NEXT PRESENTATION

STREAMLINING PROCESSES: AUTOMATING PIDX PRODUCT AND COMPANY CODES

ALISA KONCHENKO
VICE PRESIDENT OF BUSINESS DEVELOPMENT
DOCSTUDIO

KRIS PRONSKE
SENIOR IMPLEMENTATION SPECIALIST
DTN

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PIDX PRODUCT AND COMPANY CODES: AUTOMATING THE PROCESS

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WHAT ARE THEY?

- Product identifiers used by Downstream Industry Partners.
  - Individual codes represent unique products used in the industry.

Code 1	Product definition 2	Description 3	Cetane/octane 4	Oxygenated/rbob type 5	Oxygenate percent % v 6	Additized 7	Rvp percentage 8	Regulatory oxy % 9	Voc 10	Fungible/segre (f/s) 11	Dyes 12	Sulphur content 13	Am	M1	M2	M4	M5	M6	M7	M8	M9	M10	M11	M12	Comments 14
A20	AVIATION GASOLINE			N		Y																			100/130 LOW LEAD
A21	Unbranded Aviation Gasoline 100/LL	AVIATION GASOLINE																							AVIATION GASOLINE
A25	AVIATION GASOLINE			N		Y																			100/130 HIGH LEAD
B00	FUEL ETHANOL	ALTERNATIVE FUEL - Ed79-83		A	79-83	N	7.0-9.5		N	F	N		3	N	N	N	N	N	N	N	N	N	N	N	Ed79-83% ETHANOL/21-17% CaRFG3 CARB E85 fuel Class 2

- Company identifiers used by Downstream Industry Partners.
  - Individual codes represent unique companies in the industry.

Code	Company name	Address	City	St	Zip	Phone
01	Stonewin LLC	333 SE 2nd Ave STE 2000	Miami	FL	33131	305.301.1178
02	J. Global Energy Inc	440 Louisiana ST, STE 1818	Houston	TX	77002	281.455.3139

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PRODUCT CODES - WHAT ARE THEY?

Key Product Code elements include:

- Code: One to three character alphanumeric identifier assigned by the Downstream Subcommittee.
- Product Definition: Up to 34 character alphanumeric definition of the product.
  - IE: Regular, Gas, Unleaded Regular
- Description: Up to 120 character alphanumeric description of the product.
  - IE: Conventional Carb, RBOB-Carb
- Cetane/Octane: Numeric value of cetane or octane.
- Oxygenated/RBOB Type: A single alphanumeric character indicating if the product is oxygenated and if so, with which oxygenate.
  - If the product is an RBIB, this field also describes the type of RBOB.

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COMPANY CODES - WHAT ARE THEY?

Company Code elements include:

- Code
- Company Name
- Company Address
- City
- State
- Zip/Postal Code
- Phone Number
- Contact Name
- Contact Email Address
- Date Assigned

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CURRENT SOLUTION FOR REQUESTING NEW CODES

Person who wants to add a new PIDX code

PIDX-Product...022.xlsx

PIDX CODE LISTS
01-542-10-25-2014
Version: 1.06
Download Now!

New codes can be requested by filling out the attached spreadsheet and emailing a copy to **productcodes@pidx.org** or **companycodes@pidx.org**

- Downstream committee will identify the code to be assigned to the new product.

- Downstream committee will reply to you with the new code.

PIDX will update the Product Code list on the website.

DOWNSTREAM PRODUCT CODES
04-101-15-45-2010
Download Now!
70 Downloads

PIDX CODE LISTS
01-542-10-25-2014
Version: 1.06
Download Now!

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CHALLENGES: PRODUCT CODES

- Terminals/Suppliers are not always consistent.
  - Established codes not used for the same product across all terminals.
    - Causes confusion if a code means something different at two separate terminals.
    - Additional work for suppliers, customers and vendors to keep their back office updated.
- Terminals/Suppliers use non-established codes.
  - Terminals/suppliers create codes at their own discretion.
    - Parties using the Product Code list from PIDX are unable to locate/identify codes being transmitted.
      - Causes additional work to determine/identify what the code is and maintain it in back office systems.

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SOLUTIONS

Long Term Goals:

- Build an API – driven solution for PIDX codes.
  - Existing process is manually driven.
  - API should support a single, clarified protocol for providing key data sets to terminals.

Steps to consider for Product Codes:

- Compare codes being used by Data Clearing Houses to the master list.
- Identify codes being used by terminals/suppliers not on the master list.
  - Determine how to handle codes missing from the master list and duplicated codes.
  - Identify a plan for handling non-standard codes.
    - Further define attributes/requirements to create a code.
    - Determine if non-standard/"bad" codes can be added to the master list.

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SOLUTIONS

Online Request Submission:

- Partner with DocStudio to provide online solution to request codes.
  - Online form submission
    - Form reviewed for accuracy/clarity
    - Code assigned
    - New code sent to requestor
  - List updated online with new information

DocStudio

Streamlining Processes: Automating PIDX Product and Company Codes

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Solution for receiving new PIDX Product Codes through DocStudio

Person who wants to add a new PIDX code

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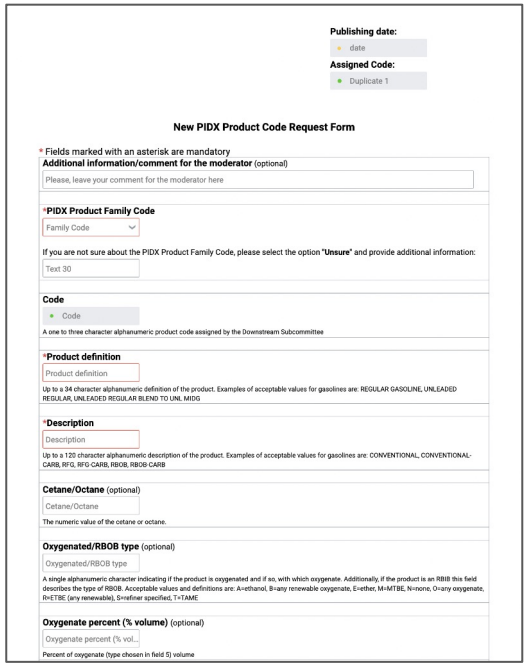
https://pidx.org/standards/downstream/product-codes/

Add new code!

Person directed to DocStudio to fill out the form



Publishing date:
date
Assigned Code:
Duplicate 1

New PIDX Product Code Request Form

* Fields marked with an asterisk are mandatory

Additional information/comment for the moderator (optional)
Please, leave your comment for the moderator here

***PIDX Product Family Code**
Family Code

If you are not sure about the PIDX Product Family Code, please select the option **"Unsure"** and provide additional information:
Text 30

Code
Code
A one to three character alphanumeric product code assigned by the Downstream Subcommittee

***Product definition**
Product definition
Up to a 34 character alphanumeric definition of the product. Examples of acceptable values for gasolines are: REGULAR GASOLINE, UNLEADED REGULAR, UNLEADED REGULAR BLEND TO UNL MIDG

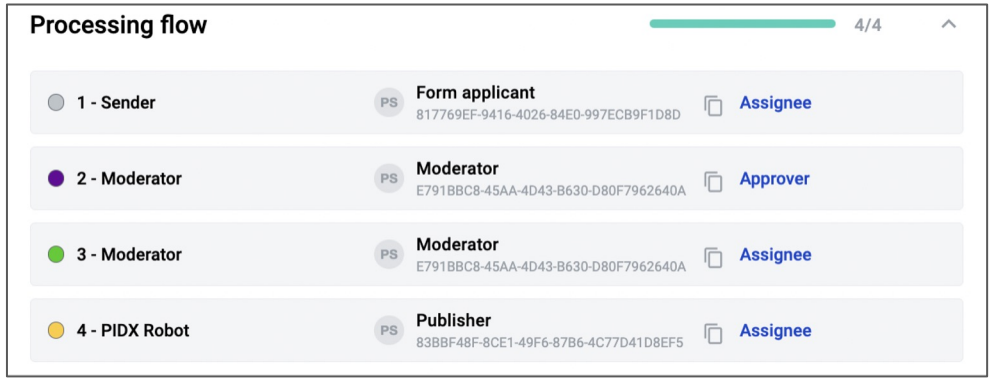
***Description**
Description
Up to a 120 character alphanumeric description of the product. Examples of acceptable values for gasolines are: CONVENTIONAL, CONVENTIONAL-CARB, RFG, RFG-CARB, RBOB, RBOB-CARB

Cetane/Octane (optional)
Cetane/Octane
The numeric value of the cetane or octane.

Oxygenated/RBOB type (optional)
Oxygenated/RBOB type
A single alphanumeric character indicating if the product is oxygenated and if so, with which oxygenate. Additionally, if the product is an RBOB this field describes the type of RBOB. Acceptable values and definitions are: A=ethanol, B=any renewable oxygenate, E=ether, M=MTBE, N=none, O=any oxygenate, R=ETBE (any renewable), S=refiner specified, T=TAME

Oxygenate percent (% volume) (optional)
Oxygenate percent (% vol...
Percent of oxygenate (type chosen in field 5) volume

Filled form will go through moderation and approval flow



Processing flow 4/4

1 - Sender	PS	Form applicant 817769EF-9416-4026-84E0-997ECB9F1D8D	Assignee
2 - Moderator	PS	Moderator E791BBC8-45AA-4D43-B630-D80F7962640A	Approver
3 - Moderator	PS	Moderator E791BBC8-45AA-4D43-B630-D80F7962640A	Assignee
4 - PIDX Robot	PS	Publisher 83BBF48F-8CE1-49F6-87B6-4C77D41D8EF5	Assignee

SFTP Connection

PIDX robot pushes the data to PIDX Website SFTP and updates Excel Spreadsheet with a new code

SFTP

DOWNSTREAM PRODUCT CODES
04-101-15-45-2010
Download Now!
70 Downloads

PIDX API

PIDX robot push the data to PIDX API

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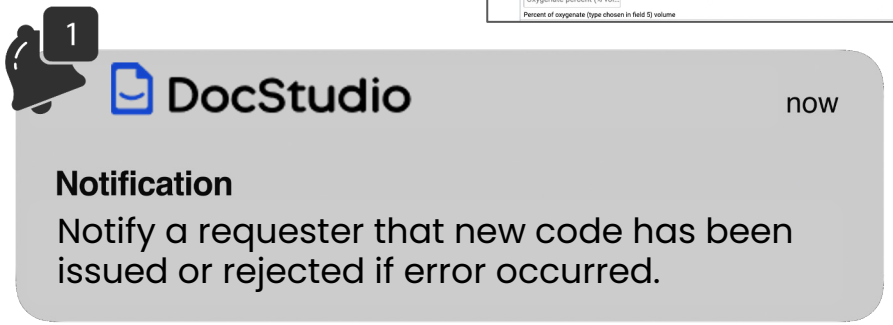
Google Cloud

api.pidx.org



1

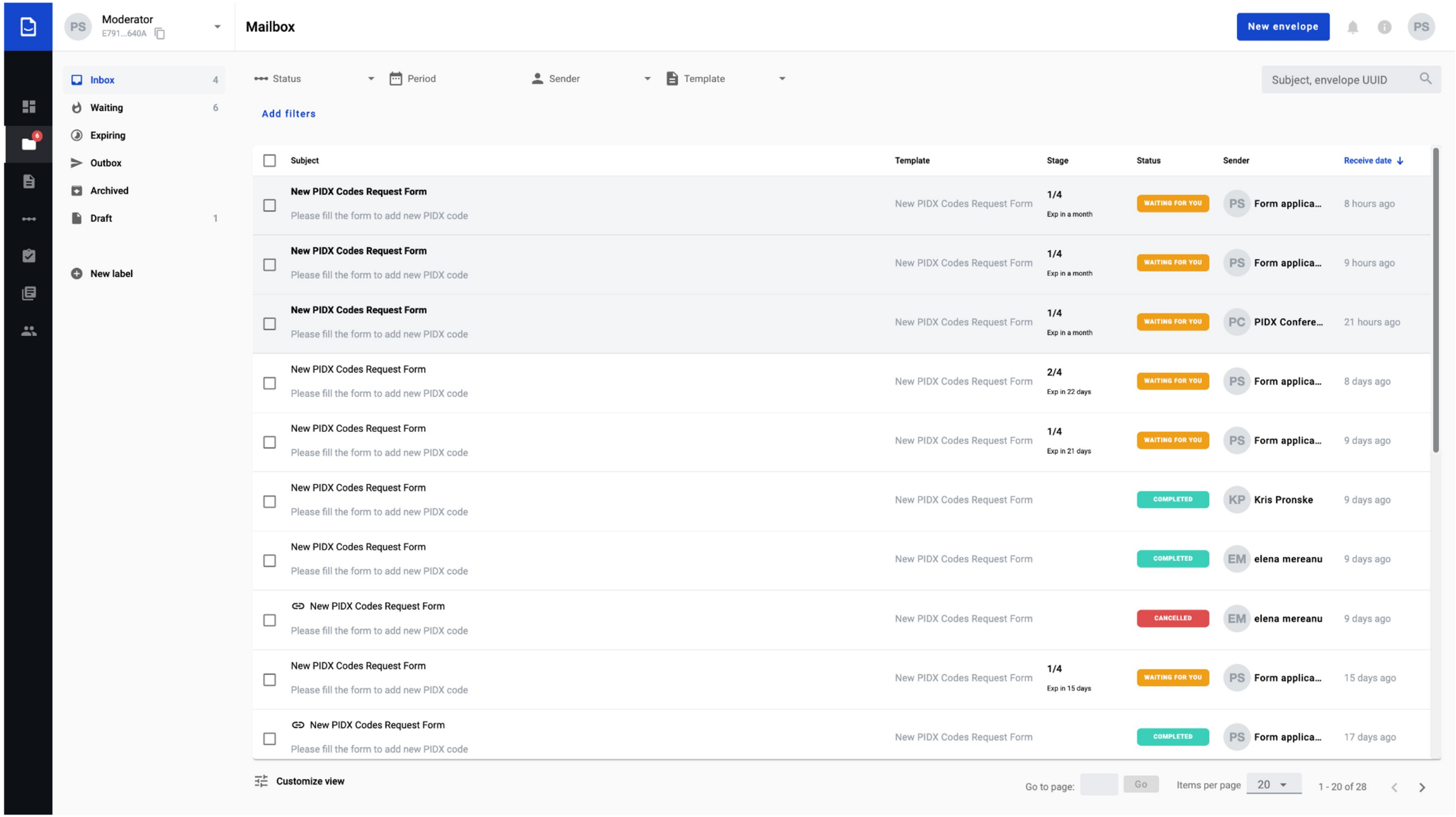
DocStudio now

Notification

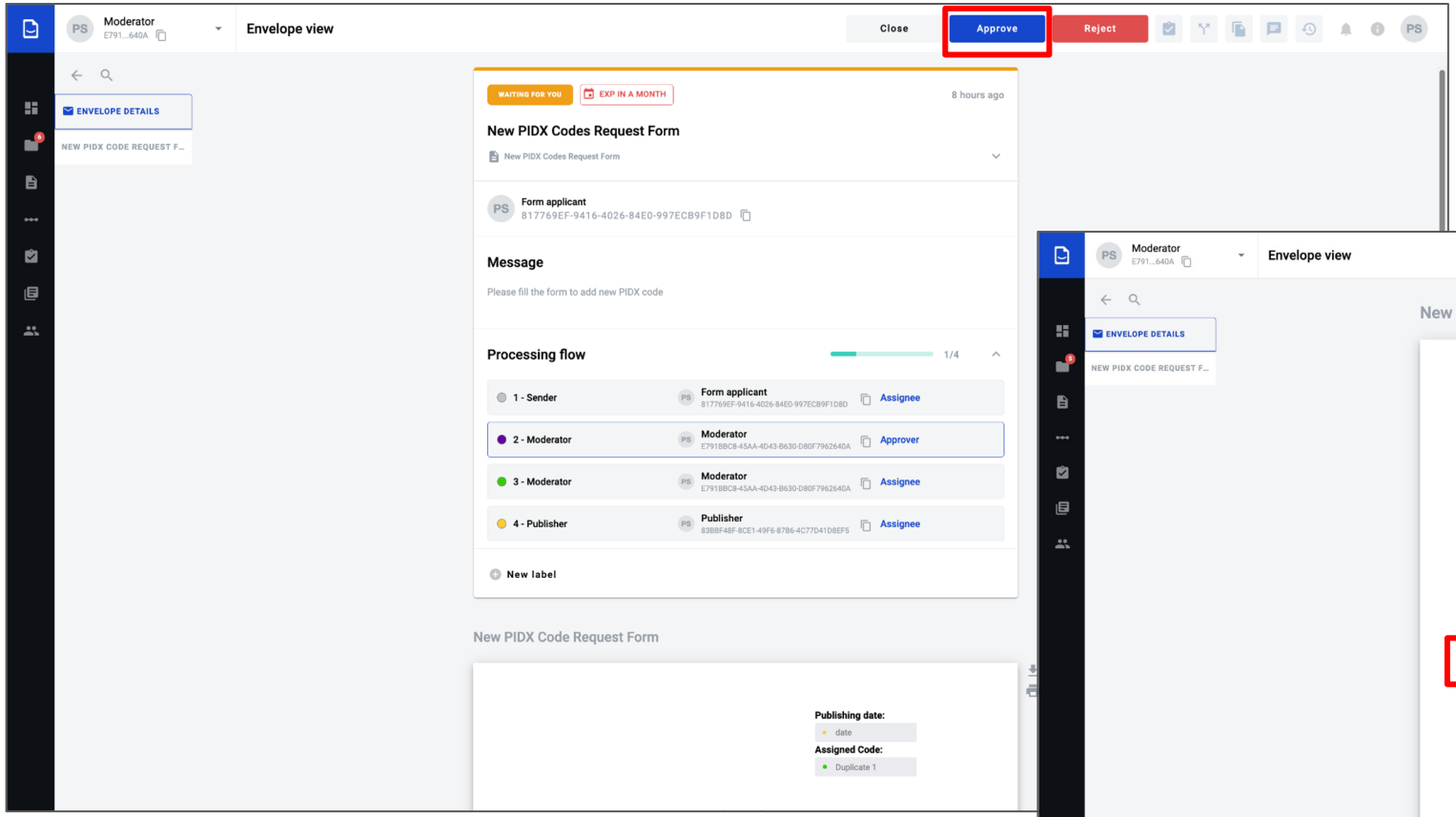
Notify a requester that new code has been issued or rejected if error occurred.

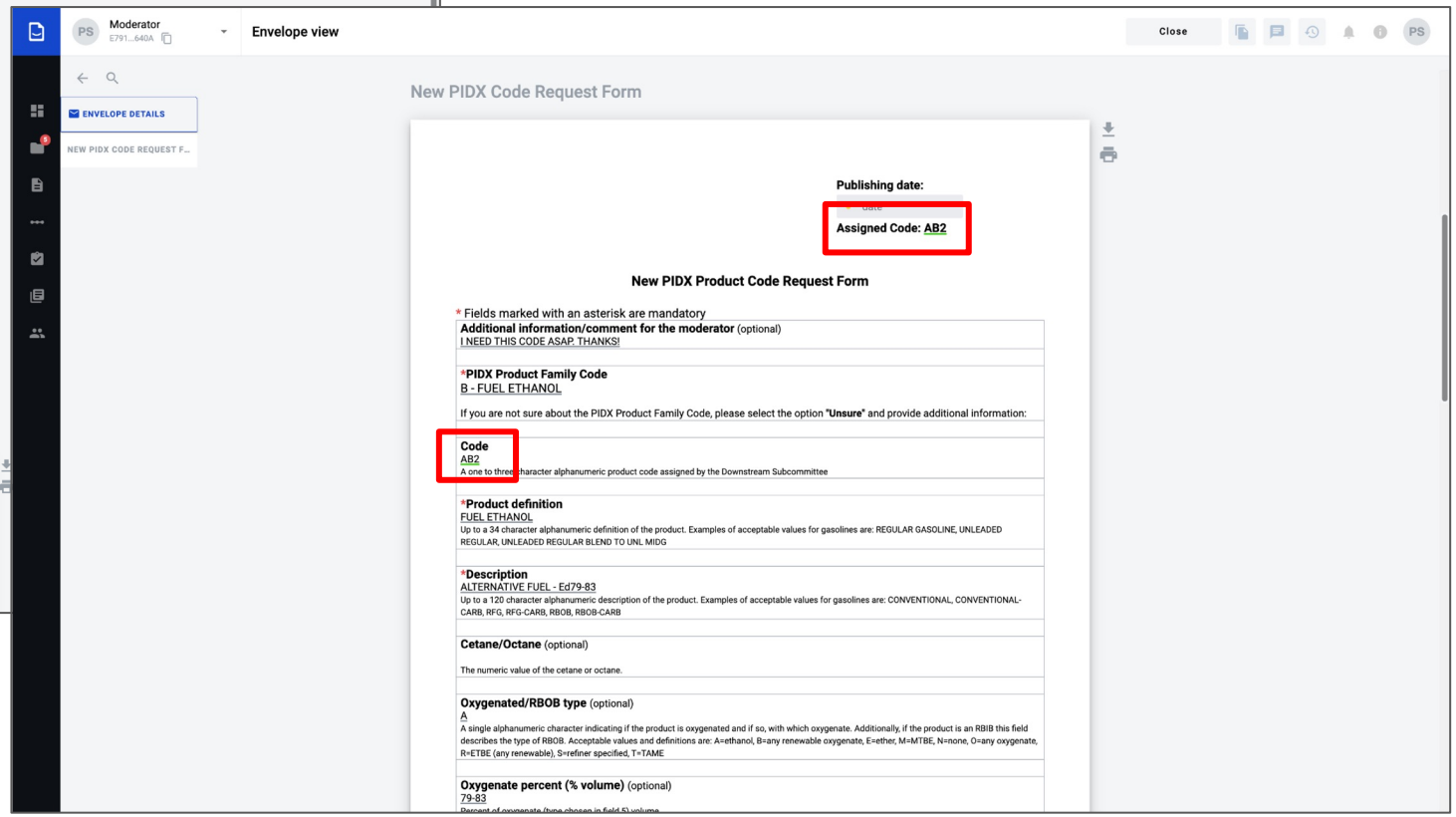
How the process looks like from requester side?

Moderation

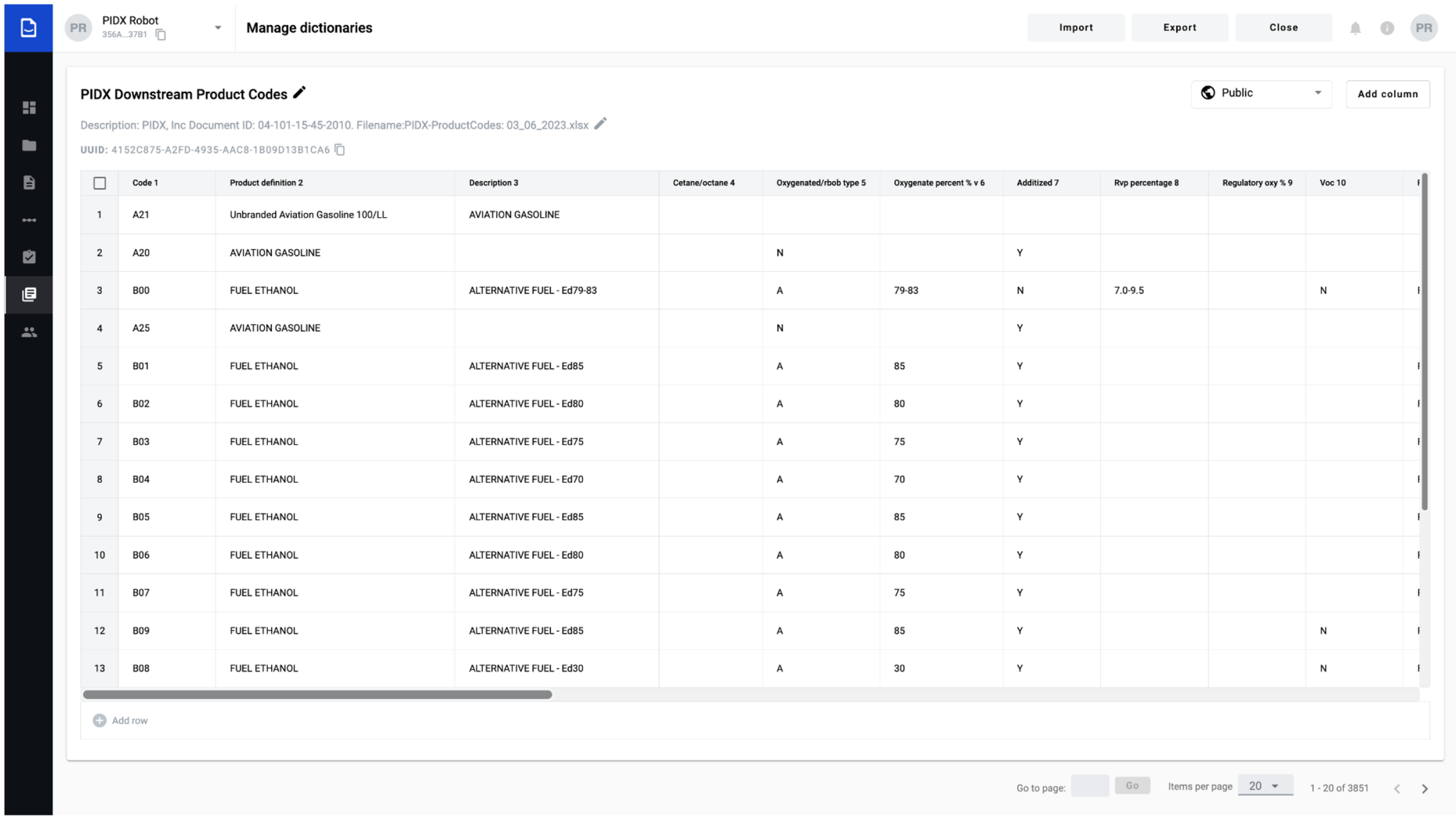

Moderator
E791...640A
Mailbox
New envelope
PS
Inbox 4
Waiting 6
Expiring
Outbox
Archived
Draft 1
New label
Status
Period
Sender
Template
Subject, envelope UUID
Add filters
Subject
Template
Stage
Status
Sender
Receive date
New PIDX Codes Request Form
Please fill the form to add new PIDX code
New PIDX Codes Request Form
1/4
Exp in a month
WAITING FOR YOU
Form applica...
8 hours ago
9 hours ago
PIDX Confere...
21 hours ago
2/4
Exp in 22 days
8 days ago
Exp in 21 days
9 days ago
COMPLETED
Kris Pronske
elena mereanu
CANCELLED
Exp in 15 days
15 days ago
17 days ago
Customize view
Go to page:
Go
Items per page
20
1 - 20 of 28

Moderation


Moderator
Envelope view
Close
Approve
Reject
ENVELOPE DETAILS
NEW PIDX CODE REQUEST F...
WAITING FOR YOU
EXP IN A MONTH
8 hours ago
New PIDX Codes Request Form
New PIDX Codes Request Form
Form applicant
817769EF-9416-4026-84E0-997ECB9F1D8D
Message
Please fill the form to add new PIDX code
Processing flow
1/4
1 - Sender
Form applicant
Assignee
2 - Moderator
Moderator
Approver
3 - Moderator
Moderator
Assignee
4 - Publisher
Publisher
Assignee
New label
New PIDX Code Request Form
Publishing date:
date
Assigned Code:
Duplicate 1


Moderator
Envelope view
Close
ENVELOPE DETAILS
NEW PIDX CODE REQUEST F...
New PIDX Code Request Form
Publishing date:
Assigned Code: AB2
New PIDX Product Code Request Form
* Fields marked with an asterisk are mandatory
Additional information/comment for the moderator (optional)
I NEED THIS CODE ASAP. THANKS!
*PIDX Product Family Code
B - FUEL ETHANOL
If you are not sure about the PIDX Product Family Code, please select the option "Unsure" and provide additional information:
Code
AB2
A one to three character alphanumeric product code assigned by the Downstream Subcommittee
*Product definition
FUEL ETHANOL
Up to a 34 character alphanumeric definition of the product. Examples of acceptable values for gasolines are: REGULAR GASOLINE, UNLEADED REGULAR, UNLEADED REGULAR BLEND TO UNL MIDG
*Description
ALTERNATIVE FUEL - Ed79-83
Up to a 120 character alphanumeric description of the product. Examples of acceptable values for gasolines are: CONVENTIONAL, CONVENTIONAL-CARB, RFG, RFG-CARB, RBOB, RBOB-CARB
Cetane/Octane (optional)
The numeric value of the cetane or octane.
Oxygenated/RBOB type (optional)
A
A single alphanumeric character indicating if the product is oxygenated and if so, with which oxygenate. Additionally, if the product is an RBIB this field describes the type of RBOB. Acceptable values and definitions are: A=ethanol, B=any renewable oxygenate, E=ether, M=MTBE, N=none, O=any oxygenate, R=ETBE (any renewable), S=refiner specified, T=TAME
Oxygenate percent (% volume) (optional)
79-83

PIDX robot updates the Product Code list on the website via SFTP connection and push the data to PIDX API



	Code 1	Product definition 2	Description 3	Cetane/octane 4	Oxygenated/rbob type 5	Oxygenate percent % v 6	Additized 7	Rvp percentage 8	Regulatory oxy % 9	Voc 10
1	A21	Unbranded Aviation Gasoline 100/LL	AVIATION GASOLINE							
2	A20	AVIATION GASOLINE			N		Y			
3	B00	FUEL ETHANOL	ALTERNATIVE FUEL - Ed79-83		A	79-83	N	7.0-9.5		N
4	A25	AVIATION GASOLINE			N		Y			
5	B01	FUEL ETHANOL	ALTERNATIVE FUEL - Ed85		A	85	Y			
6	B02	FUEL ETHANOL	ALTERNATIVE FUEL - Ed80		A	80	Y			
7	B03	FUEL ETHANOL	ALTERNATIVE FUEL - Ed75		A	75	Y			
8	B04	FUEL ETHANOL	ALTERNATIVE FUEL - Ed70		A	70	Y			
9	B05	FUEL ETHANOL	ALTERNATIVE FUEL - Ed85		A	85	Y			
10	B06	FUEL ETHANOL	ALTERNATIVE FUEL - Ed80		A	80	Y			
11	B07	FUEL ETHANOL	ALTERNATIVE FUEL - Ed75		A	75	Y			
12	B09	FUEL ETHANOL	ALTERNATIVE FUEL - Ed85		A	85	Y			N
13	B08	FUEL ETHANOL	ALTERNATIVE FUEL - Ed30		A	30	Y			N

ROADMAP: AUTOMATION OF PIDX PRODUCT AND COMPANY CODES

01

REQUEST = IDEA

OCTOBER, 2022

Kris Pronske's Presentation at the PIDX Fall Conference about PIDX Product Codes

02

SOLUTION PROTOTYPE

NOVEMBER, 2022

The DocStudio Team and Kris Pronske collaborated to create a prototype solution for automating the PIDX Codes request process

03

DEVELOPMENT

DEC-FEB, 2023

- Developed a Form Template and flow
- Conducted a demonstration on the PIDX Webinar
- Tested with PIDX Downstream WorkGroup and Code Lists Users
- Made improvements based on expert feedback

04

TECHNICAL INTEGRATIONS

MAR-APR, 2023

- SFTP integration with PIDX Website to update Excel Spreadsheet with a new code
- Publish the data to PIDX API

05

PRODUCTION & ONBOARDING

MAY-JUN, 2023

- Production stage
- User Onboarding

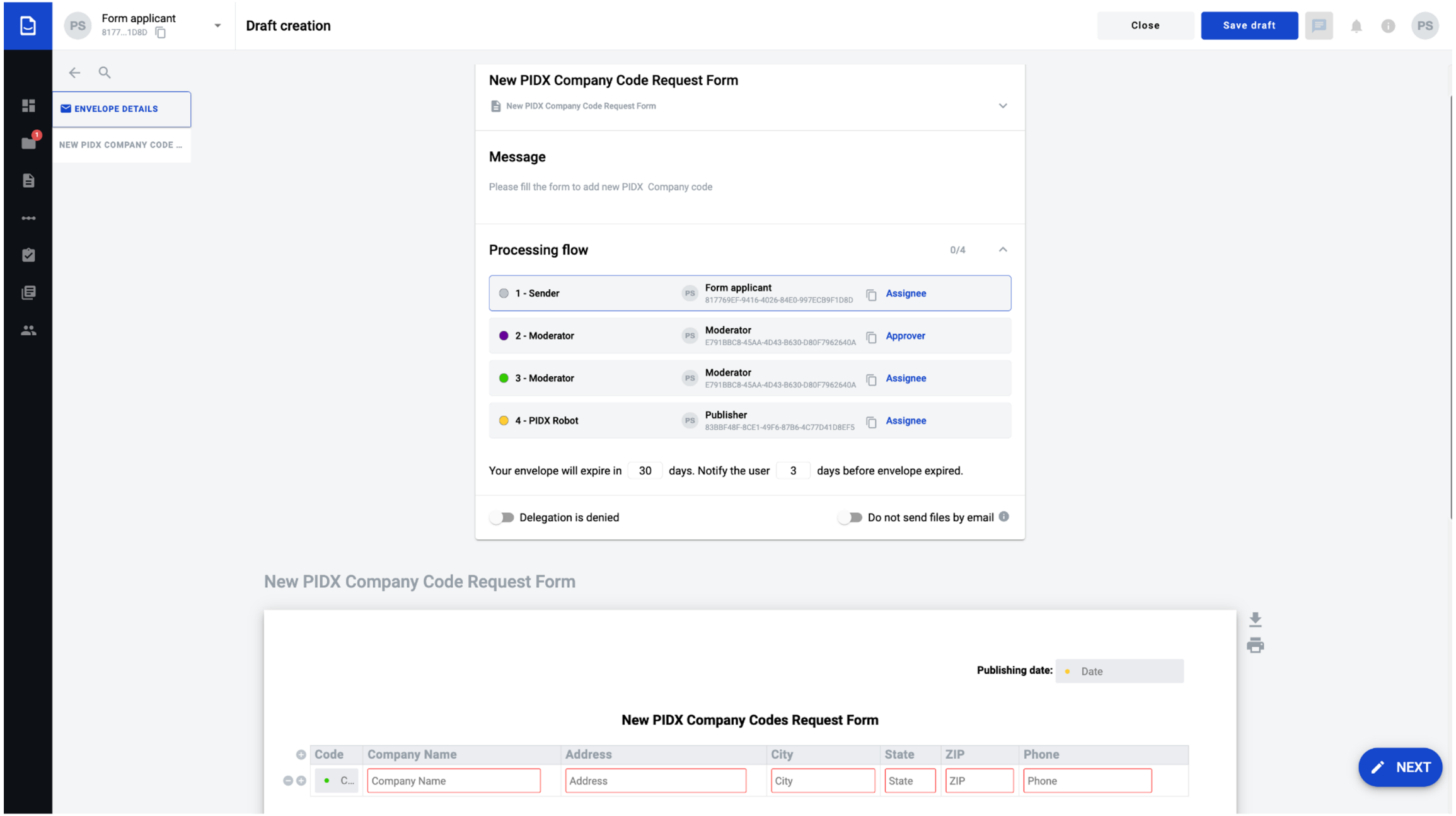
06

PIDX COMPANY CODES

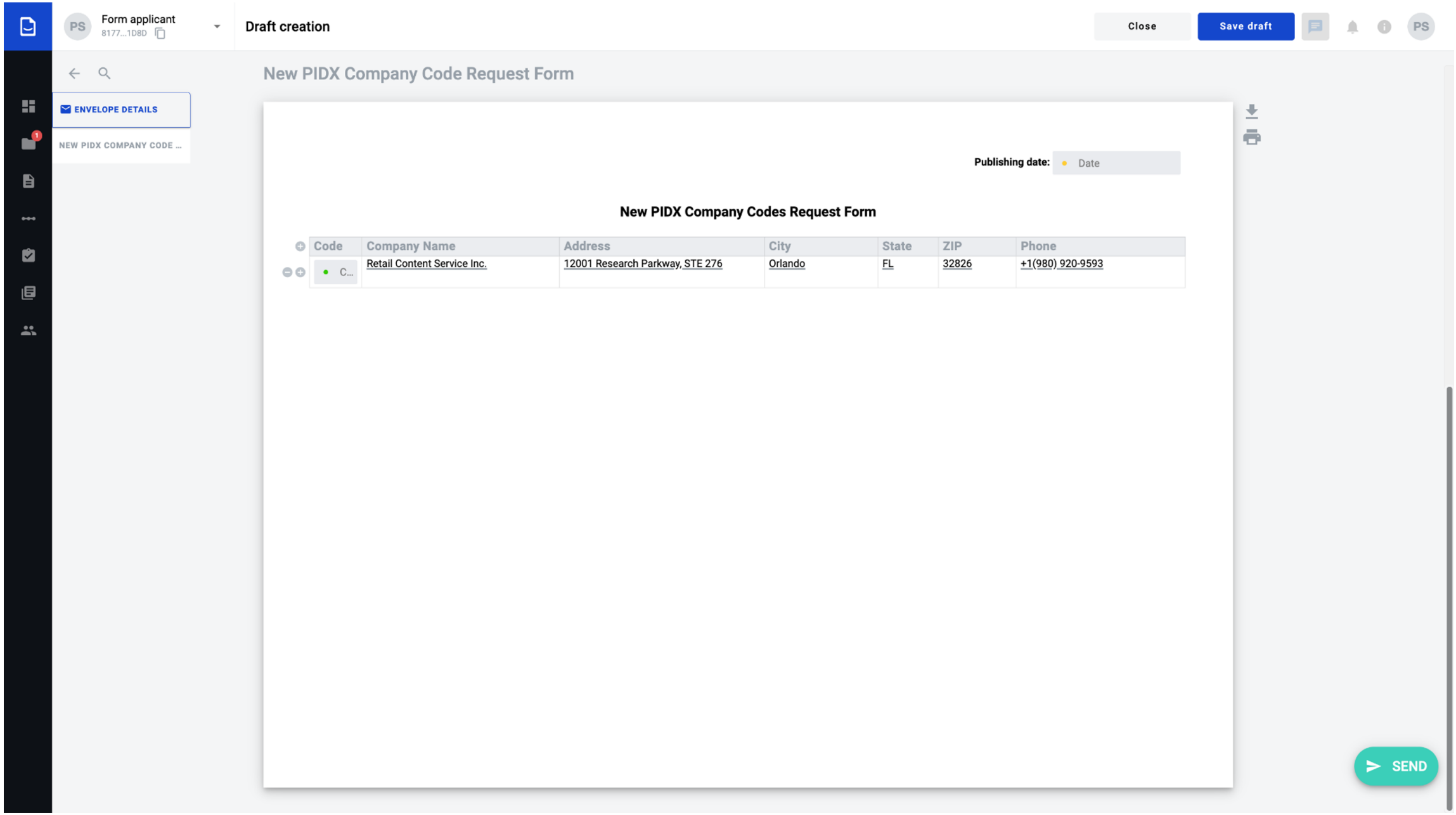
JUN-AUG, 2023

Automate the process of requesting new PIDX Company Codes based on the experience with Product Codes

PIDX Downstream Company Codes



PIDX Downstream Company Codes



Benefits of automating request of New PIDX Product and Company Codes:

- **Increased efficiency:** Automating the request process reduces the time and effort required to complete each request, freeing up resources for other important tasks.
- **Greater accuracy:** By using a standardized and automated process, the likelihood of errors or inconsistencies in the request is greatly reduced.
- **Improved communication:** The use of a centralized platform helps to streamline communication between requestors and PIDX administrators, ensuring a smooth and efficient process.
- **Enhanced tracking and reporting:** The automated process enables real-time tracking, providing greater visibility into the overall process.
- **Scalability:** The automated process easily accommodates an increasing volume of requests as the PIDX community grows.

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