

GUIDE TO SHARING



DISCLAIMER

This American Petroleum Institute (API) and Association of Oil Pipe Lines (AOPL) Guide to Sharing, including the appendices, was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Guide to Sharing should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

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INTRODUCTION

This Guide to Sharing provides a clear and simple process for determining whether and how to share safety lessons with peers across the pipeline industry.

BACKGROUND

The pipeline industry has a long history of sharing safety information industry-wide to prevent similar events from occurring. Best known within the liquid pipeline industry is the annual Pipeline Information eXchange (PIX) forum where operators gather to share near miss and incident learnings. While PIX is a popular and well-regarded sharing forum, the dozen or so presentations offer only the tip of the iceberg in potential lessons.

Most companies have active post-incident or near miss review, learning and correction procedures to learn from and help prevent similar incidents from occurring in the future. Each operator likely considers, internally, a dozen or more events, situations or scenarios per year as opportunities to learn safety lessons and spread their safety culture. A dozen safety lessons per operator times each of the 50 pipeline operators among API and AOPL membership means literally hundreds of safety opportunities waiting to benefit pipeline operators industry-wide. Combining the value of more than 50 API and AOPL member companies sharing their safety learnings increases the potential benefits of this safety knowledge to each company by that factor of 50.

The potential of greater industry-wide sharing to benefit company safety performance has led the pipeline industry to make safety sharing a top priority. The API-AOPL Performance Safety Excellence Steering Committee (PSE SC) strategic plan for 2017–

2019 includes sharing and learning and pipeline safety management systems (PSMS) as strategic initiatives under Goal 1: Promote Organizational Excellence. The plan's objective 1.1 is to expand safety management practices and objective 1.2 is to promote best safety practices sharing.

Sharing and learning is a core component of PSMS. Requirements for essential PSMS element 5, incident investigation, evaluation, and lessons learned, can be found in Section 9 of RP 1173. Learning from internal and external events is also a requirement of essential PSMS element 3, risk management, which is described in section 7.4, Risk Prevention and Mitigation.

To harness the untapped potential of greater industry-wide safety sharing, the pipeline industry is developing tools to help operators consider when and how to share safety-related information. Sharing information outside of a company is accompanied by benefits and risks. The value to a company of receiving similar information to prevent future incidents is heretofore unquantified. Information related to incidents or near misses may pose sensitive legal issues.

The following API-AOPL Guide to Sharing (Guide) will help companies assess the benefits and risks of sharing, provide a process for companies to determine whether the benefits to sharing outweigh the risks, and help companies interface with industry sponsors of sharing events to determine the most appropriate sharing forum.

This Guide was developed with references from the following publications and groups in order to minimize duplication and create consistency between complementary efforts:

- 1 Pipeline Safety Excellence Performance Report & Strategic Plan 2017–2019
- 2 RP 1173 and the Pipeline SMS Group
- 3 Data Mining Team
- 4 Voluntary Information Sharing group
- 5 INGAA Foundation's Report: Developing Safety Culture Through Industry-wide Employee Safety Surveys

This Guide to Sharing was developed by the API-AOPL Sharing & Learning Sub-team, which is overseen by the API-AOPL Performance Excellence Team (PET) under the PSE SC.

SHARING IN PRACTICE

HOW TO USE THIS GUIDE

This Guide is intended to be flexible to a company's organization, procedures, risk tolerance and sharing culture. The Guide represents a resource for companies to use as they feel appropriate. The Guide is scalable to companies of all sizes, providing thematic steps in the sharing process, without regard to the number and scope of resources a company chooses to apply.

WHO CAN SHARE?

Different groups within a company, such as operations, engineering and integrity management, can initiate a share to reduce the risk of an incident and improve safety. The topic and avenue for sharing and learning will impact who should share and to whom the learning is relevant.

WHAT TO SHARE

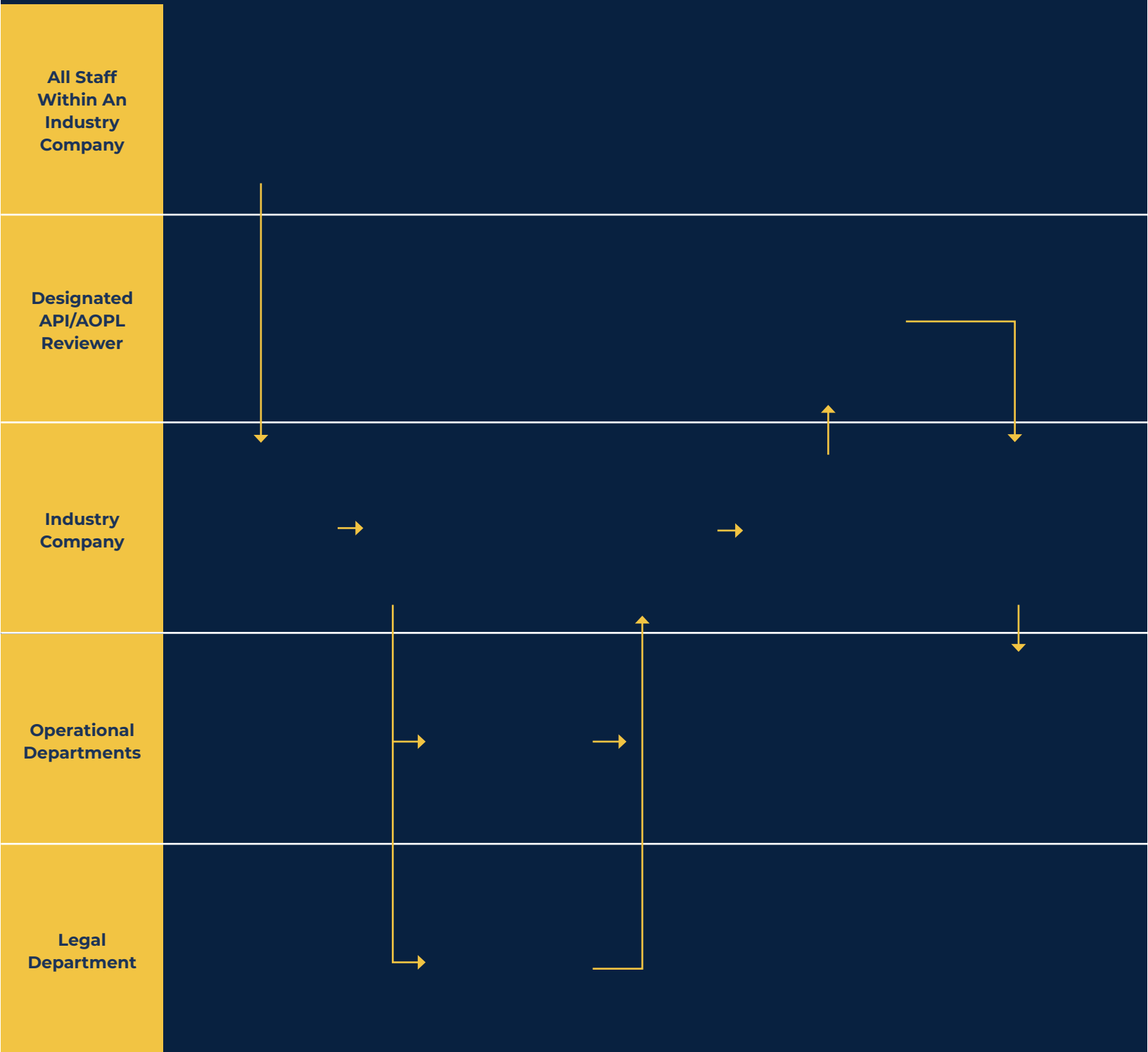
Most companies have active leading practices, post-incident or near miss reviews as well as learning and correction procedures to help prevent incidents from occurring. These are excellent candidates to consider sharing industry-wide.

HOW TO SHARE?

The Guide contains an illustrative sharing workflow to help an individual or group wishing to share a leading practice, near miss or incident determine whether to share safety information, how to develop a share, and how to communicate it to the right audience. Individuals at an industry company, the operations team, the legal team, and a company decision-maker all have a role in this process.

While use of the workflow does not have to be linear, the actions in the workflow will help companies ascertain the benefits and risks of sharing safety information, obtain a decision on whether to share and determine the most appropriate forum to share the information, given its benefits and risks.

Click on each section of the workflow for guidance on how to implement the action.



ACTION 1

IDENTIFY POTENTIAL SHARE

Based on a leading practice, internal investigation process, PHMSA reportable incident, or near-miss, identify if you have knowledge that others can use to prevent an incident from occurring. Consider:

- Can it happen somewhere else?
- Can other companies improve their safety with this information?
- Can it have an immediate industry-wide impact?
- Does it fit an industry-wide topic?

- Is it related to an industry-wide goal?
- Will other companies having this information significantly benefit industry safety?

If you can answer yes to one or more of these questions, you should initiate the sharing process. There are multiple ways to share:

- Verbally
- Written
- Videos

There are also multiple venues for sharing discussed further in Action 7.0:

- Pipeline Industry Practical Experience Sharing (PIPES) Database
- Virtual Tailgates
- Pipeline Conference
- Pipeline Information eXchange (PIX)
- Workshops (PSMS, Integrity, etc.)
- PSMS Webinars
- API or AOPL Committee Meetings / Roundtables

While many share opportunities will come from an incident or event with consequences, there may also be near miss or leading practices that may also lend themselves to an industry share. Near misses or leading practices may be identified through situations or circumstances that have the potential to cause an incident, but did not actually occur due to corrective actions or intervention, and are great opportunities to learn from and share to prevent potential future incidents. For example, if an employee discovers an event while working that does not result in an incident, but where, given a shift in time or position, an incident could have easily occurred, it is an opportunity to identify lessons learned to prevent the situation from reoccurring in the future.

ACTION 2

PRESCREEN SHARING OPPORTUNITY

A preliminary decision on whether to share should be made expeditiously, considering the likelihood of reoccurrence in the industry and the severity of the potential negative outcome to workers, the public, and the environment if reoccurrence does occur. Consider the following questions when reviewing the opportunity to share:

- ❓ Could learning from your incident or near-miss help another operator prevent a similar incident or near-miss from occurring?
- ❓ For incidents involving incorrect operations, do other operators use similar operations and thus may be susceptible to a similar incident?
- ❓ For incidents involving equipment or weld failures, do other operators employ similar techniques and may benefit from hearing such a sharing?
- ❓ Along with the benefits of potentially preventing another incident from occurring, generally speaking what risks could your company be exposed to by sharing?

There will be more opportunities in subsequent Action steps to assess more fully the benefits and risks of sharing. At this stage, only a preliminary review is necessary to determine whether further analysis is warranted.

While sharing information on an incident or near-miss may include potential risk, it could benefit the overall industry and help prevent similar incidents from occurring in the future. Following a potential incident, operators may be hesitant to share data or information that may further expose them, but they must also equally consider the opportunity to improve industry safety by ensuring other operators, with similar assets and transporting similar products, don't experience the same issues. The rising tide of immense sharing and learning benefits has the potential to lift all operators to improve the industry's already strong safety record.

If the industry fully utilizes the opportunity of sharing and learning, pipeline incidents may decrease through better practices, a stronger safety culture and improved overall safety performance. Communities, individuals, and companies benefit when pipeline incidents are zero.

ACTION 3

ORGANIZE POTENTIAL SHARING INFORMATION IN ASSESSMENT TEMPLATE

Utilizing the Assessment Template (“Template”) – [Appendix A](#) – allows a company to organize information, as well as analyze benefits and risks in a format that can begin the process of an industry share. The Template asks about the type of incident, its severity, the strategic goals associated with the sharing, and the preferred sharing venue. Moreover, the Template allows a company to provide an overview of the incident and the subsequent findings and consequences regarding the incident.

The Template will also help companies determine the best venue to provide their sharing by identifying the type of information to be shared, the preferred format for sharing, information controls and intended audiences. The Template aims to assist operators in weighing the potential benefits and risks to sharing to make an informed decision at all levels within a company and choose the best sharing venue for a company’s accepted risk level.

The Template is intended for internal company use only to providing an organized format to enable the determination process. Its contents need not be shared outside of the company.

ACTION 4A

ASSESS BENEFITS OF SHARING

Operating companies have experienced immense benefits by gaining knowledge from their peers on how to prevent or avoid pipeline incidents. The most important benefit has been lives saved, worker injuries avoided, and the continued protection of the environment. Secondary benefits range from avoiding costly operating down-time and incident cleanup costs to avoiding reputational damage to the company brand and market value.

When considering the benefits of sharing near-miss safety knowledge, a company should first consider public and environmental safety, secondly, the financial cost of an incident arising from a similar situation, and finally, the value of those avoided costs.

A company's decision on whether to share information from an incident or near miss is aided by an estimation of the benefits of such information sharing. This estimation is best accomplished by company personnel familiar with the activities involved and their costs. Companies following this guide should consider forming a small team of individuals with experience in operations, integrity management, human resources and environmental mitigation

to assess the benefits of potential candidates for safety sharing. A company might utilize ad hoc teams assembled for consideration of individual sharing candidates or a standing team or designated members of a team who may engage with each sharing opportunity.

The goal of a benefits assessment team is to estimate the benefits of sharing an event. The team should make these estimations with the knowledge that such benefits may come to the company indirectly through future sharing by another company of a similar event. Indeed, the decision of a company to share safety lessons from an event will increase the probability that another company will share such details in the future after experiencing the leadership and safety culture promotion of your company. The benefits assessment team should also keep in mind that benefits can come in the form of avoided costs. Costs of an event, both human and financial, can be quite high. An assessments benefit team should give value to their company avoiding these costs in the future.

Estimating the benefits of sharing quantitatively and comprehensively may pose a challenge. Insufficient data may hinder determining all potential benefits. The intent of this Guide is to assist operators in their analysis and suggest potential categories and sources of benefits information.

Questions to ask when considering the benefits of sharing an event:

- 1 Would the prevention of an event similar to this event potentially prevent the loss of life, prevent a life changing injury to a pipeline employee or the public, or prevent significant damage to the

environment? If yes, then your strong consideration to sharing the event is encouraged.

2

Would the prevention of an event similar to this event assist in improving the image of the pipeline industry by the public and regulators? In other words, if an event similar to this were to occur, would it erode the image of pipelines as a whole by the public and regulators? If yes, then your consideration to sharing the event is encouraged.

3

Taking into account the material costs of this incident, would your company have benefited by avoiding this type of incident? Through the reciprocal process of sharing events with your industry peers, you are encouraged to consider sharing the event with the idea that others will be sharing similar events for your benefit.

In the case of an incident, a company can tabulate the material costs the company suffered, and thus could have avoided with that knowledge provided in advance from another sharing company. Companies may consider using the Benefits Assessment Worksheet in [Appendix B](#) for estimating the costs of a specific sharing opportunity.¹

Where operators do not have company experience with incidents of certain types, incident cost data is publicly available through PHMSA's online incident reporting database.

Companies must report the costs they incurred along with the type and size of an incident on PHMSA 7000-1 incident reports. Section D(8) of the 7000-1 reports contain the following information:

- 8a. Estimated cost of public and non-Operator private property damage.
- 8b. Estimated cost of commodity lost
- 8c. Estimated cost of Operator's property damage & repairs
- 8d. Estimated cost of Operator's emergency response
- 8e. Estimated cost of Operator's environmental remediation
- 8f. Estimated other costs
- 8g. Total estimated property damage

Such data can serve as a resource when examining the costs of incidents, and therefore the benefit of avoiding similar incidents. For example, between 2010 and mid-2017, there were over 150 incidents reportedly caused by external corrosion with localized pitting costing operators an average of just over \$820,000 total per incident.

After the benefits assessment team estimates the benefits from sharing, the team should forward its information to the person or group responsible for weighing the costs and benefits of the sharing opportunity.

1 "API's Antitrust Guidelines also prohibit "sharing or discussing any company's confidential or proprietary information," and "discussion of how individual companies intend to respond to market / economic scenarios or government action; the discussion is limited to generalities." AOPL's Antitrust Compliance Guidelines likewise prohibit the sharing of information that could be competitively sensitive.

ACTION 4B

ASSESS RISKS OF SHARING

Companies participating in an industry-wide safety sharing culture stand to gain many benefits to their personnel and operations. However, sharing safety information does carry risks operators should consider. Potential categories of sharing risks range from regulatory enforcement action and disclosure of information that raises litigation risk, to negative public reaction and reputational risk. Determining the actual level of risks a safety sharing opportunity presents will allow a company to weigh whether the risks of sharing outweigh the benefits. Estimating the risks on a tangible, potentially quantifiable, basis allows companies to make an informed, data driven judgement.

Each operating company, with the assistance of their legal department, should weigh the potential risks of sharing using internal risk assessment processes. Legal departments vary in size and sophistication and companies may use this Guide flexibly based on their scale. As with estimating benefits from sharing, estimating risks are best accomplished by company personnel familiar with the activities involved and their costs. Companies following this Guide should consider forming a small team of individuals with experience in legal issues, public affairs and regulatory compliance. A company might utilize ad hoc teams assembled for consideration of individual sharing candidates or a standing team or designated members of a team who may engage with each sharing opportunity.

Risk quantification is an activity most companies currently undertake when planning and devoting resources to operations, inspection and maintenance activities. Companies can undertake similar efforts to estimate risks from sharing safety lessons.

When considering the risks of sharing safety information, potential risk factors include, but are not limited to:

- Regulatory enforcement (e.g. criminal and civil penalties, corrective action orders)
- Litigation
- Waiver of confidential and/or privileged information
- Third party impacts (e.g. labor relations, contractual obligations)
- Negative publicity
- Reputational considerations

Questions to ask when considering the risks of sharing an event:

- 1 What is the likelihood sharing information on an event would result in a regulator enforcement action? What are the penalty amounts that similar enforcement actions have imposed? What corrective actions and their costs resulted from enforcement actions on similar events?
- 2 Would disclosure of the information increase litigation risk, such as waiving a claim of legal privilege or confidentiality or otherwise increase the likelihood that information would be used against a pipeline in litigation?
- 3 What is the likelihood that sharing information on an event would result in negative publicity or reputational risk? How much negative publicity or damage to reputation have other companies borne when other companies experienced a similar incident?

Estimating the risks of sharing quantitatively and comprehensively may pose a challenge. Insufficient data may hinder determining all potential risks. The intent of this Guide is to assist operators in their analysis and suggest potential categories and sources of risk information.

In the case of an incident, a company can tabulate the legal and public affairs costs other companies experienced in similar situations. Companies may consider using the Risk Assessment Worksheet in [Appendix C](#) for estimating the costs of a specific sharing opportunity.¹

After the risk assessment team estimates the risks from sharing, the team should forward its information to the person or group responsible for weighing the risks and benefits of the sharing opportunity.

1 API's Antitrust Guidelines prohibit the sharing of compliance cost information unless it is publicly available. API's Antitrust Guidelines also prohibit "sharing or discussing any company's confidential or proprietary information," and "discussion of how individual companies intend to respond to market / economic scenarios or government action; the discussion is limited to generalities." AOPL's Antitrust Compliance Guidelines likewise prohibit the sharing of information that could be competitively sensitive.

ACTION 5

COMPARE BENEFITS AND RISKS TO MAKE INITIAL SHARING DECISION

A comparison of benefits and risks should be undertaken expeditiously, considering the likelihood of reoccurrence in industry and the severity of the potential negative outcome to workers, public, and the environment if reoccurrence does occur. The decision of a company on whether to take advantage of an opportunity to share a safety lesson with its fellow industry companies is best based upon a comparison of potential benefits and risks of the sharing. Decisions on whether to share should be risk-informed, incorporating data gathered during the cost and benefit identification stages and compared against the company's risk tolerance and culture.

Actions 4A and 4B enable a company to assess the potential benefits and costs of sharing. Company personnel most familiar with the activities involved and their potential costs and benefits will provide qualitative and quantitative analysis of the sharing impacts. Individuals with experience in operations, integrity management, human resources and environmental mitigation have assessed the benefits of the safety sharing candidate. Likewise, individuals with experience in legal issues, public affairs and regulatory

compliance have assessed the possible costs of sharing.

To accomplish the Action 5 assessment, each company should consider designating an individual or group to compare and weigh the cost and benefits assessments. The individual or group should base their work on the products Actions 4A and 4B but be separate from the groups providing the cost and benefits assessments to ensure an independent evaluation. The company may develop an internal decision-making framework or process to leverage when making decisions on whether/how to participate in and sanction external sharing. The designated individual or group should be accountable for conducting this comparison activity.

The goal of Action 5 is a decision to share based on an assessment that the benefits of sharing outweigh the risks. After assessing the benefits of sharing outweigh the risks and making a decision to share, the individual or group should notify the sharing designee (e.g. sharing process Sherpa) to undertake Action 6 to review appropriate sharing venues.

ACTION 6

SUBMIT SHARING CANDIDATE TO API-AOPL FOR SHARING FORUM SELECTION

After making the decision to share to potentially prevent a similar incident from occurring, a company should utilize the Sharing Template in [Appendix D](#). The Sharing Template describes what the learning is based on (incident, near-miss, leading practice), the findings or lessons learned and whether it impacted people or the environment. It requests information on the consequences or potential consequences, as well as corrective actions taken, or next steps identified.

Upon completion of the Sharing Template, a company should forward the template to API and AOPL by sending it to Chris Kuhman, kuhmanc@api.org and John Stody, jstody@aopl.org. API and AOPL will engage with the company in the selection of the appropriate sharing forum.

ACTION 7

API/AOPL REVIEW OF SHARING OPPORTUNITY AND VENUE IDENTIFICATION

There are a several different venues where sharing can occur, which include the following:

- Pipeline Industry Practical Experience Sharing (PIPES) Database
- Virtual Tailgates
- Pipeline Conference
- Pipeline Information eXchange (PIX)
- Workshops (PSMS, Integrity, etc...)
- PSMS Webinars
- API and AOPL Committee Meetings / Roundtables

Each type of venue occurs at a different time of the year or on a different frequency. Each forum also has a unique audience, format, and information control associated with them.

PIPES is an online system where industry members can access information posted on-line in a controlled environment. The other venues provide the opportunity to share verbally through a webinar setting or in person and are great ways to really explain to your peers in a way that may be more impactful.

A description of the different aspects associated with each of the sharing venues is presented below:

Venue:	Pipeline Industry Practical Experience Sharing (PIPES) Database
Occurrence/Frequency:	Available on-line 24 hours a day, 365 days a year
Information Recipients:	API/AOPL Members, non-Member industry representatives or consultants
Sharing Format:	Written materials (e.g. lessons learned, copies of presentations, etc...)
Information Control:	Written information available to all recipients
Benefits of this Venue:	<ul style="list-style-type: none">• Easily available to reach a large audience of industry personnel.• Ability to query/search for materials posted.• Ability to post something without any company specific information, so in other words anomalously.• Quickest way to share information.

Venue:	Virtual Tailgate
Occurrence/Frequency:	Quarterly webinar
Information Recipients:	API/AOPL Members
Sharing Format:	Verbal summary with accompanying webinar presentation
Information Control:	Audience transcription such as taking notes and screen shots.
Benefits of this Venue:	<ul style="list-style-type: none">• Provides the opportunity to express the sharing in words and not just in print.• Opportunity to explain the impact and learnings.• Does not require travel or extensive preparation to use this venue.• Can reach a large audience in a relatively easy fashion.• Provides an opportunity for question and answer.

Venue: Pipeline Conference

Occurrence/Frequency: Once per year

Information Recipients: API/AOPL Members, non-Member industry representatives or vendors, Government, and public/press

Sharing Format: Verbal summary with accompanying presentation

Information Control: Information left with recipients/information may become publicly available

Benefits of this Venue:

- With an in-person verbal sharing it can reduce the amount or need of written materials to be shared.
- Provides an opportunity for question and answer.
- Presents a forum with high visibility, when that is acceptable and desired.

Venue: Pipeline Information eXchange (PIX)

Occurrence/Frequency: Once per year

Information Recipients: API/AOPL Members

Sharing Format: Verbal summary with accompanying presentation

Information Control: Audience transcription such as taking notes

Benefits of this Venue:

- A closed forum with only industry representatives present.
- Opportunity for candid peer-to-peer conversations.
- Limits the need for any written materials to be shared.
- Promotes networking opportunities.
- Provides an opportunity for question and answer.

Venue: Workshops (PSMS, Integrity, etc...)

Occurrence/Frequency: Once per year

Information Recipients: API/AOPL Members, non-Member industry representatives or consultants

Sharing Format: Verbal summary with accompanying presentation

Information Control: Information left with recipients/information may become publicly available

Benefits of this Venue:

- A target audience with like interests conducive to detailed discussions.
- Limited amount of written materials to be shared.
- Provides an opportunity for question and answer.
- Promotes networking opportunities.

Venue: PSMS Webinars

Occurrence/Frequency: Semi-annual webinar

Information Recipients: API/AOPL Members, non-Member industry representatives or consultants

Sharing Format: Verbal summary with accompanying webinar presentation; webinar audio recorded and posted to PSMS website with approved presentation

Information Control: Audience transcription such as taking notes and screen shots.

Benefits of this Venue:

- Provides the opportunity to express the sharing in words and not just in print.
- Opportunity to explain the impact and learnings.
- Does not required travel to use this venue.
- Can reach a large audience in a relatively easy fashion.
- Ideal for situations where the cause or solution to an issue is more system or process related.
- Provides an opportunity for question and answer.

Venue: API and AOPL Committee Meetings / Roundtables

Occurrence/Frequency: Periodic and on an as needed basis

Information Recipients: API/AOPL Members

Sharing Format: Verbal summary with accompanying presentation

Information Control: Audience transcription such as taking notes

Benefits of this Venue:

- A defined / controlled audience.
- An ideal setting to influence the conversation of meeting participants.
- Limited amount of written materials to be shared.
- Provides an opportunity for question and answer.

A schedule for the above list of venues is maintained on API's website at the following link: _(Insert a LINK)_

If a company feels as though they have a sharing that is better served to be presented verbally via a webinar or in person using the venues discussed above, that opportunity does exist and is heavily encouraged. Reaching out to a contact at either API or AOPL can assist with the vetting process and can assist with the sharing through these venues. To contact API or AOPL for assistance please contact:

API: Chris Kuhman, kuhmanc@api.org

AOPL: John Stody, jstody@aopl.org

Prior to accepting a sharing event into one of the venues, API/AOPL will review the submission and will confirm with the company their understanding of the sharing venue. API/AOPL may recommend one venue over another venue on a case-by-case basis taking into consideration the actual sharing topic, timing, presenter, and audience. All companies will have the final say as to whether to share or not in the venue recommended by API/AOPL.

ACTION 8

COMPANY AGREES ON SHARING VENUE

As outlined in Action 7 of this document, there are several potential venues to share the learnings of an event with your industry peers. As you work through the determination as to whether or not to share an event, you will be faced with the question of what forum is the best method for you to share your event. In some cases, a written submission through PIPES may be selected as the best option, where in another case you may wish to have greater control over the information and perhaps a forum like PIX may be the better venue.

When determining the optimal venue for your sharing, the benefits and risks discussed earlier in this document combined with the details of each venue discussed in Action 7 will help guide your final decision on the venue to share. API/AOPL will review requests to present at any of the venues available to ensure the topic is fit for purpose and the appropriate venue has been selected.

Templates to share are provided in [Appendix D Sharing Template](#) and [Appendix E Sharing](#)

[Presentation Template](#). Examples are in [Appendix F Example Sharing](#) and [Appendix E Sharing Presentation Template](#). The templates provide guidance on completion aimed to minimize legal barriers to sharing. Companies may also opt to use their own templates.

When PIPES is selected as the venue, follow the entry steps outlined in [Appendix H](#). Any company can elect to use the PIPES system to submit a share at any time. After its submission and prior to publication, API will conduct a quality and anti-trust review of the submission. If there are any questions or concerns with a submission into PIPES, an API representative will contact the company who submitted it to address any questions or concerns.

When a venue other than PIPES is selected, the contacts at API and AOPL outlined in Action 7 are available to assist in the coordinating your sharing through the selected venue.

If you do not have a preferred venue for your sharing or are not sure what would be the best forum, you are encouraged to contact API or AOPL with information on what you are prepared to share and API/AOPL can help you define the best sharing venue.

For sharing events other than PIPES submissions you will need to identify a point person that will be the lead in finalizing your materials to share, as well as identify the presenter of the materials. Most of the venues are scheduled well in advance so there will be sufficient lead time to get ready for a presentation, when applicable. However, if there is a sharing that is significant enough to share sooner than a scheduled venue, please contact API/AOPL to see if an unscheduled tailgate, webinar or meeting can be set up.

ACTION 9

SHARING IS COMPLETED THROUGH APPROPRIATE COMMUNICATION VENUE

After the sharing is complete, companies should consider posting their materials on PIPES so others may continue to learn and potentially prevent a similar incident. The PIPES User Guide in [Appendix H](#) provides detailed guidance on creating an account and granting others in your company access. Prior to posting, the database prompts users to enter information on the sharing, including commodity and equipment type, learning details and sharing source type (Virtual Tailgate, PiX, webinar, etc.), so participants can efficiently find the information most relevant to them. Please be sure to provide information for every prompt provided to best utilize the PIPES portal. After the sharing, PIPES users can still glean important information and lessons learned on an incident or near-miss which may help them prevent a similar incident from occurring in their company.



APPENDICES

APPENDIX A

ASSESSMENT TEMPLATE¹

ASSESSMENT TEMPLATE¹

(This template is for internal use only when evaluating an item for a potential industry sharing.)

Title: name of the leading practice or incident under consideration to be shared
Date: insert date

BACKGROUND:

What is the learning based on?

Incident Near-miss Leading practice

What is the category?

Operations & Maintenance Integrity Management Challenge / success

Did the event impact people or the environment (IPE)?

Yes No

To which 2-4 strategic safety goals is your sharing tied?

Promote Organizational Excellence
 Improve Safety through Technology & Innovation
 Enhance Emergency Response Preparedness
 Increase Stakeholder Awareness & Involvement

¹ This API-AOPL Assessment Template was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Assessment Template should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

PAGE 1



CLICK TO DOWNLOAD

¹ This API-AOPL Assessment Template was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Assessment Template should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

APPENDIX B

BENEFITS ASSESSMENT WORKSHEET¹

BENEFITS ASSESSMENT WORKSHEET²

(This worksheet is for internal use only when evaluating an item for a potential industry sharing.)

Estimating the benefits of sharing quantitatively and comprehensively may pose a challenge. Insufficient data may hinder determining all potential benefits. The intent of this worksheet is to assist operators in their analysis and suggest potential categories and sources of benefits information.

Benefits from avoiding an incident or near-miss of a similar incident can be evaluated using the table below³. In the case of an incident, a company can tabulate the material costs the company suffered, and thus could have avoided with that knowledge provided in advance from another sharing company.

Where operators do not have company experience with incidents of certain types, incident cost data is publicly available through PHMSA's online incident reporting database. Companies must report the costs they incurred along with the type and size of an incident on [PHMSA 7000-1 incident reports](#). Section D(8) of the 7000-1 reports contain the following information:

- 8a. Estimated cost of public and non-Operator private property damage.
- 8b. Estimated cost of commodity lost
- 8c. Estimated cost of Operator's property damage & repairs
- 8d. Estimated cost of Operator's emergency response
- 8e. Estimated cost of Operator's environmental remediation
- 8f. Estimated other costs
- 8g. Total estimated property damage

² This API-AOPL Benefits Assessment Worksheet was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Benefits Assessment Worksheet should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

³ API's Antitrust Guidelines prohibit the sharing of compliance cost information unless it is publicly available. API's Antitrust Guidelines also prohibit "sharing or discussing any company's confidential or proprietary information," and "discussion of how individual companies intend to respond to market / economic scenarios or government action; the discussion is limited to generalities." AOPL's Antitrust Compliance Guidelines likewise prohibit the sharing of information that could be competitively sensitive.

This assessment information is intended for the company's internal use in making the sharing decision for themselves. Where possible, the company should use publicly available information in its estimates of cost.

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¹ This API-AOPL Benefits Assessment Worksheet was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Benefits Assessment Worksheet should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

APPENDIX C

RISK ASSESSMENT WORKSHEET¹

RISK ASSESSMENT WORKSHEET⁴

(This worksheet is for internal use only when evaluating an item for a potential industry sharing.)

This assessment information is intended for the company's internal use in making the sharing decision for themselves. Where possible, the company should use publicly available information in its estimates of cost.

Consequence of Sharing	Likelihood of Occurring	Estimated Cost of Sharing	Cost of Sharing
Civil Penalty	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High		Example: Penalty which resulted from similar event
Criminal Penalty	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High		Example: Penalty which resulted from similar event
Corrective Action Order	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High		Example: Actions ordered after similar events
Litigation	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High		Example: Costs of litigation after similar events

⁴ This API-AOPL Risk Assessment Worksheet was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Risk Assessment Worksheet should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

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¹ This API-AOPL Risk Assessment Worksheet was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Risk Assessment Worksheet should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

APPENDIX D SHARING TEMPLATE¹

How to complete the template

- ❑ Do not use personal name or information
- ❑ Do not use company name
- ❑ Be clear, complete and concise
- ❑ Communicate only factual information
- ❑ Include only facts related directly to the event
- ❑ Do not speculate on causation or embellish
- ❑ Do not use legally conclusory words

SHARING TEMPLATE⁵

(This template is in a form that is intended to be shared outside of the company with a larger industry contingent.)

Title: name of the sharing
Date: date published

BACKGROUND:

What is the learning based on?
 Incident Near-miss Leading practice

What is the category?
 Operations & Maintenance Integrity Management Challenge / success

Did the event impact people or the environment (IPE)?
 Yes No

To which 2-4 strategic safety goals is your sharing tied?
 Promote Organizational Excellence
 Improve Safety through Technology & Innovation
 Enhance Emergency Response Preparedness
 Increase Stakeholder Awareness & Involvement

⁵ This API-AOPL Sharing Template was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Sharing Template should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

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¹ This API-AOPL Sharing Template was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Sharing Template should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

APPENDIX E SHARING PRESENTATION TEMPLATE¹

How to complete the template

- ❑ Do not use personal name or information
- ❑ Do not use company name
- ❑ Be clear, complete and concise
- ❑ Communicate only factual information
- ❑ Include only facts related directly to the event
- ❑ Do not speculate on causation or embellish
- ❑ Do not use legally conclusory words



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¹ This API-AOPL Sharing Presentation Template was developed based on the knowledge and experience of the API-AOPL Sharing & Learning Sub-Team and API and AOPL staff, and is to be used for general guidance and reference only. Use of the guidance does not constitute adherence with any recommended practice, standard, policy or rule. The information provided herein does not necessarily represent the official views or positions of API, AOPL, or any of their respective members. Those using this Sharing Presentation Template should consult with appropriate personnel within their organizations to determine how best to use the information in this document, and before taking action on the issues addressed herein.

APPENDIX F EXAMPLE SHARING

SHARING AND LEARNING BULLETIN

(This is for internal sub-team illustration purposes only. The example that will be provided must be approved by the company.)

Title: Waterway Crossing Failure

Date: 4/17/2018

Category: Pipeline Integrity

Purpose:

To share learning(s) that can be shared among industry companies in order to help prevent a similar event from occurring at another location

Situation Statement:

On March 20, 2018, another pipeline company's Operations Center received an alarm from a leak on a product line.

- Roughly 17 ft. of overburden shifted downward, instantaneously shearing the pipe and initiating the release.
- ~1,400 barrels of diesel fuel were released into a creek in Indiana.
- The system was shut down immediately and emergency response personnel deployed boom to prevent migration into the river.
- The pipe was not exposed in the waterway, and the creek was not in a flood stage during the incident.
- The line was constructed in 1951 with an open cut crossing.

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APPENDIX G

GUIDE TO CONTRIBUTING SHARINGS TO PIPES PORTAL

The Pipeline Industry Practical Experience Sharing (PIPES) Database is an online repository of industry sharings, lessons learned and best practices. It is only available to API & AOPL members and select non-member industry representatives. Members can post valuable learnings that have had the appropriate approval from within the members' company, including videos, links, PowerPoint presentations and PDF or Word documents.

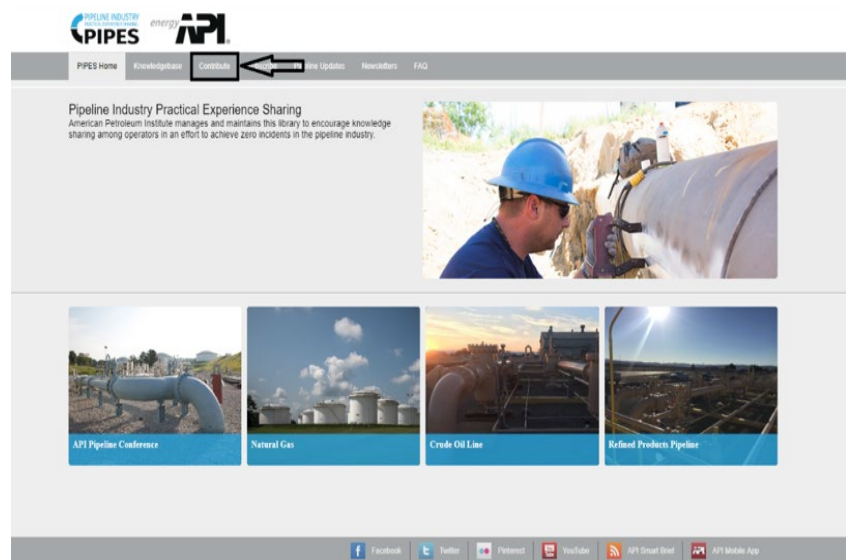
Posting to PIPES is the quickest way to reach a large audience of industry personnel. Users can filter posted materials by commodity or equipment type, along with learning details and source of sharing type. They can access these company-approved sharings, presentations or lessons learned to prevent similar incidents from occurring.

Below is a quick guide to walk participants through contributing to the PIPES portal.

Step 1: Log in at
<https://pipes.api.org>

If you don't have a PIPES account, see [Appendix A](#) for instructions.

Click on the "Contribute" section



Step 2: Fill in relevant information

Providing relevant information for all prompts is key to ensuring subscribers can efficiently find information as quickly as possible. Once you see the below screen in the Contribute section, select a file to upload.

Please be sure to provide information for each box, including Commodity, Equipment Type, Learning Details (subject matter) and Source Type (sharing venue). In addition, please enter in any keywords that may help subscribers search for and filter information more effectively.

Lastly, click the “I Agree” box in the bottom left hand corner if you are in agreement with the listed Confidentiality and Legal Risks section and then click Submit.

If you have any problems contributing sharings, please feel free to contact the PIPES administrator who will provide assistance.

Congratulations! Your sharing will be reviewed by PIPES administrators to ensure that it can be posted in this domain, and, if approved, your sharing will be published shortly in the database. You’ve just posted a vital piece of information sharing that will benefit others in the industry and may help prevent similar incidents from occurring.

Please take the time to provide as much relevant information below so we can properly classify your contribution.

Select a File:
 No file chosen

Title

Commodity

Equipment Type

Learning Details

Source Type

Keywords

CONFIDENTIALTY AND LEGAL RISKS: The information your company chooses to provide to this repository is accessible to other pipeline operating companies. This information may also be subject to government subpoena or discovery requests in civil litigation or enforcement actions. For these reasons, any information your company may post to this repository could end up in the public domain. Before posting any information, API requires that the materials undergo legal review by your company's legal counsel. By choosing to submit information to this repository, you affirm that the information has undergone legal review by your company for posting on this repository and acknowledge and accept the legal risks inherent in providing this information.

I Agree

APPENDIX H

CREATING A PIPES ACCOUNT

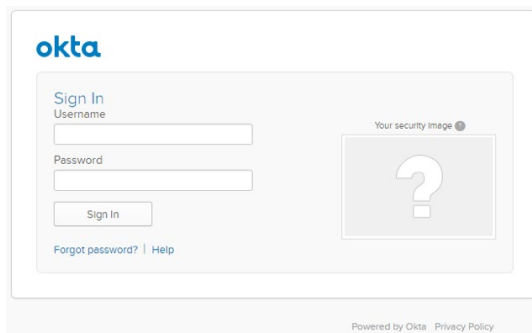
Email pipes@api.org to request an email address. The mailbox will be checked periodically for access requests. Below are the steps that will need to be completed in order to grant a user access. Once these steps have been completed the user will then be able to access the PIPES site through the following URL: <https://pipes.api.org>

GRANTING A USER ACCESS

To grant a user access to PIPES, a user with Admin privilege within OKTA will need to log into OKTA and complete the following:

STEP 1

Log into OKTA's site (you'll need Admin privilege) <https://energyapi.okta.com/>
Enter your **Username** (which is your email)
Enter your **Password**
Select the "**Sign In**" button

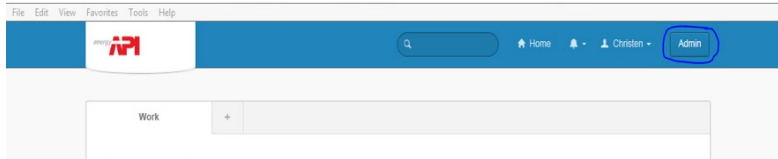


**STEP
2**

Assuming your granted access, confirm that you have the **“Admin”** button appearing in the upper right side (as shown in the image to the right).

Select the **“Admin”** button

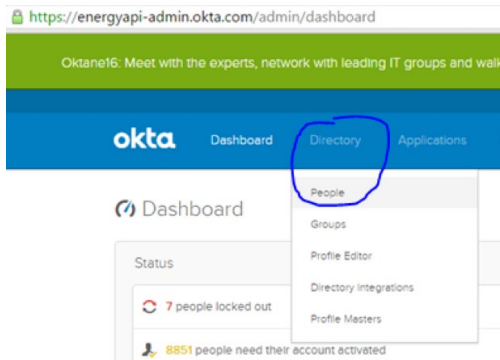
Note: If you are not able to see this screen (to the right), please contact IT who will check your access privileges or reset your password.



**STEP
3**

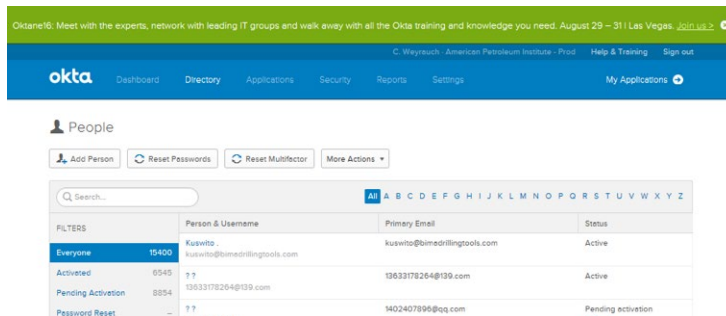
Once you have selected the **“Admin”** button from the prior step, you’ll be shown the screen (to the right).

Select the **“Directory”** link and then **“People”**



**STEP
4**

Upon selecting **“People”** you’ll be taken to the People section of OKTA. Here is where you’ll spend most of your time registering users to PIPES.



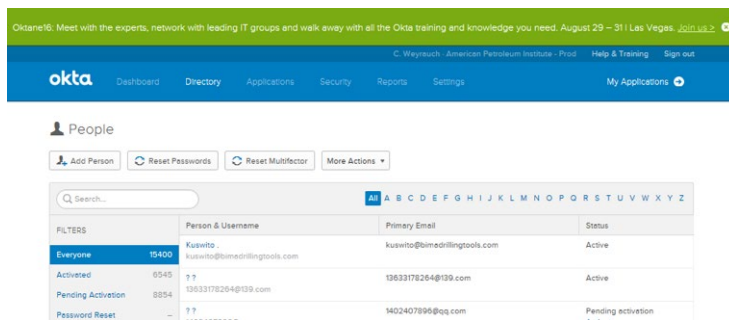
STEP 5

Within the **“Search”** field, enter the First or Last name of the person who is requesting access to the PIPES application.

Doing this will determine if the user has already established an account within OKTA. (Users associated with the myCerts program would likely already have an account within OKTA.)

Note 1: If a name is NOT returned from your search, proceed to step 6 in order to add them

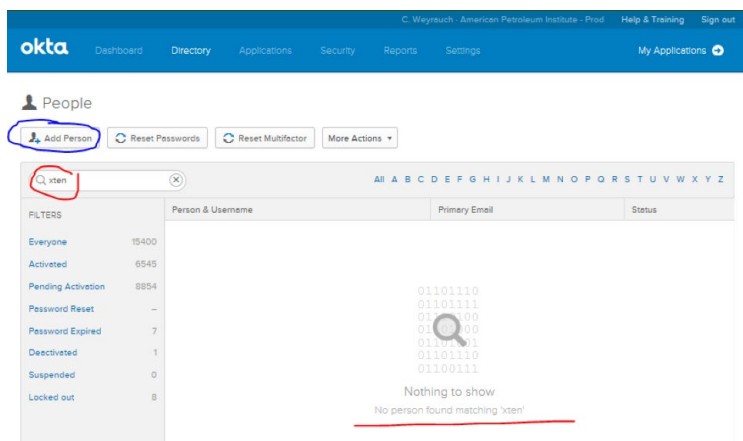
Note 2: If the name you enter IS returned from your search, proceed to step 9



STEP 6

Search for the name **“xten”** in the search field. As shown to the right, there is no person found matching **“xten”**

Select the **“Add Person”** button



**STEP
7**

Upon selecting the **“Add Person”** button, you’ll receive a pop-up window where you can enter the following information:

- **First Name**
- **Last Name**
- **Username** (email address)

Be sure to select the checkbox associated with **“Send user activation email now”**

Then select the **“Add Person”** button

The screenshot shows a form titled "Add Person" with the following fields and options:

- First name: [Redacted]
- Last name: [Redacted]
- Username: [Redacted] (with error message: "Must be an email")
- Primary email: [Empty]
- Secondary email (optional): [Empty]
- Groups (optional): [Empty]
- Send user activation email now:
- Buttons: Add Person, Save and Add Another, Cancel

**STEP
8**

After the user has been added, the window will close.

Enter the newly added First or Last name into the search space (like you did in Steps 5 and 6).

Note: The user has been created, however they are still “Pending activation”. Their status will change once they log into the PIPES application for the first time

The screenshot shows the "People" management interface with the following elements:

- Buttons: Add Person, Reset Passwords, Reset Multifactor, More Actions
- Search bar: xten
- Filters: Everyone (15406), Activated (6553)
- Table:

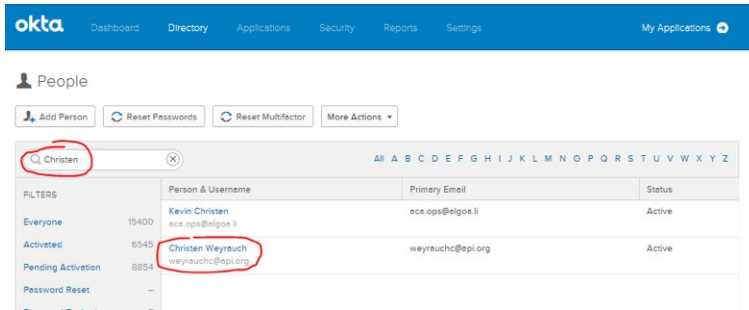
Person & Username	Primary Email	Status
xten mitchell xtenmitchell@test.com	xtenmitchell@test.com	Pending activation Activate

**STEP
9**

To assign the user to the PIPES application:

Select the link associated with the name you'd like to register

In this case the second "Christen" that appears in the search results

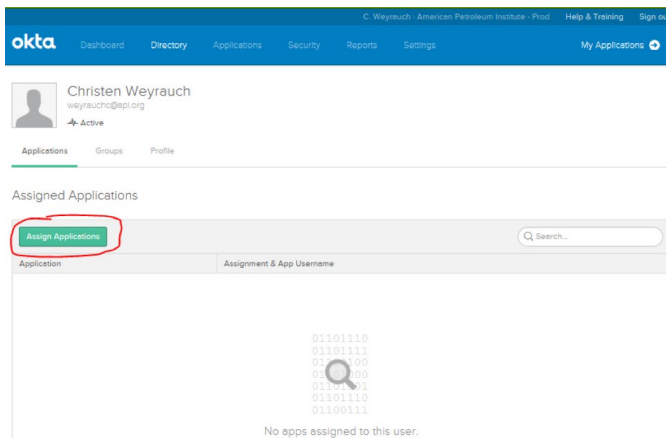


**STEP
10**

Upon selecting the link associated with the user's name, you'll be taken to their "My Applications" page.

Select the "Assign Applications" button

Note: There might be assignments made in the lower section. If there are, look to see if "PIPES" is one of them. If it is not, select "Assign Applications" to add them to the "PIPES" Application

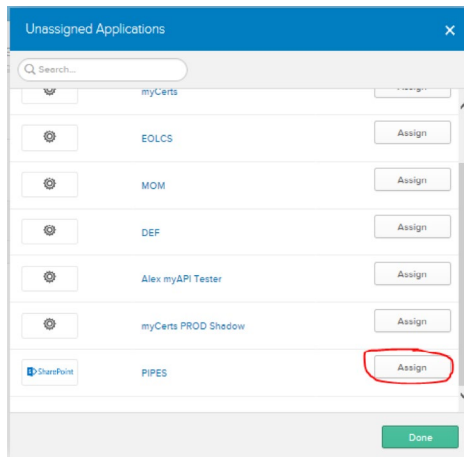


**STEP
11**

A pop-up window will appear that shows a listing of all of the available applications you can link the user to.

Scroll down till you see the **"PIPES"** application, as shown to the right.

Select **"Assign"**

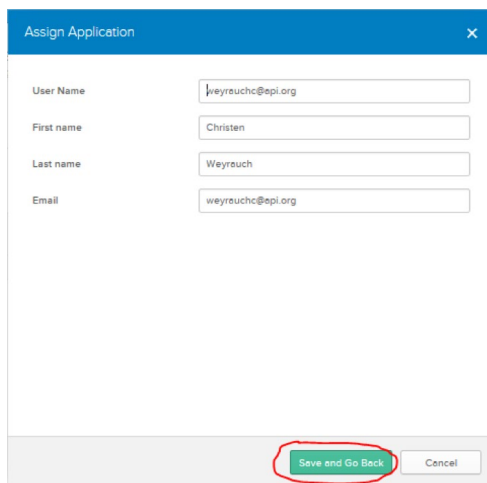


**STEP
12**

When you select **"Assign"**, a pop-up window will appear.

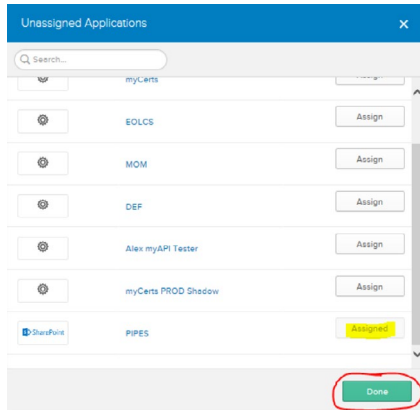
Confirm the information that appears.

Select the **"Save and Go Back"** button



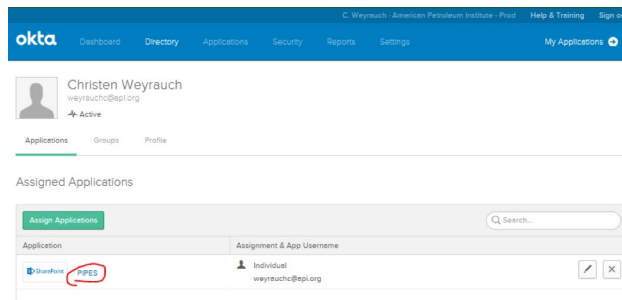
STEP 13

You'll be returned to the list of available applications. As you can see, the button has changed next to "PIPES" from "Assign" to "Assigned"
Select the "Done" button



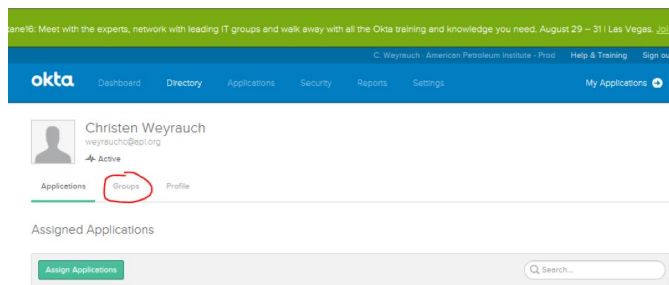
STEP 14

You'll be returned to the user's application profile.
Verify that the "PIPES" Application is displayed in the space below (shown in the screen capture to the right)



STEP 15

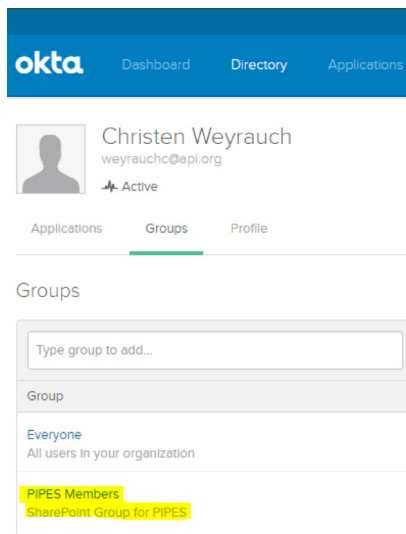
Next, select the "Groups" tab to the right of the "Applications" tab.



**STEP
16**

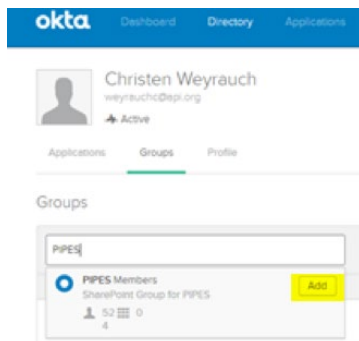
The first time a user is created within OKTA, they will NOT have a Group name appearing within the Group section. You will need to add the Group to complete their profile.

Note: If the user already has this assigned (as shown to the right), this step is done and you can proceed to Step 19



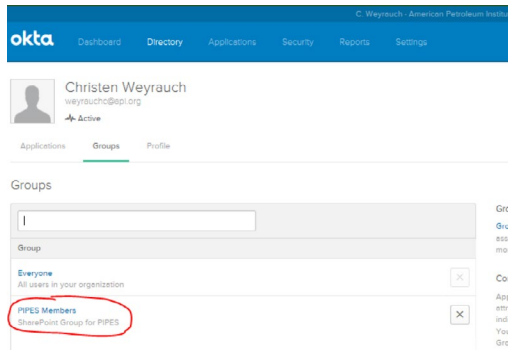
**STEP
17**

To add the “**PIPES**” group,
Type “**PIPES**” into the space available.
When it appears in the dropdown, select the word “**Add**”



**STEP
18**

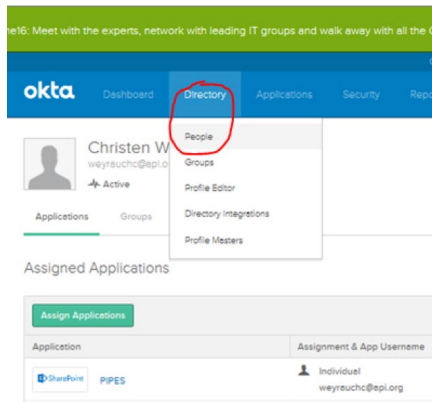
Once you select “**Add**” the group will be displayed below and associated with the user



**STEP
19**

You are now ready to add the next user to the PIPES application.

To do this, select “**Directory**” and then “**People**” and repeat Steps 5-18, above to add the next user to the PIPES application.



**STEP
20**

Once a user has:

1. Been created within OKTA
2. Associated with the “PIPES” Application
3. Associated with the “PIPES” Group

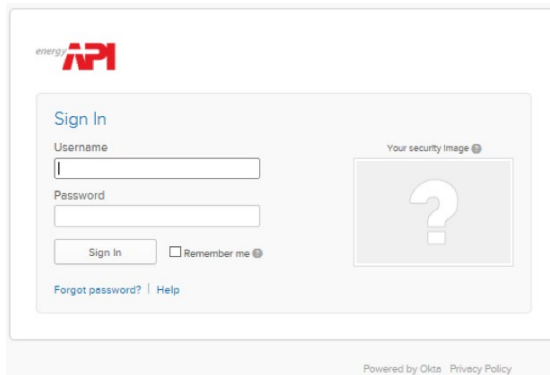
Please send an email to them confirming that their Pipes account has been created. For all new users, a password is established during the initial activation (Step 7). All existing users should already have their passwords (can be reset by clicking “Forgot password?”).

**STEP
21**

The URL for the PIPES application is: <https://pipes.api.org>

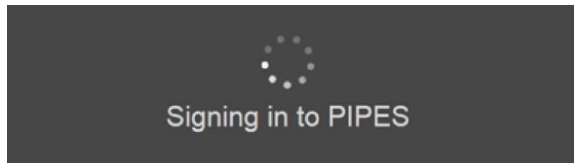
The user, upon initial login will be asked to provide the following:

1. Enter your **“Username”** in the space provided
2. Enter your **“Password”** in the space provided
3. Select the **“Sign In”** button



**STEP
22**

Wait a few minutes in order to sign into PIPES



**STEP
22**

Upon successfully entering in your Username and Password, the user will be granted to the PIPES site. To the right is a picture of the landing/home page

