# MPSC Pipeline Safety Database Application

Michigan Public Service Commission

Cindy Creisher

October 8, 2019



# Agenda



- Lean Process Improvement Project and OPS Legacy System Review
- Pipeline Safety System Development
- Salesforce Pipeline Safety System Demonstration
- System Enhancements & Maintenance
- Inspection Forms and Questions

# Process Improvement Project







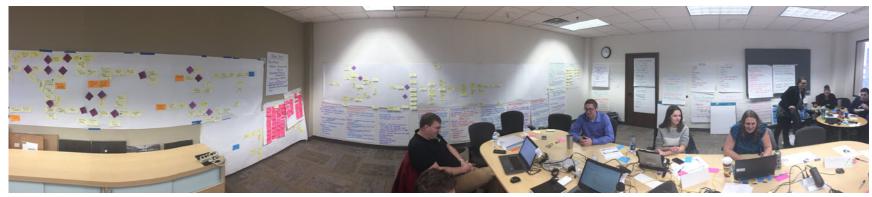
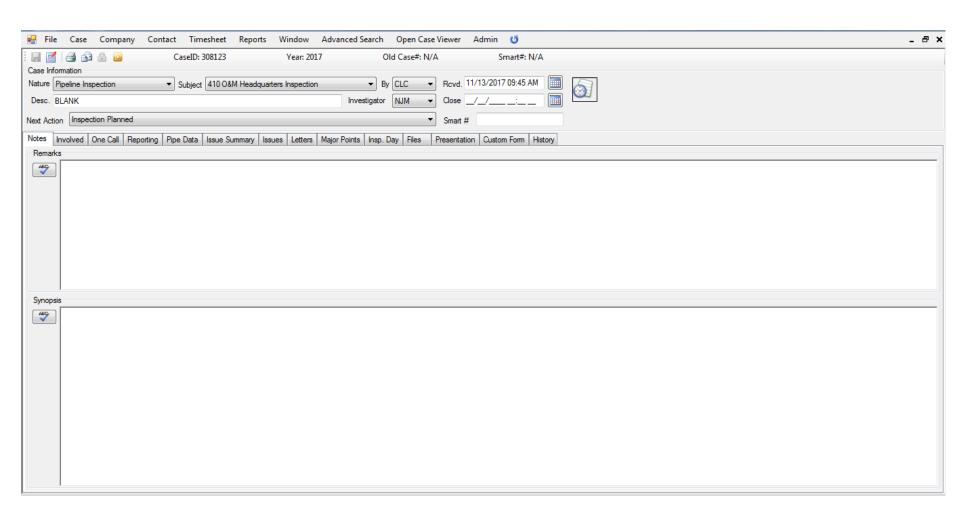


Photo credit: Tim Wolf





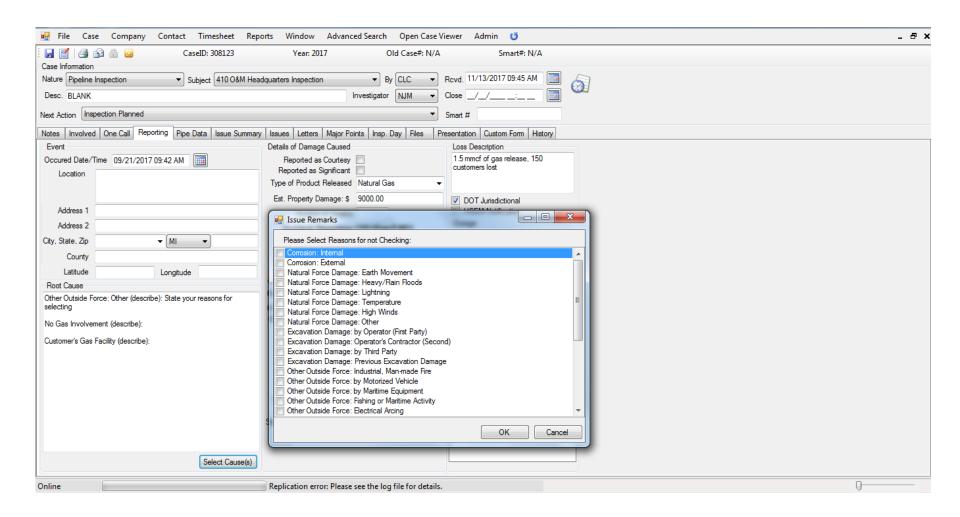


|                                | Contact Timesheet Repor          | ts Window Advanced Search Ope           | en Case Viewer Admin 🔰         |                           |             |         | _ 8 : |
|--------------------------------|----------------------------------|---|--------------------------------|---------------------------|-------------|---------|-------|
| i 🖫 📝   🐴 😭 🔒 🧧                | CaseID: 308123                   | Year: 2017 Old Cas                      | se#: N/A Smart#: N             | I/A                       |             |         |       |
| Case Information               |                                  |   |                                | (T1777700)                |             |         |       |
| Nature Pipeline Inspection     | ▼ Subject 410 O&M Heado          |   |                                | <u> </u>                  |             |         |       |
| Desc. BLANK                    |                                  | Investigator NJM                        | ▼ Close _/_/:                  | _                         |             |         |       |
| Next Action Inspection Planned |                                  |   | ▼ Smart #                      |                           |             |         |       |
| Notes Involved One Call Re     | eporting Pipe Data Issue Summary | Issues Letters Major Points Insp. Day F | Files Presentation Custom Form | History                   |             |         |       |
| Involved Companies             |                                  |   |                                |                           |             |         |       |
| Add Company Remov              | re Company                       |   |                                |                           |             |         |       |
| Role In This Case              | Name                             | Company Function                        | Region                         |                           | Closed Date | Remarks |       |
| Pipeline Operator              | Test AnyGas Company              |   | Anywhere                       |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
| Involved Contacts              |                                  |   |                                |                           |             |         |       |
| Add Contact Remo               | ve Contact                       |   |                                |                           |             |         |       |
| Role In This Case              | Verbally Contacted               | Name                                    | Represents                     | Job Title                 | Company ID  | Remarks |       |
| Company Official               | verbally contacted               | Name<br>Nathan Miller                   | MichCon                        | Assistant Safety Engineer | 116212      | Nemarks |       |
| Company Official               |                                  | INAUTIATI WIIIEF                        | MICHCOTI                       | Assistant Safety Engineer | 110212      |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
|                                |                                  |   |                                |                           |             |         |       |
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|                                |                                  |   |                                |                           |             |         |       |

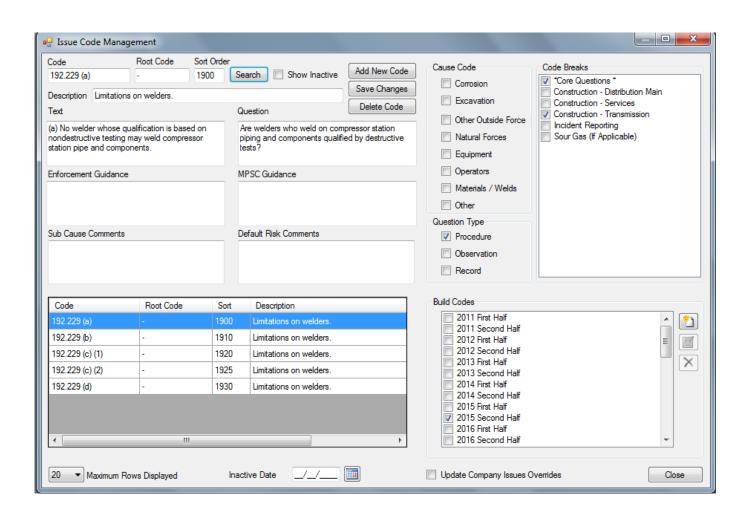


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|---|---|----------------------------------|-------|
| CaseID: 308123  | Year: 2017 Old Case#: N/A                                   | Smart#: N/A                      |       |
| Case Information  |   | (mm)                             |       |
| Nature Pipeline Inspection ▼ Subject 410 O&M He               | eadquarters Inspection   By CLC   CLC                       | Revd. 11/13/2017 09:45 AM        |       |
| Desc. BLANK   | Investigator NJM ▼  | Close _/_/                       |       |
| Next Action Inspection Planned                                | •   | Smart #                          |       |
| Notes Involved One Call Reporting Pipe Data Issue Summa       | ary Issues Letters Major Points Insp. Day Files F           | Presentation Custom Form History |       |
| Event   | Details of Damage Caused                                    | Loss Description                 |       |
| Occured Date/Time 09/21/2017 09:42 AM                         | Reported as Courtesy  | 1.5 mmcf of gas release, 150     |       |
| Location  | Reported as Significant                                     | customers lost                   |       |
|   | Type of Product Released Natural Gas  ▼                     | ,                                |       |
|   | Est. Property Damage: \$ 9000.00                            | ▼ DOT Jurisdictional             |       |
| Address 1   | Number of Deaths  | HSEM Notification                |       |
| Address 2   | Incident Reporting (191/Gas/LNG)                            | Outage                           |       |
| City, State, Zip ▼ MI ▼                                       | In-patient Hospitalization                                  | Outage was experienced           |       |
| County  | ESD of an LNG Facility                                      | Duration Years ▼                 |       |
| Latitude Longitude  | Accident Reporting (195/HV/HVG                              | NRC                              |       |
| Root Cause  | a) Explosion or fire not intentionally set)                 | Notify Date/                     |       |
| Other Outside Force: Other (describe): State your reasons for | (b) Barrel of product lost (#) 0.00                         | Number                           |       |
| selecting   | (c) Barrels of HVL, lost per day 0.00                       | Rescind/_/_                      |       |
| No Gas Involvement (describe):                                | (d) Bodily harm resulting in:                               | Event                            |       |
| Customer's Gas Facility (describe):                           | (1) Loss of Consciousness 0                                 | Fire                             |       |
| customers das radiity (describe).                             | (2) Injured carried from scene 0                            | Explosion                        |       |
|   | (3) Required Medical Treatment 0                            | Spill Road                       |       |
|   | (4) Unable to perform normal 0 duties beyond the day of the | News Media                       |       |
|   | accident.   | ☐ Bldg Evac.                     |       |
|   | .e) Polluted stream, river, lake, reservoir)                | ☐ Injured                        |       |
|   |   |                                  |       |
|   | Safety Related Condition Report                             |                                  |       |
|   | PHMSA Incident Report                                       |                                  |       |
| Select Cause(s)   |   |                                  |       |
| Select Cause(s)   |   |                                  |       |

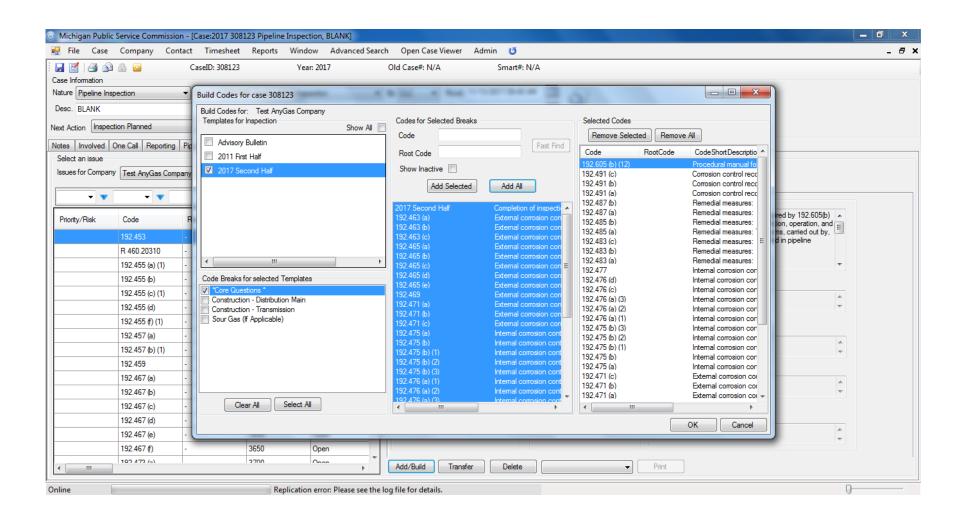




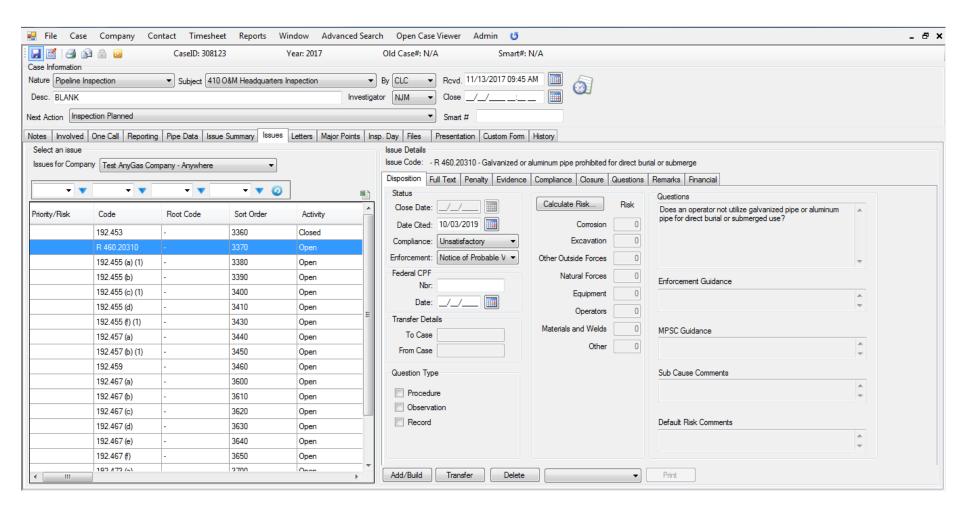












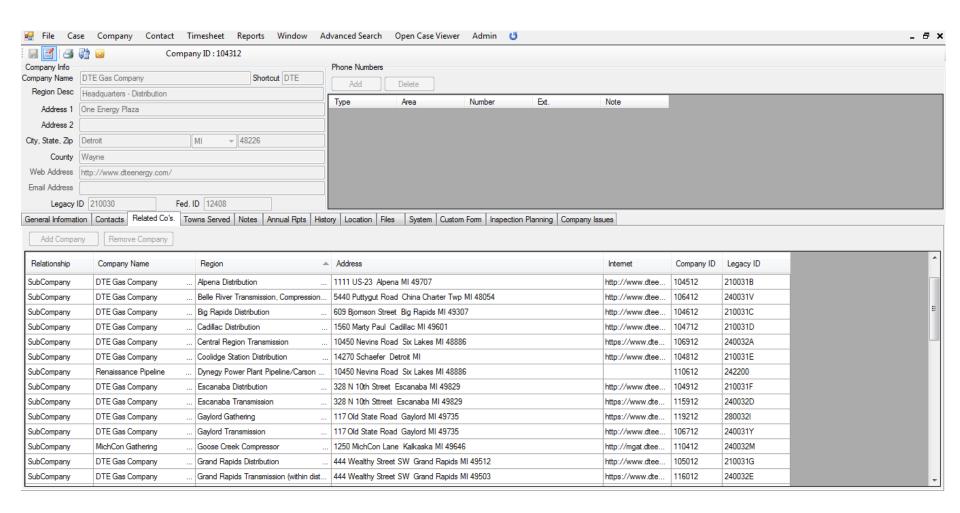


|        | ₫   €  | <b>3</b> 😭 🔒 🧿     | CaseID: 3081           | 123 Year: 201                 | 17 0                 | ld Case#: N/A  | Smar                  | rt#: N/A        |                  |
|--------|--------|--------------------|------------------------|-------------------------------|----------------------|----------------|-----------------------|-----------------|------------------|
| Case I | nforma | ation              |                        |                               |                      |                |                       |                 |                  |
| Nature | Pipe   | line Inspection    | ▼ Subject 41           | 0 O&M Headquarters Inspection | n ▼ By               | CLC V          | Rcvd. 11/13/2017 09   |                 |                  |
| Desc.  | BLA    | NK                 |                        |                               | Investigator         | NJM 🔻          | Close/_/              | :]              | ~                |
| Next A | ction  | Inspection Planned |                        |                               |                      | ▼ ;            | Smart #               |                 |                  |
| Notes  |        |                    | eporting Pipe Data Iss | ue Summary Issues Letters     | Major Points Insp. I | Day Files Pre  | esentation Custom Fo  | orm History     |                  |
|        |        | nvolved Party      |                        |                               |                      |                |                       |                 |                  |
| Test   | AnyG   | as Company - Anywh | nere                   |                               |                      |                | •                     |                 |                  |
| Lette  | r#     | Subject            |                        | Sent Date Rovd Date           | Response Due Da      | ate Respon     | nse Rovd Date (       | Certification # | Internal Remarks |
| 1      |        | 410 O&M Headq      | uarters Inspection S   | 9/30/2019                     | 11/29/2019           |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |
| Ne     | W      | Letter ID          | 1 Template MI          | Insp. Results w/o Penalty     | ▼ Issue List         | R 460.20310 10 | )/3/2019 Unsatisfacto | ory             |                  |
| Sav    | ve     | Mailed?            | Certified Mail Num     | ber                           |                      |                |                       |                 |                  |
| Edit I | Doc    | Sent Date          | 09/30/2019             | Response Due 11/29/20         | 119                  |                |                       |                 |                  |
| Vie    | w      | Company Rovd       | _/_/_                  | Response Recieved/_/_         | Contacts             |                |                       |                 |                  |
| Dele   | ete    | Enclosure          |                        |                               | ▼                    |                |                       |                 |                  |
| Em     | ail    | Internal Comments  |                        |                               | Addressee            |                |                       |                 |                  |
|        |        |                    |                        |                               | CC List              |                |                       |                 |                  |
|        |        |                    |                        |                               | CC LIST              |                |                       |                 |                  |
|        |        |                    |                        |                               |                      |                |                       |                 |                  |



| File        | Case C        | Company Co           | ntact Times  | heet Reports                     | Window    | Advanced Search       | Open Case Vie | wer Admin (        | )                   |            | _ & X |
|-------------|---------------|----------------------|--------------|----------------------------------|-----------|-----------------------|---------------|--------------------|---------------------|------------|-------|
| i 🖳 📝       | <b>3</b> 🖟 😉  | 2                    | Company ID   | : 104312                         |           |                       |               |                    |                     |            |       |
| - Company I |               |                      |              |                                  |           | Phone Numbers         |               |                    |                     |            |       |
| Company N   |               | Gas Company          |              | Sho                              | rtcut DTE | Add                   | Delete        |                    |                     |            |       |
|             |               | quarters - Distribut | tion         |                                  |           | Туре                  | Area          | Number             | Ext.                | Note       |       |
|             |               | nergy Plaza          |              |                                  |           |                       |               |                    |                     |            |       |
| Addre       |               |                      |              | 10000                            |           |                       |               |                    |                     |            |       |
|             | Zip Detroit   |                      | MI           | <b>▼</b> 48226                   |           |                       |               |                    |                     |            |       |
|             | unty Wayn     |                      |              |                                  |           |                       |               |                    |                     |            |       |
|             |               | /www.dteenergy.o     | com/         |                                  |           |                       |               |                    |                     |            |       |
| Email Add   |               |                      |              |                                  | 7         |                       |               |                    |                     |            |       |
|             | pacy ID 210   |                      | Fed. ID 1    |                                  | 10. 10    |                       |               |                    | BI : I C            |            |       |
| Company     |               | ontacts   Related    | Cos.   Towns | Utilities Works                  |           | story   Location   Fi | les System U  | ustom Form Inspect | on Planning   Compa | any issues |       |
|             |               | ine Operator         |              | Cable TV                         |           |                       |               |                    |                     |            |       |
|             | ership Priva  |                      |              | Customer Ov                      | wned      |                       |               |                    |                     |            |       |
|             | Type V M      |                      |              | Electric & Ca                    |           |                       |               |                    |                     |            |       |
|             | √ In          | spection Unit        |              | ☐ Electric & Pip ☐ Electric & Te |           |                       | _             |                    |                     |            |       |
| DOT Info    |               | ral Gas Distribution | n v          | Fiber Optic                      |           |                       |               |                    |                     |            |       |
|             | iction Intras |                      |              | Not Applicate Other              | ole       |                       |               |                    |                     |            |       |
| Important   |               |                      |              | Other (see re                    |           |                       |               |                    |                     |            |       |
|             |               | ed//                 |              | Pipeline - Cn Pipeline - Na      |           |                       |               |                    |                     |            |       |
|             | Activation Da | ate 12/28/2008       |              | Pipeline - NI Pipeline - Pri     |           |                       |               |                    |                     |            |       |
| In          | activation Da | ate//                |              | Pipeline - Pri                   |           |                       | +             |                    |                     |            |       |
|             |               |                      |              |                                  |           |                       |               |                    |                     |            |       |
|             |               |                      |              |                                  |           |                       |               |                    |                     |            |       |
|             |               |                      |              |                                  |           |                       |               |                    |                     |            |       |
|             |               |                      |              |                                  |           |                       |               |                    |                     |            |       |
|             |               |                      |              |                                  |           |                       |               |                    |                     |            |       |
|             |               |                      |              |                                  |           |                       |               |                    |                     |            |       |





#### Pipeline Safety System Development



- Project timeline:
  - September 2018 project kick off
  - April 15, 2019 Go Live
- Development team:
  - Contractor: SevenPoints
  - MPSC Staff: Dave Chislea, Cindy Creisher, Eleanor Mundorf, Kristen Lawless, Kasey Patrick
- Developed on Salesforce platform
  - Web-based access to the system through MiLogin
- Significant changes
  - Account and Contact relationships
  - Cases and Inspections
  - Inspection of Questions related to Rules
  - Compliance Action and Violation relationships
  - Template generation of documents
  - Incorporates features to administer MPSC's Damage Prevention program
  - Email-to-Case and Web-to-Case

#### **Email-to-Case**



- Utilizes the Operations email account (LARA-MPSC-Operations@michigan.gov) for the Email-to-Case function.
- All formal and informal correspondence will be delivered from the pipeline safety system.
  - Inspection Exit Summary documents
  - Non-Compliance, Response, and Closure letters
  - Staff Incident Reports and Recommendation letters
- Any new email sent to the Operations account will automatically create a new case.
  - Annual reports
  - Safety related condition reports
  - Construction filings and reports
  - Excavation damage incident reports per Act 174 of 2013
  - Other notifications as required

#### **Email-to-Case**

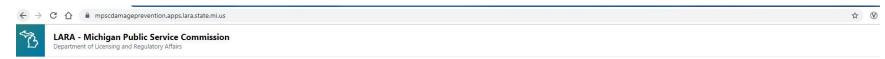


- Email responses to existing cases should contain the case threading information (e.g., "ref:\_00Dr08vPn.\_500r04lQ1o:ref") in either the subject or the body of the email to the Operations account.
  - Most easily done by a direct response to an email delivered from the pipeline safety system.
  - Delivers the response to the Operations account then be redirected to the appropriate database case for review by Staff.
  - Attachments to email are automatically attached to the appropriate case
  - Any email sent without appropriate case threading reference information to the Operations account will automatically create a new case.

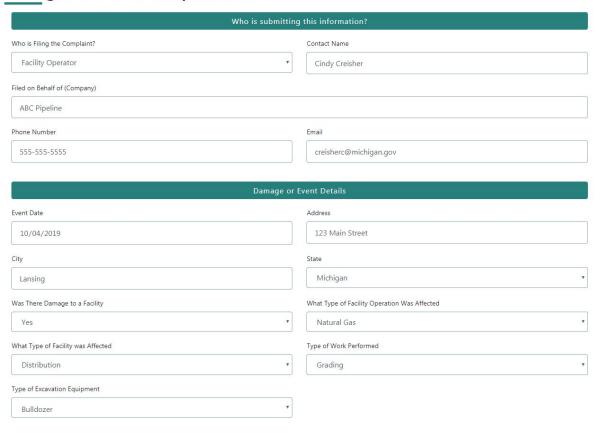


- Submission of the online Damage Prevention Complaint form automatically creates a case in the MPSC Pipeline Safety System.
  - www.mpscdamageprevention.apps.lara.state.mi.us/
- Data submitted through the form is mapped to fields in the system.
- Utilizes Email-to-Case function to generate confirmation email to complainant that the complaint has been received.
- Attachments or evidence pertaining to the complaint case can be provided via response to the Operations account.





#### **Damage Prevention Complaint Form**







Fri 10/4/2019 1:38 PM

noreply@salesforce.com on behalf of Michigan LARA MPSC Gas Safety <noreply@michigan.gov>

Your Case #00003811 "Complaint Filed Against Excavator - Nathan Miller - 2019-10-04" Has Been Received

To Creisher, Cynthia (LARA)



#### STATE OF MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS PUBLIC SERVICE COMMISSION

Dear Cindy Creisher,

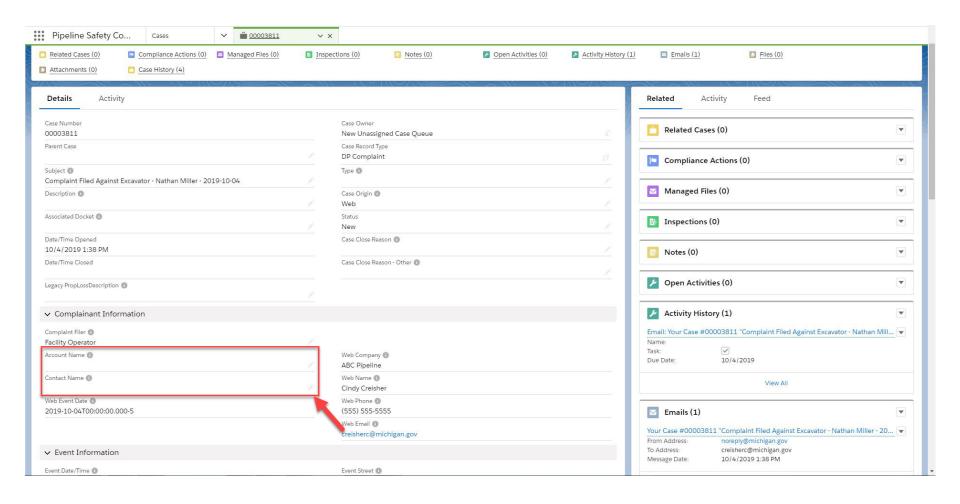
Your complaint filed pursuant to Michigan Public Act 174 of 2013, the MISS DIG Underground Facility Damage and Safety Act, has been received by the Michigan Public Service Commission. Your complaint has been assigned Case Number 00003811. A member of our Staff will follow up with you shortly regarding your submitted complaint.

Sincerely,

Gas Operations Section Energy Operations Division Michigan Public Service Commission

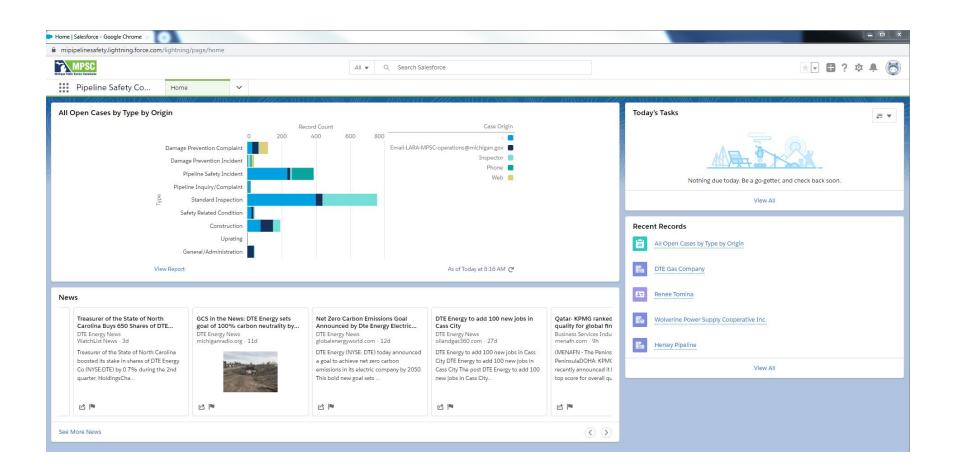
ref:\_00Dt0LBEP.\_500t0NBwsH:ref





## Salesforce Pipeline Safety Demo





#### What's Next?



- System Maintenance
  - Question and Inspection Form development
  - Reports and dashboards
  - Applying exempt questions to inspection units
  - Cleanup of migrated data
- System Enhancements
  - Improvements related to the ability to move questions between inspections and documentation of exit summary delivery
  - User interface improvements for ease of use
  - Addition of miscellaneous fields
  - User permissions
  - Validation rules

# Development of Inspection Forms and Questions

Michigan Public Service Commission

Eleanor Mundorf

October 8, 2019



## PRO, and General Questions



- P Procedure
- R Records
- O Observation
- C Construction, suffix
- G General

| Question ID    | • | Question Text  | ¥  | Compliance |
|----------------|---|--|----|------------|
|                |   | Is the plastic pipe manufactured in accordance with a listed     |    |            |
|                |   | specification in Section I of Appendix B(Thermoplastic: ASTM     |    |            |
|                |   | D2513-99; Polyethylene: ASTM D2513-09a), and resistant to        |    |            |
|                |   | chemicals with which contact may be anticipated? (Pipe should    |    |            |
| 192.59(a)_O-C  |   | be free of visible defects.)                                     |    |            |
|                |   | Is each valve, fitting, length of pipe, and other component      |    |            |
|                |   | marked as prescribed in the specification or standard to which i | it |            |
|                |   | was manufactured(thermoplastic pipe and fittings, other than     |    |            |
|                |   | polyethylene, must be marked in accordance with ASTM D 2513      | -  |            |
| 192.63(a)(1)_O |   | 87)?   |    |            |

# Development



- Each rule is evaluated to determine whether P, R, O elements exist.
- Questions are developed for each element.

|             |   | Has a manual of written procedures for conducting operations and maintenance activities and for emergency response been prepared and followed? |
|-------------|---|--|
|             |   | For transmission lines, does the manual also include procedures for  |
| 192.605 (a) | P | handling abnormal operations?  |
|             |   | Do records document the operations, maintenance, and emergency   |
|             |   | manual has been reviewed and updated at least once per calendar year,  |
| 192.605 (a) | R | not exceeding 15 months?   |
|             |   | Are appropriate parts of the operations, maintenance, and emergency  |
| 192.605 (a) | О | manual kept at locations where these activities are conducted?   |

#### Cited Rules



- Each question can check compliance to multiple rules.
- Ex. 192.605(a) states in part "Each operator shall prepare and <u>follow</u> for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response."
- Ex. Construction
  - 192.303, 192.305

#### Inspection Forms



#### Current

- 4 year comprehensive inspection cycle 2 standard inspection forms each year
- Special inspections every 4 years, all operators inspected over a 2 year timeframe - TIMP, DIMP, OQ, CRM, D&A...

#### Future

- 5 year comprehensive inspection cycle 1 comprehensive form each year.
- Special inspections on a 4 year cycle, a quarter of operators inspected each year.

# Questions

?????

