The Benefits of an Integrated Data Platform

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Acronyms

AERO – Air Emissions Reporting Online

CAERS – Combined Air Emissions Reporting System

CMPL – IBEAM Compliance Modules

ED – Emissions Data

EPA – Environmental Protection Agency

IBEAM – Internet-Based Enterprise Application Management

IMPAQ – Information Management Programs for Air Quality

NC – North Carolina

NCDAQ – North Carolina Division of Air Quality

QA – Quality Assurance

SLT – States, Local Programs and Tribes

TV – Title V

Overview

- What is IBEAM?
- What Air Quality Modules Are Contained in IBEAM?
- How IBEAM Makes Daily Processes More Efficient?
- Integrating IBEAM with CAERS for More Options for Facility Reporting

What is IBEAM?

- Developed Information Management Programs for Air Quality (IMPAQ) in the late 1990's, later changed to Internet-Based Enterprise Application Management (IBEAM)

- Framework of web-based applications and tools to support the mission critical work (currently supports 8 Divisions)

- On April 29, 2002, IBEAM went into production

- IBEAM is 21 years old this year

What is IBEAM?

- First Five Modules Developed Were:
  - Facilities (facility identifiers and information),
  - Fees (invoicing and related permit information),
  - Emission Sources (sources and control devices),
  - Emission Data (ED) (emission inventory data) and
  - Air Emissions Reporting Online (AERO) (external facility emission inventory data submittal).

What is IBEAM?

- IBEAM Statistics:
  - Processed
    - 33,000 permit related applications since 2002
    - almost 28,000 complaints since 2003
    - over 31,000 inspections on facilities since 2008
    - over 23,000 service station inspections since 2010
  - Supported by 5 NCDAQ staff members
- IBEAM Includes:
  - 19 modules for NCDAQ including two external modules
  - 475 custom IBEAM reports and letters
  - Auto-saves specific reports to Laserfiche document repository
  - Data for submittals to EPA programs

What AQ Modules are contained in IBEAM?

- **Air Emissions Reporting Online** (**AERO**) - external module for electronic reporting of emissions by permitted facilities.
- **Ambient Monitoring** - collects ambient data from monitoring stations
- **Budget** - invoicing/administration functions
- **Compliance** (**CMPL**) - includes **Actions**, **Complaints**, **Source Test** and **Violations**
- **Emission Data** (**ED**) - internal module for emission inventory data entry and review
- **Emission Sources** - emission source and control device information
- **Facilities** - description, status, identifiers, location and contact information
- **Fees** - facility account tracking for invoicing and related permit information
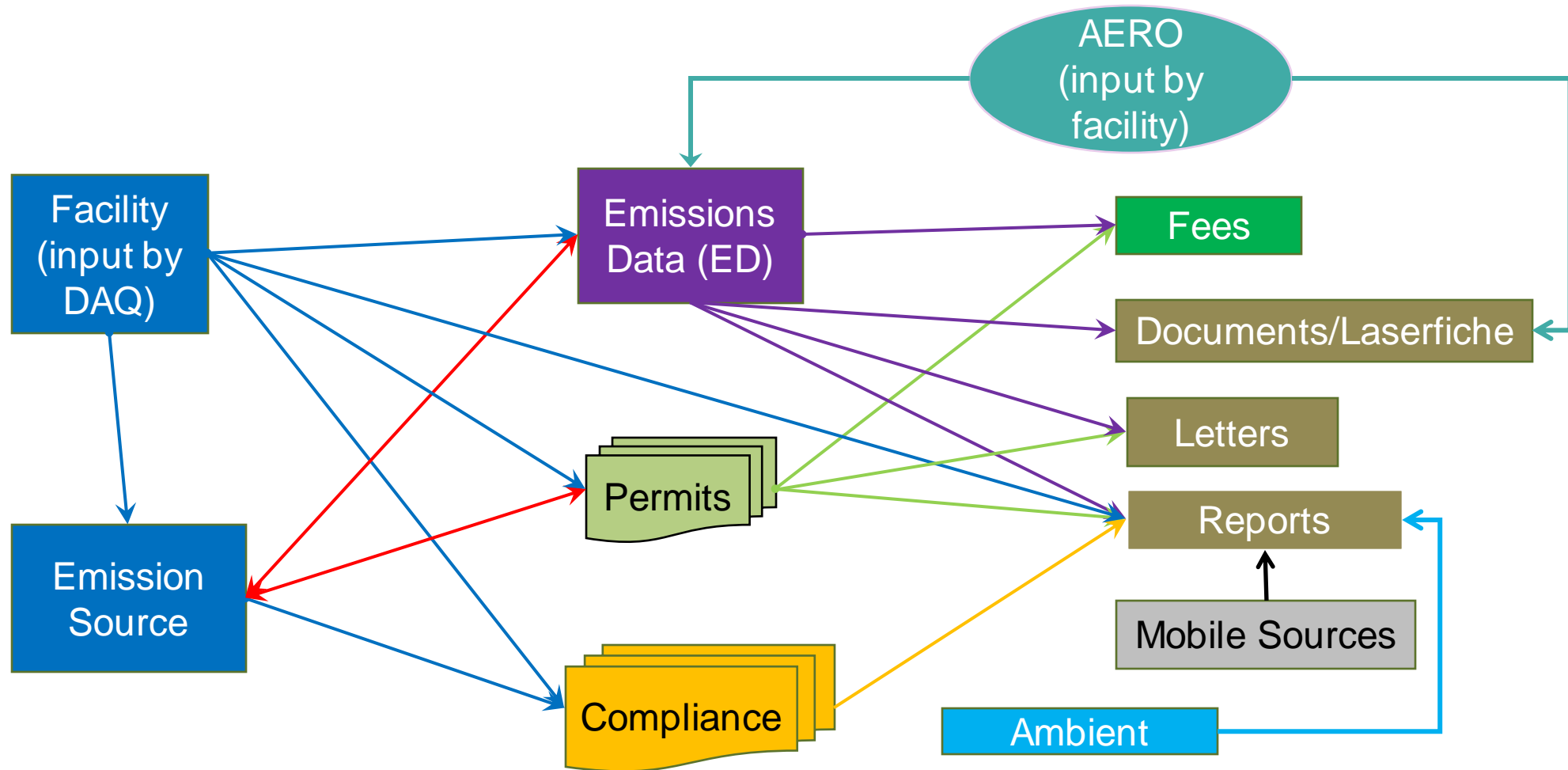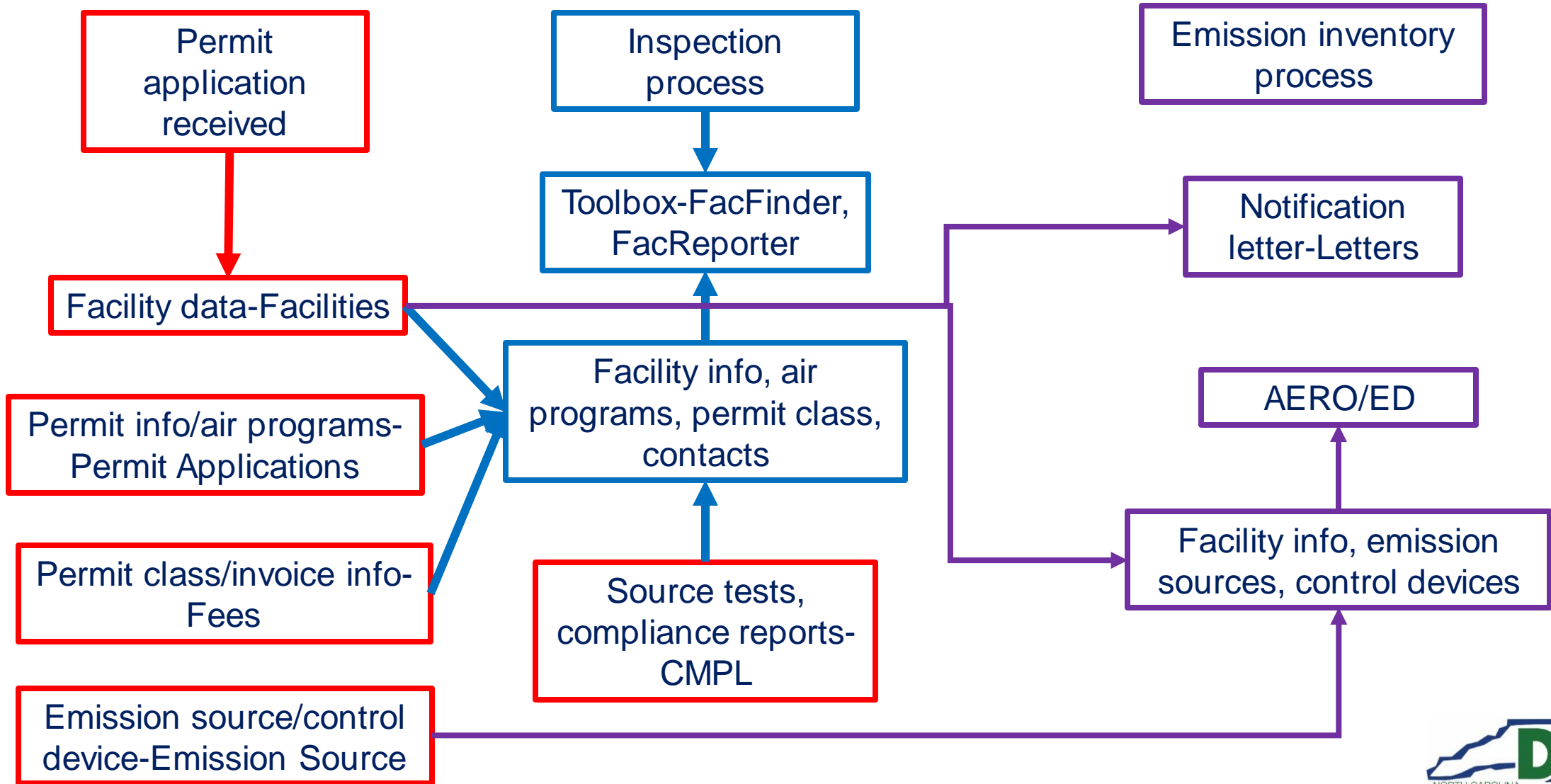
What AQ Modules are contained in IBEAM?

- **Letters** - generates routine letters
- **Mobile Sources** - inspections of gas stations, etc.
- **Permit Applications** - tracks application/modification receipt/progress, air program information
  - **Permit Writer** - generates permit template for non-TV permit
  - **Title V Equipment Editor** - creates list of emission sources in TV permits
- **Reports** - reports for QA, tracking and data requests
- **Toolbox** - commonly used forms and information
- **Odor Reporting Tool for New Hanover/Brunswick** - external module for tracking odor complaints in these counties

How are IBEAM Modules Connected

How IBEAM Makes Daily Processes More Efficient

Permit application received

Inspection process

Emission inventory process

Toolbox-FacFinder, FacReporter

Notification letter-Letters

Facility data-Facilities

Facility info, air programs, permit class, contacts

AERO/ED

Permit info/air programs-Permit Applications

Permit class/invoice info-Fees

Source tests, compliance reports-CMPL

Facility info, emission sources, control devices

Emission source/control device-Emission Source

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How IBEAM Makes Daily Processes More Efficient

Sharing Data Between Modules and Being Web-based, IBEAM Has:

- Virtually eliminated double entry of data
- Promoted consistency in identifiers and descriptions
- Promoted consistency in work products across the state
- Simplified tracking compliance and other due dates, and invoicing

Integrating IBEAM with CAERS

Potentially Beneficial to NCDAQ and Our Permitted Facilities
- Offers NC facilities that have plants in multiple states the option to enter data for all facilities into one data collection system

However, The Challenges Are:
- Automated data transfer to SLTs needed
- Creation of additional external module to ingest and distribute data in IBEAM
- Additional pollutants collected by NC

Questions?

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