization required to facilitate chemical reporting data warehouse.
7. ETL process from local Agency databases to data warehouse.
8. Data warehouse. Data extracted, transformed, and loaded from local agency databases to data warehouse to provide the state and the public a role-based unified view of chemical reporting activities across the state.
 - a. Administrative console to allow the state to edit data.
9. State chemical discovery website. Website that provides the state with the ability to query chemical reporting activities by several criteria including the ability to search activities via a map interface.
10. Public chemical discovery website. Website that provides the public with the ability to query chemical reporting activities by several criteria including the ability to search activities via a map interface.
11. State Open Data Portal. Chemical data made available through the State's Open Data Portal.

Additional requirements:

1. Master chemical data list/inventory & governance of list
2. Data warehouse data standard to support state and public discovery
3. Local agency web database applications (or web interface to forms datastore)

- a. Minimum data standard per local Agency database to facilitate ETL

Options:

1. MS Dynamic CRM to provide customer portal, authentication, account management, forms, payment processing.
2. VIC to provide customer portal, authentication, account management, forms, payment processing.

Programs to onboard on to forms platform:**1. Registration of Air Contaminant Sources and Control of Hazardous Air Contaminants (ANR)**

Fees: Yes

Program Summary: See Attachment B at 1

2. National Point Source Discharge Elimination (ANR)

Fees: Yes

Program Summary: See Attachment B at 3

3. Public Notice of Wastewater Discharges (Act 86) (ANR)

Fees: No

Program Summary: See Attachment B at 11

4. Indirect Discharge Program (ANR)

Fees: Yes

Program Summary: See Attachment B at 13

5. Underground Injection Control Program (ANR)

Fees: Yes

Program Summary: See Attachment B at 15

6. Residual Waste and Emerging Contaminants Program (ANR)

Fees: Yes

Program Summary: See Attachment B at 18

7. Spills Management Program (ANR)

Fees: No

Program Summary: See Attachment B at 22

8. Contaminated Sites Program (ANR)

Fees: No

Program Summary: See Attachment B at 22

9. Underground Storage Tank Program (ANR)

Fees: Yes

Program Summary: See Attachment B at 25

10. Pollution Prevention Act/Toxics Use Reduction Act (ANR)

Fees: Yes

Program Summary: See Attachment B at 27

11. Pesticide Control Program (Sales & Use) (AAFM)

Fees: Yes

Program Summary: See Attachment B at 30

12. Emergency Planning and Community Right-to-Know Act/Tier II (DPS)

Fees: Yes

Program Summary: See Attachment B at 33

13. Asbestos Control (DOH)

Fees: Yes

Program Summary: Vermont-licensed asbestos abatement contractor must generally notify DOH within 10 working days prior to beginning asbestos abatement activities and submit visual and air clearance documentation to DOH within 30 days of completion of the work.

14. Lead Control (DOH)

Fees: Yes

Program Summary: Vermont-licensed lead abatement contractor must notify DOH within 10 working days prior to beginning lead removal activities and submit documentation of appropriate waste disposal within 60 days of completion of the work. Owners of a pre-1978 residential rental housing unit or child care facility must submit an annual Essential Maintenance Practices Compliance Statement.

Programs outside of forms platform but within pre-reporting guidance and public data warehouse:**1. Safe Drinking Water Program; Water Supply Program (ANR)**

Fees: Yes

Program Summary: See Attachment B at 36

2. Hazardous Waste Management Program (ANR)

Fees: Yes

Program Summary: See Attachment B at 39

3. Solid Waste Management Program (ANR)

Fees: Yes

Program Summary: See Attachment B at 46

4. Chemicals of High Concern in Products (Act188) (DOH)

Fees: Yes

Program Summary: See Attachment B at 49

5. Pesticide Control Program (Product Registration) (AAFMD)

Fees: Yes

Program Summary: See Attachment B at 30

6. Groundwater Chemistry Database (DOH)

Fees: No

Program Summary: Laboratories that are certified to conduct testing of potable water supplies must submit the results of groundwater analyses (naturally occurring and man-made chemicals) to DOH and ANR.