IMPACT

- Developed through a collaboration with the State of Ohio Environmental Protection Agency (Ohio EPA).

- Designed to allow the Air Quality Division (AQD) of the Wyoming Department of Environmental Quality to:
  - Better manage the flow of information and data across all of its programs,
  - Provide better service to Industry and the Public,
  - Improve data quality, and
  - Offer increased transparency between the Division, Industry, and the Public.

- IMPACT represents a new way of conducting business electronically for the State - allowing the Division to shift its resources from performing data entry to data analysis.
Architecture of the IMPACT System

- **IMPACT Internal Data System**
  - airimpact.wyo.gov

- **IMPACT Industry Portal**
  - openair.wyo.gov

- **Open Air (Public Website)**
  - openair.wyo.gov
Benefits/Efficiency Gains

- Increase transparency of information within the AQD, between the AQD and regulated community, and to the public.
- Access to data, public records, and other information about Division-permitted facilities.
- Ability to submit data electronically, reducing/eliminating the need for paper.
- CROMERR compliant e-signature and electronic submission allows authorized users to submit from anywhere in the world (with an Internet connection).
Benefits/Efficiency Gains

- Validation of data submissions reduce requests for additional information.

- Minimize repetitive data entry for reports, emissions inventories, and permit applications.
Benefits/Efficiency Gains

- Minimize air quality administrative permit processing and data entry times.
  - NSR permit issuance decreased by over 40 days when application is submitted electronically.
  - NSR waiver (authorization letter) issuance decreased by over 14 days when application is submitted electronically.
- Increase collaboration and communication with the Ohio EPA, Gila River Indian Community Air Quality Department (GRIC), and the Maricopa County Air Quality Department (MCAQD).
High Level Achievements

IMPACT Portal Submissions by Quarter
High Level Achievements

Percentage of Portal Submitted NSR and TV Permitting Actions
High Level Achievements

Percentage of Stack Test Portal Submissions

- Qtr1
  - 2015
- Qtr2
  - 2016
- Qtr3
  - 2017
- Qtr4
  - 2018
High Level Achievements

Percentage of Compliance Report Portal Submissions

<table>
<thead>
<tr>
<th>Year</th>
<th>Qtr4 2014</th>
<th>Qtr1 2015</th>
<th>Qtr2 2015</th>
<th>Qtr3 2015</th>
<th>Qtr4 2015</th>
<th>Qtr1 2016</th>
<th>Qtr2 2016</th>
<th>Qtr3 2016</th>
<th>Qtr4 2016</th>
<th>Qtr1 2017</th>
<th>Qtr2 2017</th>
<th>Qtr3 2017</th>
<th>Qtr4 2017</th>
<th>Qtr1 2018</th>
<th>Qtr2 2018</th>
<th>Qtr3 2018</th>
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<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
</tbody>
</table>
Lessons Learned

- Resistance to change/culture differences.
  - Technology not the issue; getting buy-in from staff is where projects either succeed or fail.
  - Fierce ownership of existing systems; not wanting to let go of those systems.

- Good customer service is necessary to assist Industry in learning a new system - a varied multimedia approach is essential.

- IT hosting challenges are difficult to resolve at times.

- To resolve system related and procedural issues – Developed a committee of technical staff, from each program within AQD.
Transferability/Partnerships

- Developed through a collaboration with the Ohio EPA.
- AQD recently entered into a partnership with both the GRIC and the MCAQD.
- Each entity’s air data system has the same foundation (source code).
- Primary goal of the newly-formed partnership is to share ideas for further streamlining business processes and resources.
Contact Information

IMPACT Project Manager
Adam Deppe
Email: adam.deuppe@wyo.gov
Phone: 307-777-6088
New Features – Permit Tables

- New Permit Table Layout - Clicking the *Permits* option from the Facility Information page now loads NSR permits/waivers (authorization letters) and Title V Permits into two separate tables. Clicking the Workflow Diagram link will show the permitting workflow progress for that particular permit.
## New Features – NSR Permit Table

### NSR Permits/Waivers

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Legacy Permit Number</th>
<th>Application Number(s)</th>
<th>Action</th>
<th>Reason(s)</th>
<th>Start Date</th>
<th>End Date</th>
<th>Public Notice Document</th>
<th>Permit Analysis Document</th>
<th>Public Comments</th>
<th>Final Permit Doc</th>
</tr>
</thead>
</table>
# New Features – TV Permit Table

## Title V Permits

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Legacy Permit Number</th>
<th>Application Number(s)</th>
<th>Reason(s) ▲</th>
<th>Start Date</th>
<th>End Date</th>
<th>Public Notice Document</th>
<th>Draft Statement of Basis Document</th>
<th>Draft Title V Permit Document</th>
<th>Public Comments</th>
<th>Date Permit Sent to EPA</th>
</tr>
</thead>
</table>
New Features – Permit Workflow
New Features – RP Calculation

- Facility Inventory Calculation for Release Points (RP) - Users now only enter values for a vertical or horizontal release point for Stack Diameter (ft) and Exit Gas Flow Velocity (ft/s). IMPACT calculates the Exit Gas Flow Rate (acfm).

**Release Point Type Specific Information**

<table>
<thead>
<tr>
<th>* Base Elevation (ft):</th>
<th>3333.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feet above sea level</td>
<td></td>
</tr>
<tr>
<td>* Stack Height (ft):</td>
<td>215.00</td>
</tr>
<tr>
<td>Feet above base elevation</td>
<td></td>
</tr>
<tr>
<td>* Exit Gas Velocity (ft/s):</td>
<td>51.73</td>
</tr>
<tr>
<td>* Stack Diameter (ft):</td>
<td>1.65</td>
</tr>
<tr>
<td>* Exit Gas Temp (F):</td>
<td>385.00</td>
</tr>
</tbody>
</table>

Exit Gas Flow Rate (acfm): 6636.69

Flow rate is calculated by IMPACT: 
3.1415927 * Velocity * 60 * (Diameter/2)^2
New Features – NSR Permit & EU

- NSR Application and Emission Unit Updates
  - Affects Tank, Pneumatic Equipment, and Fugitive Emissions Units

Emission Unit Type Specific Information

Fugitive Emission Type - Fugitive Leaks at Oil and Gas Sites:

<table>
<thead>
<tr>
<th>Component</th>
<th>Gas</th>
<th>Heavy Oil (≤20° API)</th>
<th>Light Oil (&gt;20° API)</th>
<th>Water/Condensate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Flanges</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Open Ended Lines</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pump Seals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Valves</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Other</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Just Released – Open Air

Open Air – IMPACT Public-Facing Website

- Launched November 5, 2018
- openair.wyo.gov

The WDEQ Air Quality IMPACT Public Website Disclaimer:

This tool allows you to search the Wyoming Air Quality Division’s IMPACT database. Improper or incorrect use of this tool may cause unexpected or inaccurate results. Although every attempt is made to ensure that the information contained in the database is accurate, the Wyoming Department of Environmental Quality (DEQ) is not responsible for any loss, consequence, or damage resulting directly or indirectly from reliance on the accuracy, reliability, or timeliness of the information that is contained in this database. Users assume the entire risk of using the data contained in IMPACT. DEQ is providing this data "as is;" and no warranty expressed or implied is made, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will DEQ be liable to any user or third party for any direct, indirect, incidental, consequential, special, or exemplary damages or lost profit resulting from any use or misuse of this data. Additional information concerning the accuracy and appropriate uses of this data may be obtained from the point of contact for the IMPACT database. The point of contact can be found at:
http://deq.wyoming.gov/aqd/impact-system/
Just Released - OpenAir

Facility Detail Page in OpenAir

Facility ID: F026263
Facility Name: AQD Test Facility
Company Name: Wyoming Air Quality Division
District: District 1
County: Laramie
Version Start Date: 10/22/2018
Version End Date: Current

Facility Information

Facility ID: F026263
Facility Name: AQD Test Facility
Facility Description: 

Facility Class: Title V
Facility Type: Pipeline Station
Associated Monitor: MGRP000063
Group ID: Operating Status: Operating

Location

ID: 109103
Physical Address: Section 22, 12N, 68W
City: Laramie
County: Laramie
Lat/Long: 41.000000-105.000000
PLSS: S22-T12N-R08W
Effective Date: 9/15/2014

Printable view
Export to excel
Just Released - OpenAir

Stack Test Page in OpenAir

<table>
<thead>
<tr>
<th>Facility ID</th>
<th>Facility Type</th>
<th>Facility Name</th>
<th>Operating Status</th>
<th>Version Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>F026263</td>
<td>Pipeline Station</td>
<td>AQD Test Facility</td>
<td>Operating</td>
<td>9/6/2018</td>
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<tr>
<td></td>
<td></td>
<td>Company Name: Wyoming Air Quality Division</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stack Test ID</th>
<th>AFS ID</th>
<th>EUs</th>
<th>Stack Test Method</th>
<th>Failed Pollutants</th>
<th>Test Date(s)</th>
<th>Date Scheduled</th>
<th>Date Received</th>
<th>Date Reviewed</th>
<th>Conformed to Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>STCK019650</td>
<td>E0L001</td>
<td>Portable Analyzer (NOx &amp; CO)</td>
<td>2/2/2015</td>
<td>2/5/2015</td>
<td>3/16/2015</td>
<td>Yes</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>