

Frac Focus USER GUIDE

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Guidelines for Entering Chemical Disclosure Data into FracFocus

Chapter 1 - Background

In April 2011, the FracFocus website (www.fracfocus.org) was launched. It provided a mechanism for oil and gas operators to enter data on the names and quantities of the chemical ingredients used during the hydraulic fracturing of wells (frac fluids). Once the data was submitted, any interested person, including members of the general public, could search to find individual disclosures and view the data. The FracFocus website, known as the Chemical Disclosure Registry (or Registry), represented a unique resource and a useful repository of chemical usage information.

Initially, data entry into the Registry by operators was voluntary. However, during the first year of FracFocus' existence, several state agencies adopted regulations requiring operators to enter data into the Registry for each hydraulic fracture job performed on oil and gas wells. The number of wells for which data was entered into the Registry grew rapidly. As of 2023, 26 states state agencies require or support operators entering chemical disclosures into the Registry.



Chapter 2 - Introduction

Contents of This Guide

This guide includes information on the different components of the FracFocus application, users authorized to review and enter information, and how the information is reviewed and entered. Many screen shots are included to show users what the system looks like and to indicate where information should be entered when navigating the Registry.

There are areas of the application designated for specific entities. These include:

- Operating Company companies that operate oil and gas wells and have the responsibility to upload and submit their disclosure reports to FracFocus.
- Registered Agents approved consultants/uses who support operators in reviewing, entering, and potentially submitting data on the operators behalf.
- Service Companies companies that typically conduct the hydraulic fracturing job and prepare the initial disclosure data for the operators.

The following chapters review the available activities for each entity and are created to provide comprehensive instructions on the system's use.

Defining Entities and Associated Roles

OPERATING COMPANY

Company operating oil and gas wells. Identified as Responsible Operator by State Agencies.

OPERATOR SUPERVISOR

User role responsible for managing the company's users, associations, and registration.

OPERATOR SUBMITTER

User role responsible for entering, validating, and submitting data to FracFocus.

REGISTERED AGENT

Organization that supports Operators by entering, validating and potentially submitting disclosures.

REGISTERED AGENT SUPERVISOR

User role responsible for managing the organization's users and registration.

REGISTERED AGENT USER

User role, when agent organization approved by operator, can submit disclosures for operator.

SERVICE COMPANY

Company that typically performs the fracturing jobs and provides initial data to operator for review and submission.

SERVICE COMPANY SUPERVISOR

User role responsible for managing the organization's users and registration.

SERVICE COMPANY USER

User role responsible for entering, validating, and routing data to Operators so they can submit.

System Requirements

For optimal functionality and performance FracFocus requires:

- The use of a modern and up-to-date web browser such as Google Chrome, Mozilla Firefox, Safari, or Microsoft Edge. FracFocus was not developed to be compatible with Microsoft Explorer.
- A major operating system such as Windows, macOS, Linux, Android and iOS.
- Connection to stable and high-speed internet.
- A desktop PC or tablet with a screen that allows a resolution of 1024x768 or above. While
 FracFocus can adapt to various screen sizes and resolutions, a higher resolution will provide a
 better experience.

Chapter 3 - Understanding the Value of FracFocus

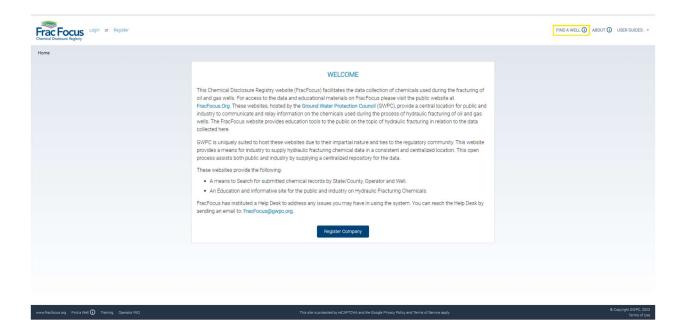
The purpose of FracFocus is to provide online information about the chemicals used to fracture individual wells. The publicly available output shows the well name, location, depth, and a list of the additives and component ingredients. For each ingredient, it gives the percentage of that ingredient within the additive, and the percentage of that ingredient in the whole of the job performed.

To understand how FracFocus works, it is useful to see how the end users search for information and then examine the format in which the resulting information is presented. This chapter explains how to find a well and then shows the resulting disclosure submitted.

Search for a Well

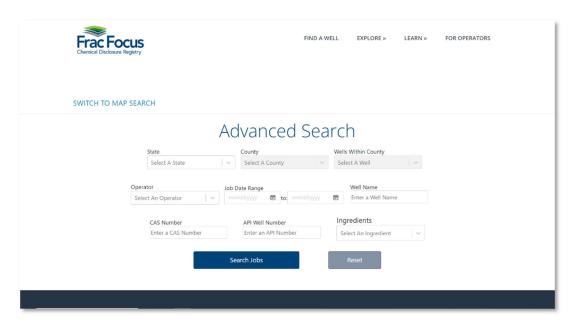
FracFocus allows you to search the public database for specific disclosures. You can search for a well using an Advanced Search or Map Search.

At the main FracFocus Data page, click on Find a Well located in the Dashboard. This will take you to the Advanced Search. You can switch to Map Search by clicking Switch To Map Search at the upper left of Advanced Search.

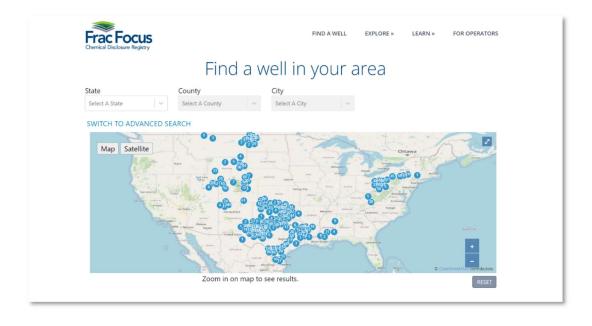


You can use the Advanced Search to search by:

- State
 - County
 - Wells Within County
- Operator
- Job Date Range
- Well Name
- CAS Number
- API Well Number
- Ingredients (from drop-down list)



The Map Search allows a user to find a well by using a map interface—this is useful if you do not know the specific data to search on the Advanced Search page but know its physical location.



The End Product

After getting search results, you will have a list of disclosures either below the Advanced Search options or below the Map. You can click on the well name in the list to see the individual well page with disclosures information, including chemicals, submitted for that well. On that page you can click on the PDF Disclosure Form button to open a .pdf file that shows the public disclosure (see below, Systems Approach format).

Elements of the .PDF Disclosure

The .pdf disclosure seen to the right is an example of an output for a Systems Approach disclosure. The information shown on the disclosure .pdf file is comprised of the data submitted by the operator for each hydraulic fracturing job performed.

The box near the top of the .pdf provides information on the well, its location, and how much water was used. It is known as the "header information."

The Hydraulic Fracturing Fluid composition section lists each primary additive, who supplied the product, why that additive is used, and then lists the individual ingredients below the green line. For each ingredient, the chemical name and its CAS number are listed along with the percentages in the additive and percentage in the whole frac fluid. Both percentages are expressed on a mass basis. The format of a MSDS+ disclosure approach differs slightly by linking individual chemicals to the products.

A new feature allows for the submission of Water Source data and is located next to the header data.

	Job Start Date:		1/23/2018												
Job End Date:			1/23/2018												
	State:		Montana												
	County: API Number:		Certon 5-009-21302-00-00												
Operator Norne: Well Name and Number: Latitude: Longitude: Datum: Fedoral Woll: Indian Well: True Vertical Depth:			ard Operating, LLC	Frac Focus											
		EBET2 390 45 02266000 -108.88655000 NAD83 YES NO 6,737		Chemical Disclosure Registry											
										1					
				GROUNDWATER PROTECTION COUNCIL											
								Total Base Water			69,853				
								Total Base Non	water volume:						
				ydraulic Frac	turing Fluid Cor	nposition:	37								
				Chemical Abstract	Maximum	Maximum									
Trade Name	Supplier	Purpose	Ingredients	Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Ingredient Concentration in HF Fluid	Comments								
				(CAS #)	(% by mass)**	(% by mass)**									
4	QES	Breaker													
				Listed Bolow											
uffer -4L	QES	Buffer													
		-4190													
				Listed Below											
VG-1SLR QES	QES	Guar slurry													
				Listed Below											
				Listed Below											
E-1	QES	Non Emulsifier													
	6			Listed Below			4								
				- and 100 A 166000	5										
CI-2SUB	QES	KCL subsitute													
				Listed Below											
_B-2	QES	Crosslinker													
orod a li							8								
				Listed Below											
R-1	QES	Breaker													
	-			Listed Below											
ater	Vanguard Natura Resources	fluid													
	- Anna Carachitest		fresh	7732-18-5											
IO-2L	OFS	BIOCIDE					ş								
Ada															
	0			Listed Below											
ems above are Tr	ade Names with the	exception of Base V	/ater . Items below are the indi	vidual ingredients		V-									
			Water	7732-18-5 14808-60-7	100.00000	85.09300 13.75405	1								
			Solvent Naptha (pol.)	64742-47-8	60.00000	0.37117									
			heavy aliphatic Guar Gurn	9000-30-0	50,00000	0.30931	-								
			Choline Chloride	67-48-1	70,00000	0.12890									
			Water	7732-18-5	30.00000	0.05524	0								
			Water Methanol	7732-18-5 67-56-1	70.00000 30.00000	0.05070 0.04855									
			Sodium hydroxide	1310-73-2	30.00000	0.02173									
			Ammonium persulfate	7727-54-0	100,00000	0.02039									
			Boric acid Hydrotreated light	10043-35-3 064742-47-8	10.00000 30.00000	0.00625 0.00436									
			distallate												
			Tetrakis(hydroxymethyl) Phosphonium Sullate	55566-30-8	20.00000	0.00356									
			Sodium Borate	13840-56-7	5.00000	0.00312									
			Glycerol Oxylalkylated alcohol	56-81-5 69227-21-0	5.00000	0.00312									
			Sodium Chloride	7647-14-5	5.00000	0.00073									
tal Water Volume s	urres may include van	turn burger of pusher use	using fresh water, produced vister of thus the total may be over 100% the water volume below the green												





FracFocus OPERATOR GUIDE

Chapter 4 - Using FracFocus as an Operator

This chapter describes the activities an operator can do within FracFocus. There are two different roles that can be assigned to users who are Operators:

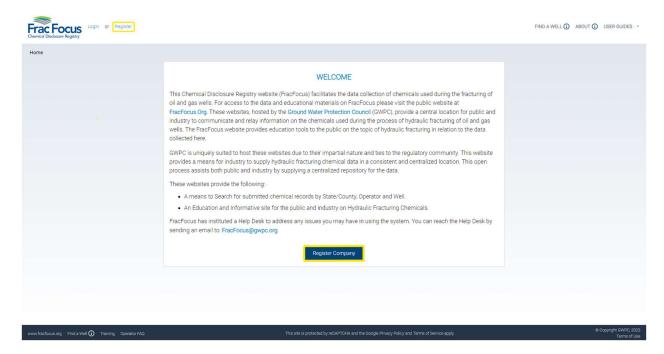
- **Supervisor** A supervisor has overall responsibility for the operator's organization and registration with FracFocus and can add users to the organization and manage both Supervisor and Data Submitter roles of users.
- Data Submitter The data submitter role allows a user to manage the information on a
 disclosure and submit the disclosure for regulatory compliance to the public portion of
 FracFocus.

Getting Started as an Operator

Registering an Operating Company

The first thing an Operator must do is register to participate in FracFocus. The person who makes the initial registration for an Operator is automatically assigned the Supervisor role. If you registered for FracFocus previously, you do not need to register again. Registering a company implies that the company is not an existing organization registered in FracFocus. The system will perform a search to determine if your registration information matches previous registrations.

To Register: If your company has not yet registered, click Register (at the top next to Login) or click the Register Company button on the home screen.



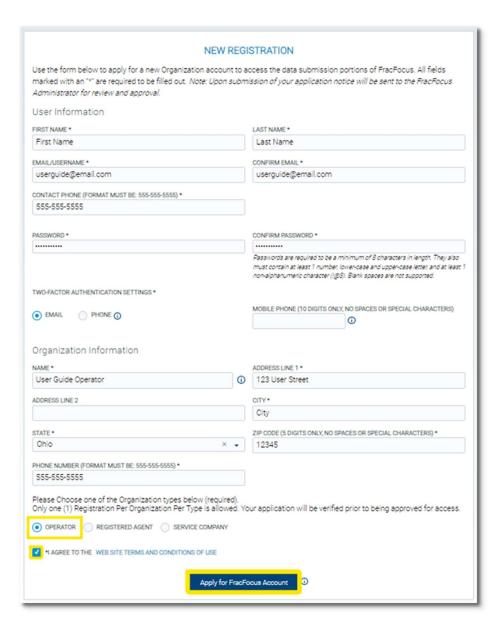
You will be directed to the new registration form.

Enter the required information and create a password. Passwords are required to be a minimum of 8 characters in length. They also must contain at least 1 number, a lower-case and an upper-case letter, and at least 1 non-alphanumeric character (!@\$). Blank spaces are not supported.

For the two-factor authentication settings choose between email or phone. If you choose to receive authentication via phone, you will be required to enter a mobile phone number that can receive text messages.

Select Operator from the organization types list. When registering a new organization, you can only select one type of entity.

You must agree to the web site terms and conditions of use, then click the Apply for FracFocus Account button.



If the system finds a matching existing organization registration it will present those to you at the top of the form.

NEW REGISTRATION

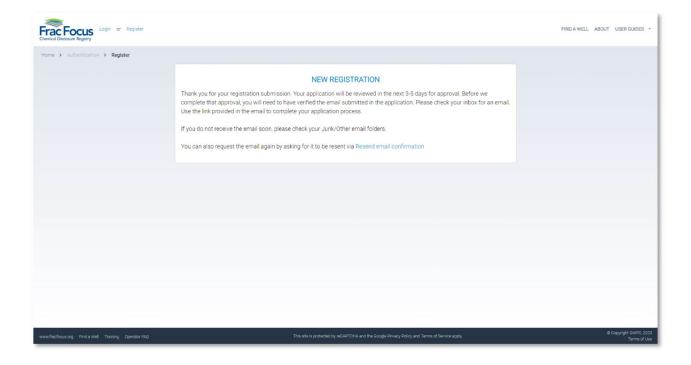
It appears that your company may already be registered with FracFocus. Please verify that your company is not already registered before proceeding with registration.

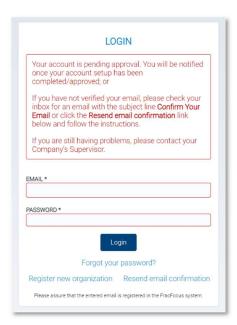
gwpc: 133 N. MacArthur Blvd. Oklahoma City OK 73142 - Registered as Operator

If your company is not represented in the list, scroll to the bottom and check the box confirming that the company you would like to register is not listed and click the Apply for FracFocus Account button again.



After your application has been submitted, you will receive an email to verify the email address associated with your account. Before your approval can be completed, you must verify the email submitted in the application.



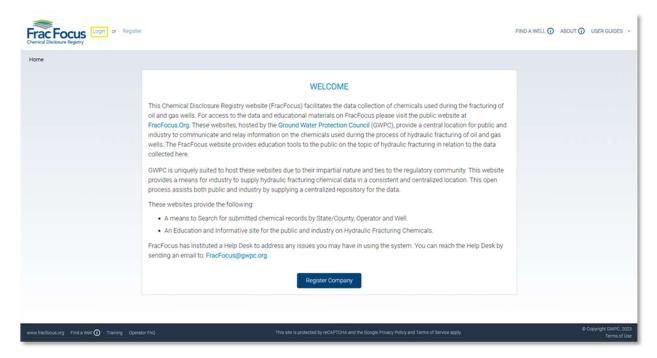


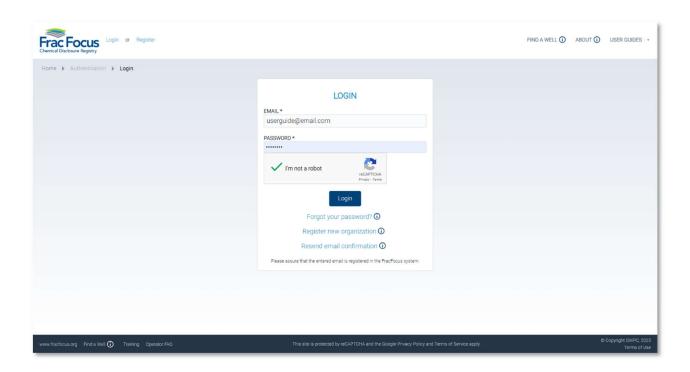
Once your email is verified, your application will be reviewed in the next 3-5 business days for approval by a FracFocus Support Administrator. Once you are approved, you will receive an email acknowledging your approval.

Please note – you will not be able to login to FracFocus until being approved. If you try, you will receive a notice stating your account is pending approval.

Once approved, use the link from the email or return to https://www.fracfocusdata.org. Enter your email and password and complete the two-factor authentication when prompted.

To Login: Start at the FracFocus homepage (www.fracfocusdata.org). At the top left of the screen (next to the FracFocus logo), click login. From there, you will be prompted to enter your email address, password, reCAPTCHA, and complete the two-factor authentication to get started.



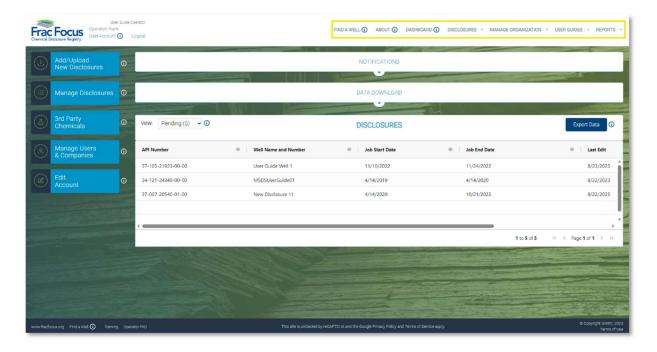


The Operator Dashboard

After successfully logging in, you will be directed to the operator dashboard screen that shows notifications, data download, disclosures, a header menu system, and the left-hand navigation menu. Each of these dashboard components allow users to perform actions in the system based on their assigned roles.

Upper Right-Hand Navigation

You will see this menu on most FracFocus screens – this allows efficient navigation to other screens and to return to the dashboard. Options available to a user are dependent on the role assigned to them.



Find a Well

Directs you to the public disclosure interface on FracFocus.org to search for submitted disclosures.

About

Directs you to the About page which contains general information about FracFocus.

Dashboard

Directs you to the Dashboard – your home screen.

Disclosures

Allows you to add/upload new disclosures, manage disclosures, and manage 3rd party chemicals.

Manage Organization

Allows you to manage your organizations profile, users, relations, and set up organizational defaults.

User Guides

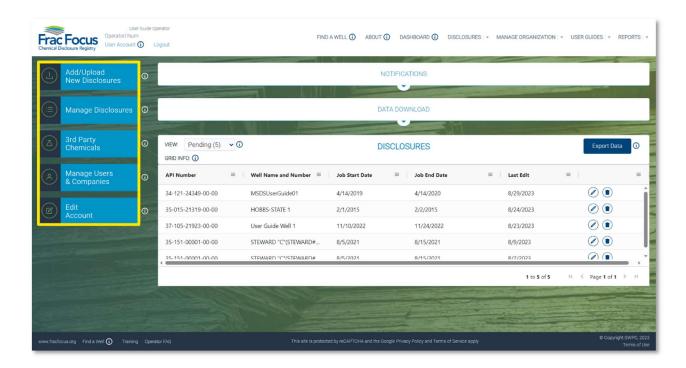
Directs you to the Schema Guide and User Guide.

Reports

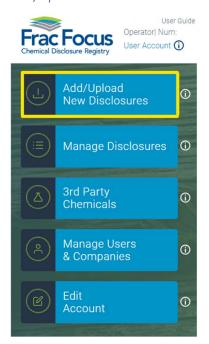
Directs you to a set of Operator Reports which provide insight into the disclosures submitted.

Left-Hand Navigation

The Left-Hand Navigation options provide the user with quick access to specific menu selections. The available items in the Left-Hand Navigation menu will be dependent on the logged in user's roles.



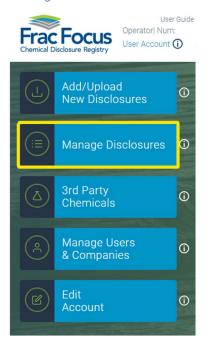
Add/Upload New Disclosures



Operator users with the Data Submitter role will have this menu option. This menu item directs you to the New Disclosure page. You can also access this page from the Add/Upload New Disclosure drop-down item from the Disclosures option in the navigation menu.

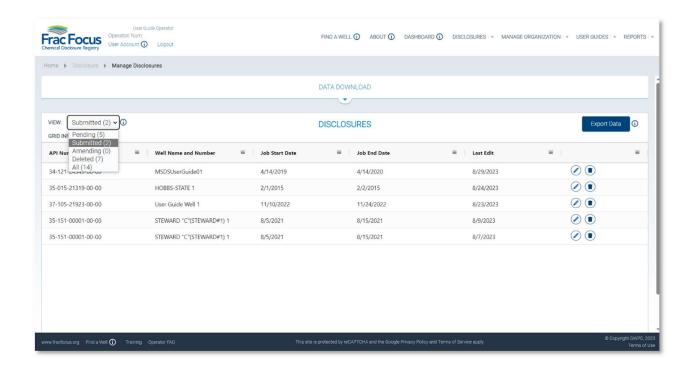
Refer to page 31 of this guide for additional information on adding/uploading new disclosures.

Manage Disclosures

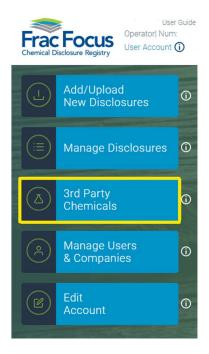


This menu item directs you to the Disclosures page. You can also access this page from the Manage Disclosures drop-down item from the Disclosures option in the navigation menu. Here, you can view submitted, pending, amending, deleted or all disclosures from your company. (Note: deleted disclosures are created during the process of editing/amending submissions and will be removed from the system after a 6-month holding period.)

Once on the Disclosures page, use the View drop-down to narrow your disclosures based on status. You also have the option to export your data into an excel spreadsheet with the Export Data button for review while offline.



3rd Party Chemicals



This menu item opens the 3rd Party Chemicals page, which is used to enter additives and their chemicals in a list where they can be used by the operator to streamline addition to disclosure reports. Instructions for adding a new 3rd party chemical (or additive) is outlined below.

Users with the Data Submitter role have the ability to add and edit 3rd party chemicals. Users with the Supervisor role can only review the list.

Add New Additive

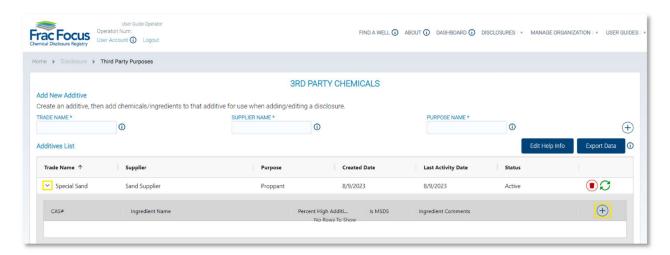
To create a new additive, input the Trade Name, Supplier Name, and Purpose Name then click the dadd. After adding a new additive, the user then can add ingredients to it.



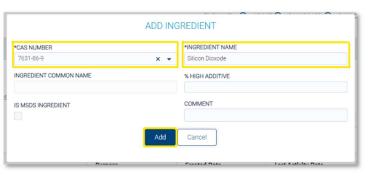
Adding Ingredients

To add an ingredient to an Additive, click the drop-down option (i.e. ">" arrow next to Trade Name of Additive) to view the Additive's ingredients.

To add a new ingredient, click the $\stackrel{(+)}{}$ in the header portion of the drop-down. then click the $\stackrel{(+)}{}$ to add a new ingredient.



You will then be directed to enter the new ingredient information. The CAS Number and Ingredient Name are required fields. If you select a CAS Number from the existing drop-down list, the Ingredient Name field will be populated. You can also enter the % High Additive and any additional comments regarding the ingredient. The Ingredient Common Name Field is read-



only and will be populated based on previous use of that chemical's CAS Number in FracFocus. For the special cases of "Proprietary", "Trade Secret", "CAS Not Assigned", and "Confidential", enter one of those values in the CAS Number field and press the enter key on your keyboard. This will add the value to the CAS Number field.

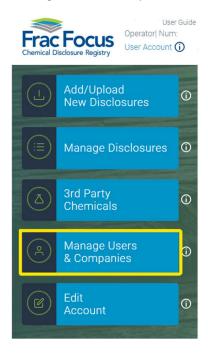
If the ingredient is an MSDS Ingredient, click the checkbox under "Is MSDS Ingredient". Both MSDS and non-MSDS ingredients can be entered for an Additive. After the information is entered, click the Add button to add the ingredient. If a special case has been entered for the CAS Number, claimant

information will be able to be populated after adding.

Once the ingredient has been added, it will populate in the Additive List drop-down. By clicking on the fields of the ingredient in an Additive, you can edit that ingredient.



Manage Users & Companies



For users with the Supervisor Role, this menu item directs you to the Organization Users page where you can manage the following:

Users Tab:

- Add new users to your organization
- Associate existing users with your organization
- Manage user's roles
- Manage user access to FracFocus for your organization

Companies Tab:

- Approve or deny Registered Agent entities to do work for you
- Adjust Registered Agent's role for your organization
- Approve or deny Service Companies to route data to you

You can navigate between the Organization Users and Companies Relationship page by using the Users and Companies tabs.



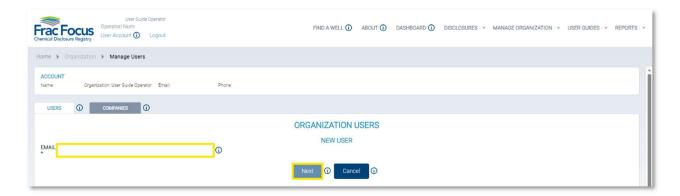
The system requires your organization to have at least one Supervisor. As a supervisor you cannot remove that role from your user account. If this role needs to be removed from your user account, another Supervisor of your organization can remove it. An organization can have multiple Supervisors and multiple Data Submitters. Users can also have both roles assigned.

Add a New Operator User or Supervisor (new to FracFocus)

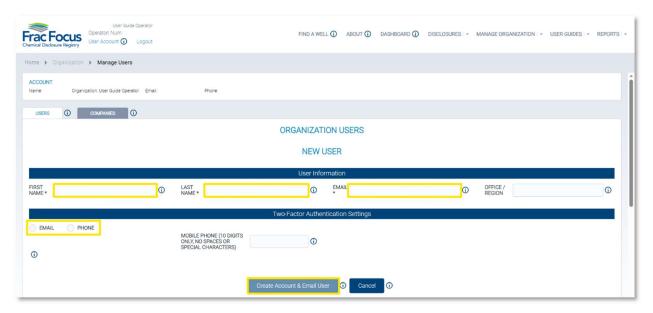
To add a new organization login under the operating company, that is also new to FracFocus, click either New User or New Supervisor under the Users Tab. (Note: example shows New User option selected – same process is followed for a New Supervisor.)



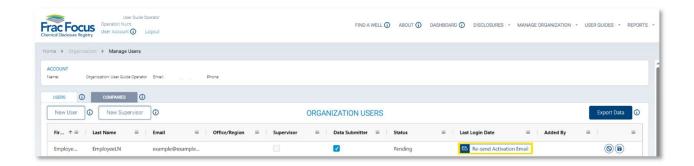
Next, enter the email address of the new organization login to verify the email address is not already registered in FracFocus. Once the email is entered, click Next to check for existing user and move forward.



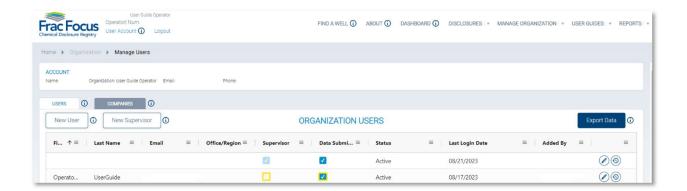
You will be directed to a New User form, also known as an Account form. Enter the new user's required information: first name, last name, email address (pre-populated) and two-factor authentication settings. You can also assign an Office/Region to your staff. Then click Create Account & Email User. This will send an email to the user with steps to complete their account setup and login for the first time.



The new user's account will be put in a pending state after the account is created. Before the user logs in for the first time, the new user's first name, last name, office/region, and email can be edited. If the email was entered incorrectly, it can be edited, and the email can be resent by clicking the Resend Activation Email button. At this point in the process, the account can be deleted, once the user has logged in for the first time, it can no longer be deleted.



Once the user is added, the name of the new user will be added to the Organization Users list. The Supervisor then can adjust or add the Supervisor or Data Submitter roles to the new user by clicking the corresponding checkboxes.



Add an Existing User

A new feature of FracFocus allows an existing user of FracFocus to be associated with your organization. If you enter an email address of a user that has already been entered as a user in FracFocus, you will be prompted by the dialog box seen below.

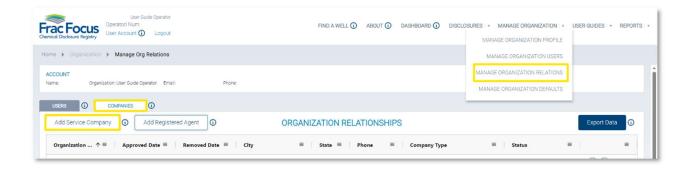


If you select yes and associate the existing user to your organization, you will be able to manage their roles and permissions to interact with your organization submission data. They will have the same ability as your organization's employees based on the roles you assign them.

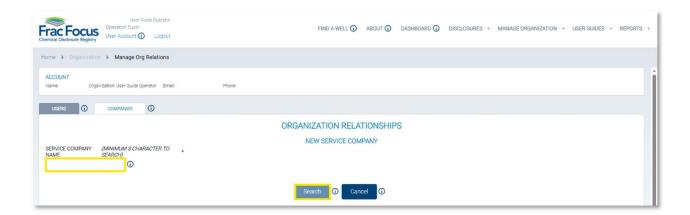
Add a Service Company

Operators with the Supervisor role have the ability to hire a Service Company to conduct hydraulic fracturing jobs and prepare the initial disclosure for the Operators review and submittal.

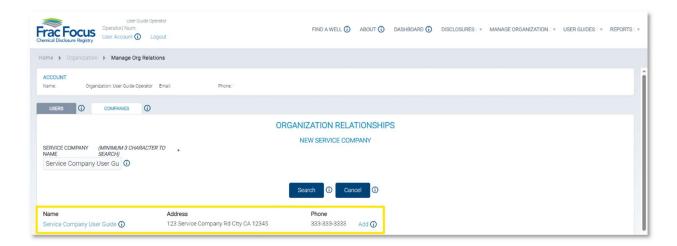
To add a Service Company, click the Companies tab under Manage Organization Users or click Manage Organization Relations under the Manage Organization drop-down from the navigation menu. Then, click Add Service Company.



Service Companies must be identified by name. They can be found by typing the name (or as little three characters) into the Service Company Name search and clicking Search.



Once approved, this allows any disclosure reports prepared by the selected service provider, in this case, "User Guide Service Company," to be entered into the operator disclosure queue.



Service Companies can prepare disclosure reports and upload them to an operating company's queue. When this is done, a disclosure report is not available to the public – it is only available to the operator. Service Companies do not have the ability to upload a disclosure report on behalf of an operator into the main FracFocus registry. It is a two-step process:

- 1. The service company uploads the disclosure report to the operator's queue
- 2. Following review by the operator (or by an authorized registered agent) the approved disclosure is uploaded to the FracFocus registry by the operator or agent.

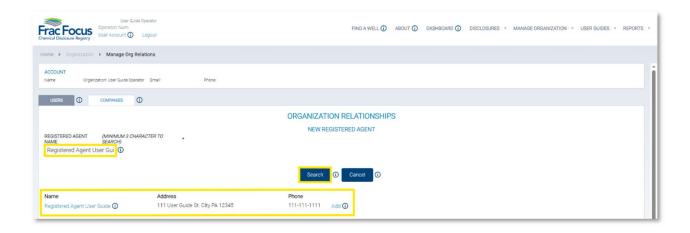
Add a Registered Agent

Operators with the Supervisor role can hire Registered Agents for support with reviewing, entering and potentially submitting data on the operator's behalf.

To add a Registered Agent, click the Companies tab under Manage Organization Users or click Manage Organization Relations under the Manage Organization drop-down from the navigation menu. Then, click Add Registered Agent.

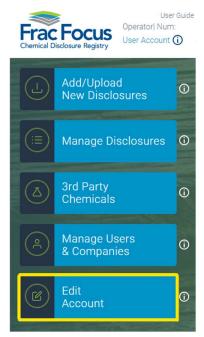


Registered Agents must be identified by name. They can be found by typing the name (or as little as three characters) into the Registered Agent Name search and selecting Search.



Once approved, the Registered Agent will be authorized to support the operator with preparing, reviewing, editing, and potentially submitting disclosure reports into FracFocus.

Edit Account



This menu item directs you to the User Account page. This page allows you to view or edit your profile information and change your password. Operators can click Edit Profile to edit the following information on their accounts:

- First Name
- Last Name
- Phone Number
 - Primary
 - Cell
- Two-Factor Authentication Type

To change your password, click Change Password

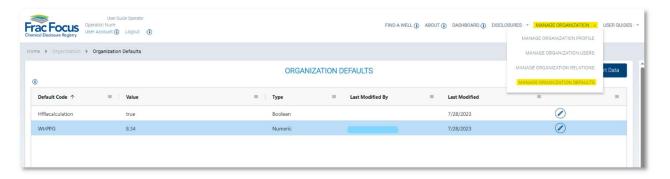
Organization Defaults

Organization Defaults allows an Operating Company to add values to defaults that aid in the data calculation for disclosures. This menu item is only available to an Operator with the Supervisor role. To view and/or edit the Organization Defaults, click Manage Organization Defaults in the Manage Organization drop-down (from the upper right-hand navigation menu).

The current Organization Defaults available are the HfRecalculation and Water Density (WtrPPG). The Water Density is necessary to calculate the mass of Chemicals/Ingredients used if the value is not supplied.

The fRecalculation Default allows an Operator Supervisor to either allow or deny the FracFocus system to offer recalculating the mass of chemicals/ingredients. To allow the system to offer the HfRecalculation, ensure the value is set to true. If you do not want the system to offer the HfRecalculation, set the value to false.

The Water Density (WtrPPG) Default allows an Operator Supervisor to set the default value of the water density for your organization's data calculations in FracFocus. Enter the water density in pounds-pergallon in the value field. The default water density set by an Operator overrides the global water density value for the system.



Export Data

In some cases, it might be beneficial for an Operator to be able to access the data input into FracFocus outside of the system or offline. In FracFocus, any page that presents a list of data is also able to be downloaded in an Excel Spreadsheet. To download any list, click the Export Data button to download the Excel Spreadsheet.



Creating a New Disclosure

Often, disclosure reports will be created by a Data User under a Service Company and routed to the Operator Data Submitter or Registered Agent Data User for review. In other cases, Operators with the Data Submitter role may create their own disclosure reports. Only Operators with the Data Submitter role can create new disclosures. In FracFocus, disclosures can be created using two separate approaches – the Systems Approach and the MSDS+ Approach.

Systems Approach: The Systems Approach allows users to input the data for all additives and all ingredients in common lists.

MSDS+ Approach: With the MSDS+ approach, the additives are split into two separate lists depending on whether the chemicals require preparation of an SDS (Safety Data Sheet) or not, MSDS Chemical Ingredients and Additional Non-MSDS Chemicals. Usually, water and sand are included in the MSDS Chemical Ingredients list even though they do not require preparation of an SDS.

Getting Started

To add a new disclosure, click the Add/Upload New Disclosures from the Left-Hand Navigation menu or click the Add/Upload New Disclosure from the Disclosures drop-down from the Upper Right-Hand Navigation menu.



You will be directed to the New Disclosure Form. You have the option to upload a valid XML file to complete the Disclosure or if a valid XML file is not available, you can manually complete the form.

Please note the Edit Help Info button in the form. This will generate a pop-up with editing help that describes how to edit the fields, add new items, and save your information.





You will also note the tooltip icons. By hovering over these icons, they will provide explanations for key fields and action buttons.

Upload XML File

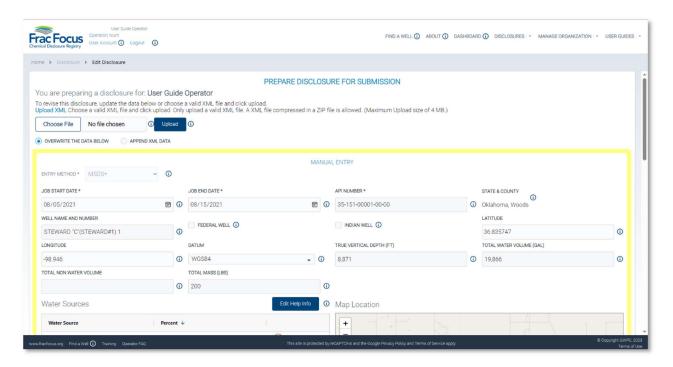
1. Click Choose File



- 2. Click your valid XML file
- 3. Click Upload



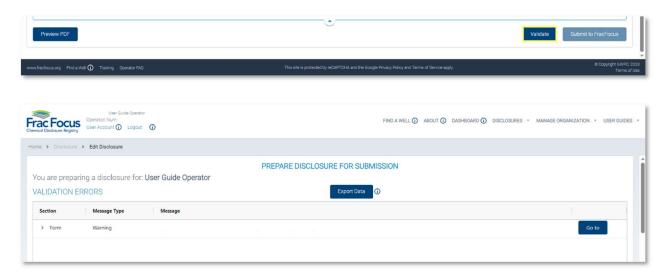
4. Information from the valid XML will populate the form.



5. To view a preview of the disclosure, click Preview PDF at the bottom of the page



6. Once everything looks correct, click Validate to ensure there are no errors on the form for submittal. If there are any errors or warnings, they will populate at the top of the disclosure. You can submit a disclosure with warnings, but you cannot submit a disclosure with errors.

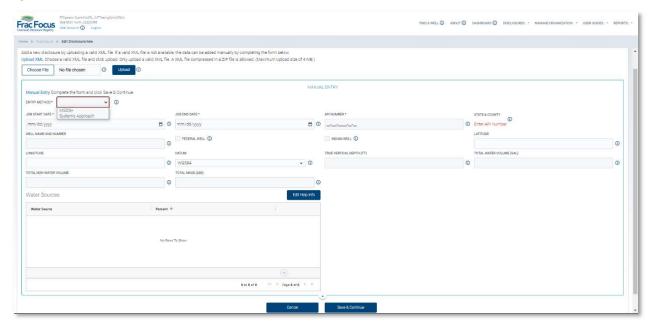


7. Only Operators with the Data Submitter role have access to submit disclosures to FracFocus once the disclosure has been validated.



Upload Manually

To enter the disclosure information manually, fill out the required fields in the Disclosure Manual Entry form.



Fields of Note:

- Entry Method: In FracFocus, disclosures can be created using two separate approaches the default Systems Approach and the MSDS+ approach.
 - MSDS+: Includes header data, MSDS Chemical Ingredients List and Additional Non-MSDS Chemicals
 - Systems Approach: Includes header data, Additive List, and Ingredient List
- API Number: Must be in 14-digit format. Often, you will receive an API number in a shorter 10-digit format. If you enter the API as a 10-digit number, the four zeroes will be added automatically to the end of the API number. For most wells, the last 4 digits are "0" unless the well is a new lateral or new completion. Do not enter the dashes "-" between the sets of numbers these are added automatically
- Federal Well (checkbox): Indicate if the well is on Federal land or has Federal mineral interests, such that information would be reported to the U.S. Department of Interior's Bureau of Land Management (BLM)
- Indian Well (checkbox): Indicate if the well is on Indian land or has Indian mineral interests, such
 that information would be reported to the U.S. Department of Interior's Bureau of Land
 Management (BLM).
- Datum: Has a drop-down list including WGS84, NAD83, or NAD27. This choice should correspond with the coordinate system used to locate your company's well.
- Total Non Water Volume: Any base fluids besides fresh water are used in large amounts (e.g., CO2, Nitrogen, or recycled produced water)

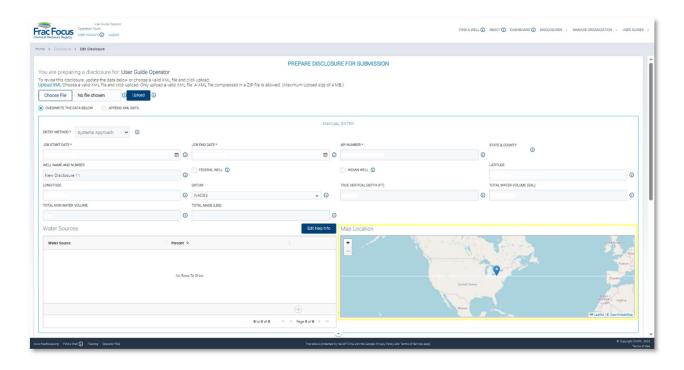
- Total Mass (lbs.): Information can be entered here if you need to recalculate the % HF Mass information in the ingredients portion of the form.
- Water Sources: Add and track the percentage of water source types used during the job.
 Select a type of water source with associated breakdown by TDS using the following codes:
 - a. Surface Water, <1000TDS
 - b. Surface Water, >1000TDS
 - c. Groundwater, <1000TDS
 - d. Groundwater, >1000TDS
 - e. Produced Water
 - f. Other, <1000TDS
 - g. Other, >1000TDS

You will then be able to enter a percentage of the job performed using the water type selected

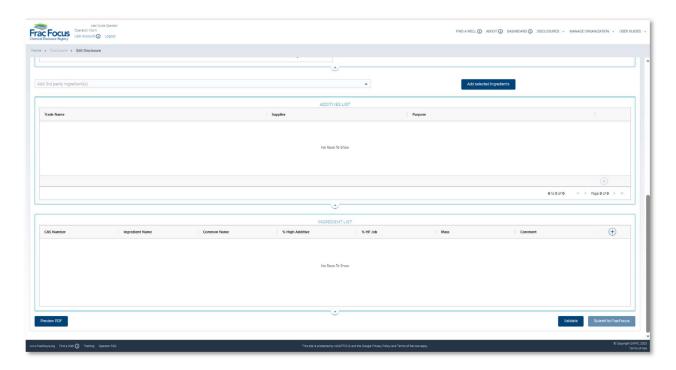
When all information is entered, click Save and Continue. At this point, you move on to the section of the disclosure where chemical additives and ingredients are entered. This step will follow either the MSDS+ approach or the Systems approach of data entry.

Systems Approach

After the header information has been entered and you have selected Save and Continue, the location of the well will show on the map. You can visually verify that the map shows the correct location of your well.

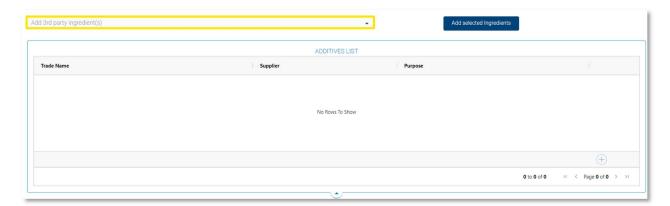


The Prepare Disclosure for Submission page allows entry of additives and their ingredients.

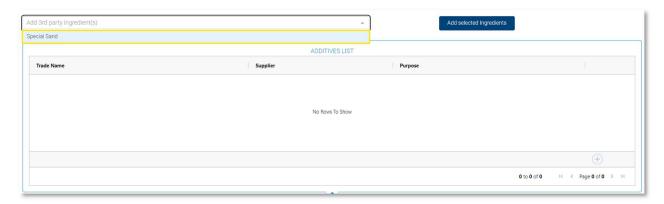


Systems Approach: Add 3rd Party Ingredients

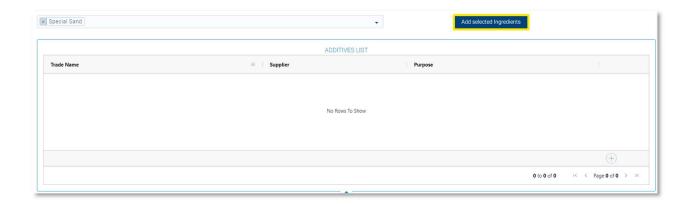
1. Click the Add 3rd Party Ingredient(s) drop-down



2. Select desired 3rd party ingredient(s)

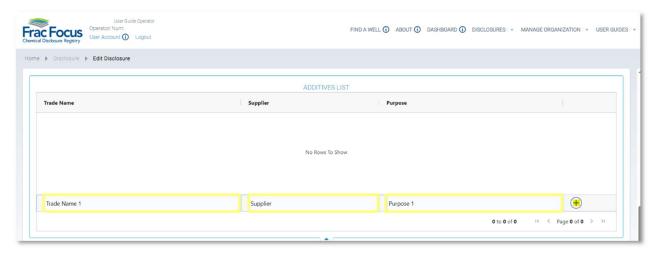


3. Click Add Selected Ingredients to add to the Additives and Ingredient List



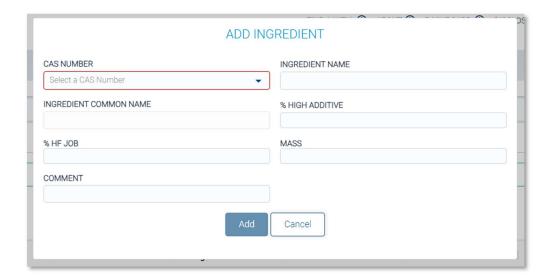
Systems Approach: Add Additives

Enter the Trade Name, Supplier, and Purpose for each additive. Data is stored as soon as you tab into a subsequent field. Once the information has been entered, click the \bigcirc to add it to the list.



Systems Approach: Add Ingredients

Click to add an ingredient to the list. Ingredients are not linked to any specific additive, but rather are part of the overall list. For each ingredient, enter the CAS Number, Ingredient Name, % High Additive, and % HF job. You can also add the Mass and any Comments if applicable. Click Add to add to the Ingredient List. You are able to edit the information in the table by selecting the list fields.



Systems Approach: Submitting to FracFocus

Once the header information, Additives List and Ingredients List have been entered, you can preview your disclosure by clicking the Preview PDF button. The disclosure will be downloaded as a .pdf to your device for preview.

Preview PDF

To submit the disclosure, you will first need to click Validate to validate your information and check for any errors or warnings

Validate

Any warnings or errors will populate in the Validation Errors list. In FracFocus, you can submit a disclosure with warnings. You must fix any errors to submit the disclosure to FracFocus. Use the Go To buttons to navigate to the error/warning.



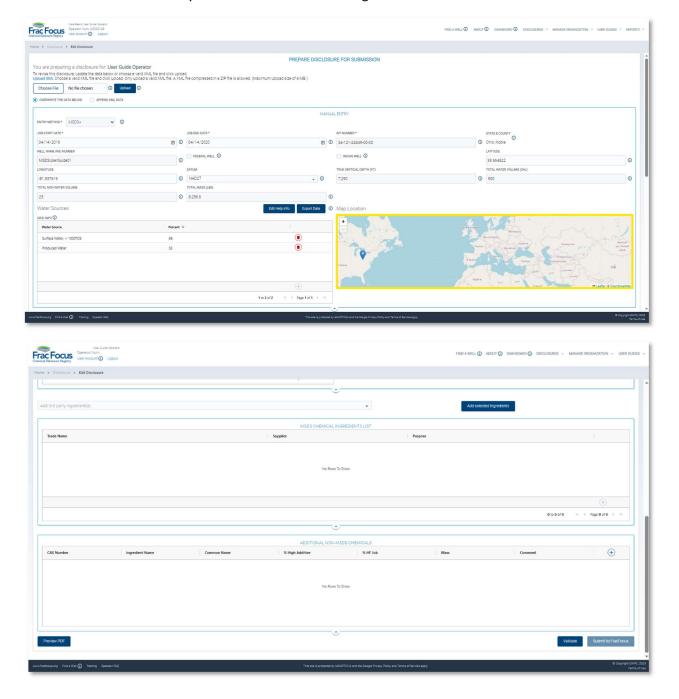
Once all errors have been fixed, click Validate again to validate your disclosure. Once validated, click Submit to FracFocus for submittal.

Submit to FracFocus

MSDS+ Approach

With the MSDS+ approach, the additives are split into two separate lists depending on whether the chemicals require preparation of an SDS (Safety Data Sheet) or not, MSDS Chemical Ingredients and Additional Non-MSDS Chemicals. Usually, water and sand are included in the MSDS Chemical Ingredients list even though they do not require preparation of an SDS.

After the header information has been entered and you have clicked Save and Continue, the location of the well will show on the map. You can visually verify that the map shows the correct location of your well. This screen allows entry of the additives and their ingredients.

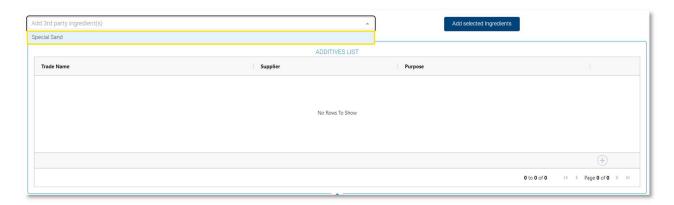


MSDS+ Approach: Add 3rd Party Ingredients

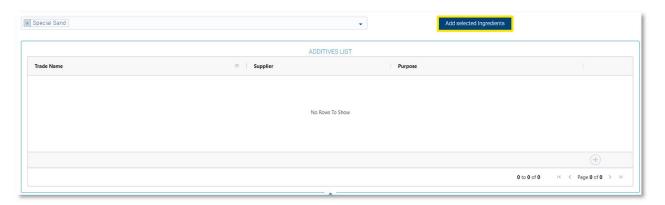
1. Click Add 3rd Party Ingredient(s)



2. Select desired 3rd party ingredients



3. Click Add Selected Ingredients to add to the MSDS Chemical Ingredients and Additional Non-MSDS+ Chemicals Lists



MSDS+ Approach: Add MSDS Chemical Ingredients

Under the MSDS Chemicals Ingredients List, enter:

- Trade Name
- Supplier
- Purpose

Click to add to the list



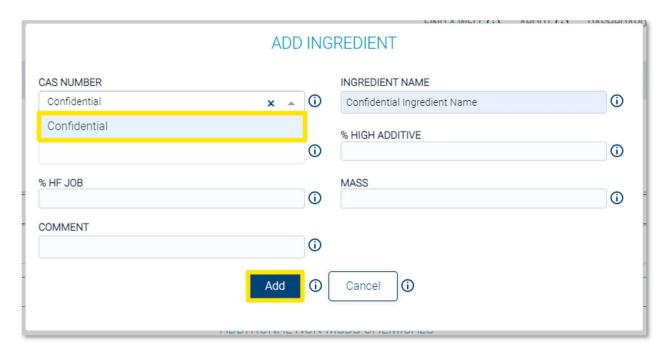
MSDS+ Approach: Add Additional Non-MSDS Chemicals

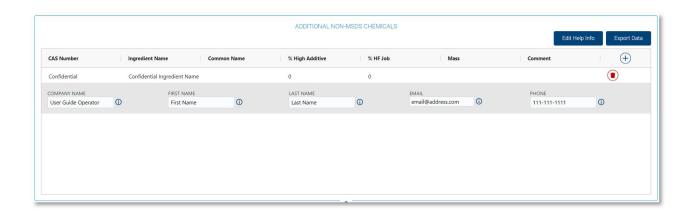
Click $\stackrel{\textcircled{+}}{+}$ to add a non-MSDS chemical



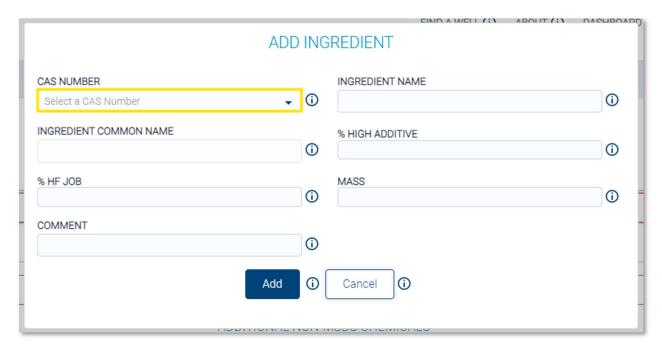
The Add Ingredient form will populate, where you will enter the CAS Number (if applicable), Ingredient Name, % High Additive, % HF Job, Mass, and Comments

If the ingredient is considered to be protected as a trade secret, as proprietary, or confidential business information, or if no CAS is assigned, type Trade Secret, Proprietary, or Confidential and click the corresponding choice from the drop-down. If one of these is clicked, you must fill in the contact information box.





If the ingredient has a CAS number, enter it in the CAS Number box. Ensure you use the right format with numbers and dashes. If you enter it incorrectly, the ingredient will not populate in the drop-down. You can also enter the name of the ingredient or choose one of the options from the drop-down list provided by the system (based on the CAS number).



Fields of Note:

- % High Additive: Often the SDS shows the percentage of each ingredient as a range. You should enter the high end of the percentage range in the % High Additive box.
- % HF Job: Here, you will enter what percent of the ingredient is used in the whole job (% by mass). For disclosures that you generate yourself (not those already prepared by the service company), you need to calculate the percentage by mass of the total frac job made up by each ingredient. You do not need to estimate the mass for water it is automatically calculated from the volume of water you entered in the header information. The proportions of all the other additives are then recalculated by FracFocus. For nearly all the ingredients other than water and sand, the % HF Job numbers will be very small (having several zeros behind the decimal point). When entering % HF Job numbers, it is important to enter the percentage rather than a decimal version of the number. For example, if the actual % HF is 0.00056%, and the decimal version is 0.0000056 the number that should be entered in the field is 0.00056.
- Mass: The ingredient Mass box is generally left blank. It is used, however, when a new additive is entered onto an existing disclosure report.

When finished, click Add to submit to the list. The additive is saved and populates in the Additional Non-MSDS Chemicals list. You can then enter information for more additives. If you want to remove a particular additive from the disclosure report, click the red trash can that corresponds with the additive.

Reviewing, Editing and Approving Disclosure Reports

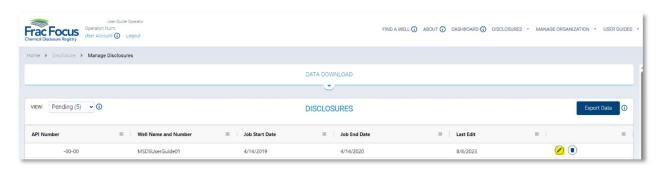
The previous section showed how an Operator with the Data Submitter role can create and submit a new disclosure. This is useful information for understanding data entry methods. However, most of the disclosure reports are created by the service companies and submitted to the operator's queue. The operator must review these disclosures and edit them as necessary. When disclosures are completed, the operator sends them for validation by the FracFocus code. When validation is successful, the disclosures are submitted into the FracFocus database, and the information is available to the public.

This section describes the procedures for reviewing, editing, validating, and submitting disclosures. It also explains how other additives, not included by the service companies, can be added to a disclosure.

Only Operators with the Data Submitter role have access to edit and submit disclosures to FracFocus. Operators without the Data Submitter role only have access to review the disclosures in the queue.

Reviewing and Editing Existing Disclosure Reports

Start at the Manage Disclosures page. Click the pencil to edit a pending disclosure report. Only Data Submitters are able to edit disclosure reports.



You will be directed to the Prepare Disclosure for Submission page with the header data, Additive List, and Ingredient List (Systems Approach Entry Method) or the Prepare Disclosure for Submission page with the header data, MSDS Chemical Ingredients List and Additional Non-MSDS Chemicals (MSDS+Entry Method).

To edit the disclosure, you can upload a valid XML to overwrite or append the data or you can edit the disclosure manually. To edit the data manually, simply click the desired field to make changes. Once the changes have been made, you will need to validate the disclosure.

Validating a Disclosure

When the Data Submitter Operator is satisfied that a disclosure report is complete, it is time to submit it for inclusion in FracFocus. At the bottom of the disclosure report, click Validate.



FracFocus makes some internal checks. If the disclosure does not meet FracFocus requirements, the disclosure will list the warnings and/or errors in the disclosure.

- Warnings: Warnings do not block validation but serve as reminders that something may not be completely correct. If the data entered is correct, the user can ignore the warnings and proceed to submittal. If the data entered is incorrect, the user can revise the data and submit the disclosure for validation again.
- Errors: An error means that the data does not meet the expected requirements of FracFocus and must be corrected prior to submittal.

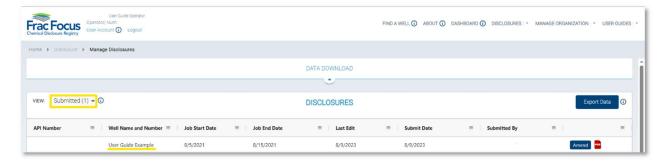
After correcting all errors and/or warnings, you can click the Validate Disclosure button again for submittal.

Submitting a Disclosure

At this point, the disclosure can be submitted by clicking the Submit to FracFocus button. Note that when the validation meets FracFocus requirements, the Submit to FracFocus button will become available.



The successfully submitted disclosure report now leaves the Pending view and appears under the Submitted view on the Manage Disclosures page.



Note that under the Submitted tab, there is an Amend button and a .pdf icon. Submitted disclosures can be modified by clicking on the Amend button. Click the .pdf icon to download a full .pdf version of the disclosure. This is what the public can view.

Job Start Date:		12	08/05/2021				
Job End Date:		20	08/15/2021				
State:		20	Oklahoma	F-100	E		
County:		Woods		rrac	Focus	5	
API Number:		35	5-151-00001-00-00	Chemical Dis	closure Registr	у	
Operator Name:			u U	ser Guide Operator			
Well Name and Number:			User Guide Example		Water Source Po		ercent
Latitude:			36.835747		Groundwater, < 1000TDS		100.00%
Longitude:			-98.946				
Datum:			12	WGS84			
Federal Well:			l:	NO			
Indian Well:			NO				
True Vertical Depth:			0	8871			
Total Base Water Volume (gal)*:			19	19866			
Total Base Non Water Volume:			12	0			
Trade	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS#)	Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comment
Name				1	100000000000000000000000000000000000000		
	Well Services	Surfactant					
		Surfactant	Fatty Acid diethanolamide	61790-66-7	5.00000	98.00000	None
Surf 1	Services ents shown a		diethanolamide		5.00000 faterial Safety Data Sheets		1000000
Surf 1	Services ents shown a		diethanolamide		1.0000000		1000000
Name Surf 1	Services ents shown a		diethanolamide eet to 29 CFR 1910 potassium	0.1200(i) and appear on M	faterial Safety Data Sheets	(MSDS). Ingredients show	vn below are

Adding Chemicals to an Existing Disclosure

In some situations, the operator receives a disclosure report from a service company that contains most, but not all the additives. For example, the operator may have purchased a specialty biocide from a different vendor. That biocide may not be included in the service company's disclosure. But to make a complete disclosure, the biocide must be included.

Typically, the service company has provided values of % HF Job for each ingredient. The operator with the data submitter role will need to enter the additional additive(s) manually and account for the incremental percentage in the % HF job.

Start by opening the disclosure from the operator's queue under Manage Disclosures. The system has already calculated the mass of the full frac fluid. The mass of the new additive is entered, and FracFocus will provide an option to recalculate the % HF Job numbers to account for the incremental mass.

If your company permits, FracFocus will provide the option to recalculate the HF% when:

- The mass data is fully populated, %HF Job is not fully populated, and the user has edited the ingredient records by adding an ingredient with mass (changing the mass of the system) and no %HF Job was entered on the ingredient record
- User uploads additional XML ingredients with mass values and zero/null %HF Job

 Mass is fully populated, and user has deleted an ingredient, changing the total mass of the system

If you consent to the recalculation, click Recalculate. If you do not consent, click Don't recalculate and you will be responsible for providing the values manually.

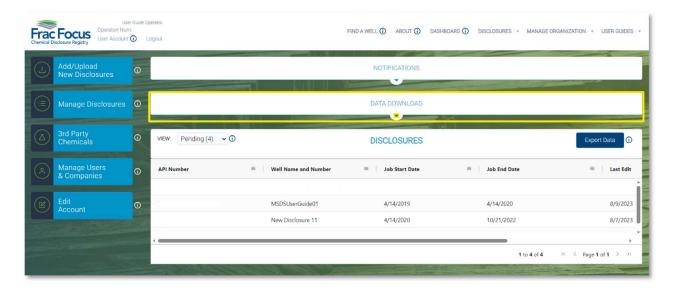


The new additive name, supplier, purpose, and ingredient information are entered. Numbers (pounds) are entered in the Mass box, not the % HF Job box.

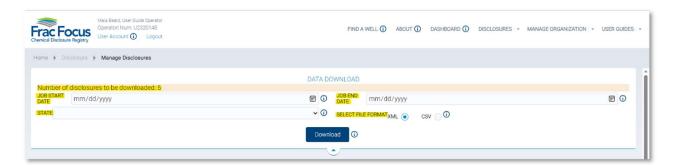
The list of additives is updated to include the biocide. The % HF Job values are adjusted to reflect the incremental mass of the biocide. Compare the % HF Job values. They all shifted slightly to reflect the additional mass contribution of the biocide added manually.

Download Chemical Disclosures

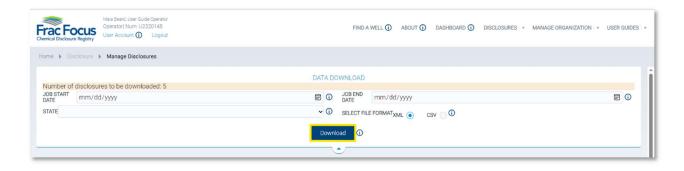
In FracFocus, the Operator, Registered Agent, and Service Company are able to download their Pending, Submitted, and Amending disclosure reports. From the Dashboard or Manage Disclosure page, click the Data Download drop-down.



Filter your number of disclosures to be downloaded by entering the Job Start Date, Job End Date, State (where the desired wells are located) and/or File Format. You'll notice the number of disclosures to be downloaded will change as more or less filters are applied.



Once desired filters have been applied, click Download and the .xml will download onto your device.



Additional BLM Requirements

The Bureau of Land Management is working on regulations that govern disclosure of chemicals used to fracture wells located on Federal or Indian lands. Anytime the Federal or Indian Well checkboxes are checked, a Disclosure Agreement pop-up will appear. By checking the Federal or Indian Well boxes you are agreeing to the disclosure agreement.

DISCLOSURE AGREEMENT

Per the Final Hydraulic Fracturing Rule on Federal and Indian Lands (FF Vol. 80, No. 58 / Thursday, March 26, 2015), #167;3162.3-3 (i)(8) I certify that:

- The operator complied with the requirements in #167;3162.3-3, paragraphs (b), (e), (f), (g), and (h) of the section;
- For Federal lands, the hydraulic fracturing fluid constituents, once they arrived on the lease, complied with all applicable permitting and notice requirements as well as all applicable Federal, State, and local laws, rules, and regulations;
- For Indian lands, the hydraulic fracturing fluid constituents, once they arrived on the lease, complied with all applicable permitting and notice requirements as well as all applicable Federal and tribal laws, rules, and regulations.

By checking the Federal or Indian Well boxes you are agreeing to the above statements

Close

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FracFocus REGISTERED AGENT GUIDE

Chapter 5 - Using FracFocus as a Registered Agent

This chapter describes the activities a Registered Agent can perform within FracFocus.

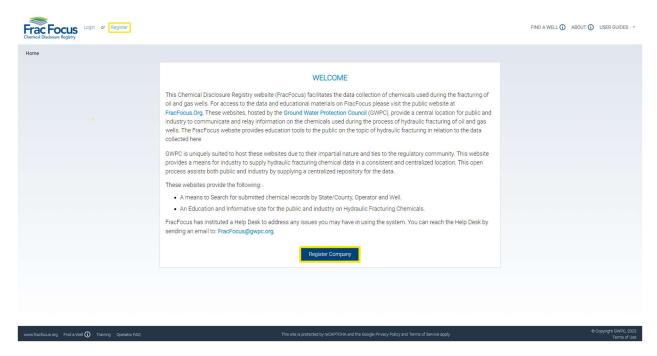
A Registered Agent is an organization that supports Operators by entering, validating, and potentially submitting disclosures. There are two different roles that can be assigned to users employed by a registered agent:

- **Supervisor** A supervisor has overall responsibility for managing the organization's users and registration
- Data User A data user, when approved by operator, can submit disclosures for operator

Getting Started as a Registered Agent

The first thing a Registered Agent must do is register to participate in FracFocus. The person who makes the initial registration for a Registered Agent is automatically assigned the Supervisor role. If you registered for FracFocus previously, you do not need to register again. Registering a company implies that the company is not an existing organization registered in FracFocus. The system will test to see if your registration information matches previous registrations.

To Register: If you have not yet registered, click Register (at the top next to Login) or Register Company on the main screen.



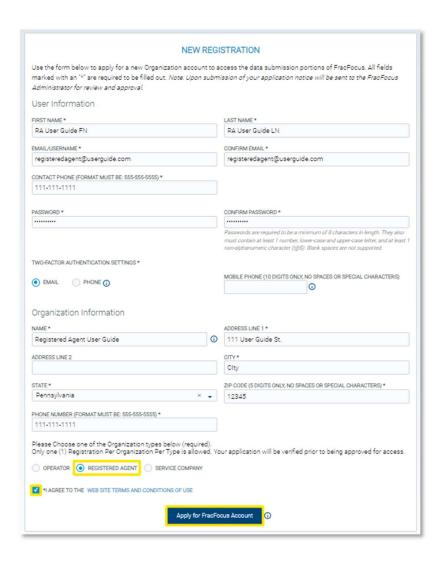
You will be directed to the new registration form.

Enter the required information and create a password. Passwords are required to be a minimum of 8 characters in length. They also must contain at least 1 number, a lower-case and an upper-case letter, and at least 1 non-alphanumeric character (!@\$). Blank spaces are not supported.

For the two-factor authentication settings choose between email or phone. If you choose to receive authentication via phone, you will be required to enter a mobile phone number that can receive text messages.

Select Registered Agent from the organization types list. When registering a new organization, you can only select one type of entity.

You must agree to the web site terms and conditions of use, then click the Apply for FracFocus Account button.



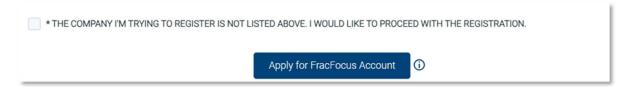
If the system finds a matching existing organization registration it will present those to you at the top of the form.

NEW REGISTRATION

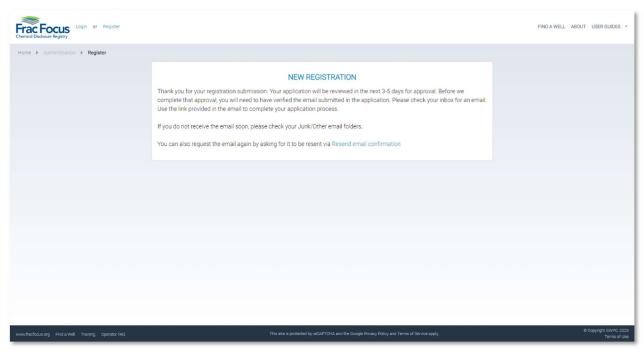
It appears that your company may already be registered with FracFocus. Please verify that your company is not already registered before proceeding with registration.

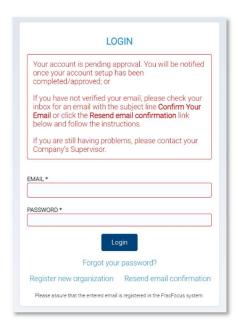
gwpc: 133 N. MacArthur Blvd. Oklahoma City OK 73142 - Registered as Operator

If your company is not represented in the list, scroll to the bottom and check the box confirming that the company you would like to register is not listed and click the Apply for FracFocus Account button again.



After your application has been submitted, you will receive an email to verify the email address associated with your account. Before your approval can be completed, you must verify the email submitted in the application.



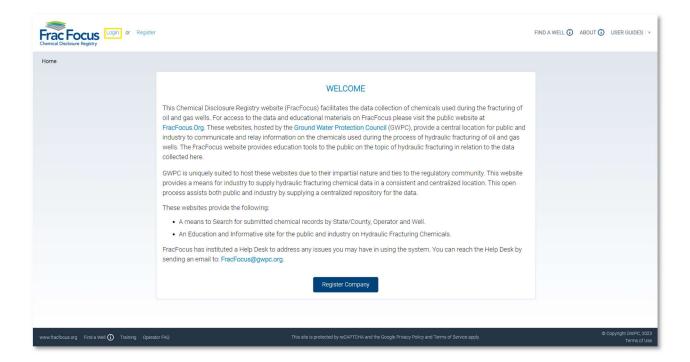


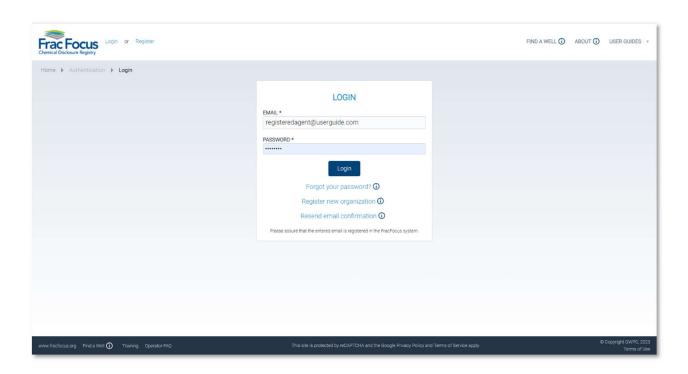
Once your email is verified, your application will be reviewed in the next 3-5 business days for approval by a FracFocus Support Administrator. Once you are approved, you will receive an email acknowledging your approval.

Please note – you will not be able to login to FracFocus until being approved. If you try, you will receive a note stating your account is pending approval.

Once approved, use the link from the email or return to https://www.fracfocusdata.org. Enter your email and password and complete the two-factor authentication when prompted.

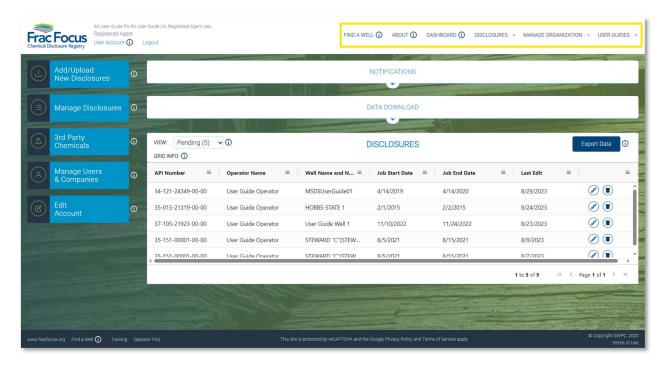
To Login: Start at the FracFocus homepage (https://www.fracfocusdata.org). At the top left of the screen (next to the FracFocus logo), click Login. From there, you will be prompted to enter your email address, password, and complete the two-factor authentication to get started.





The Registered Agent Dashboard

After successfully logging in, you will be directed to the registered agent dashboard screen that shows Notifications, Data Download, Disclosures, a header menu system, and the left-hand navigation menu. Each of these dashboard components allows users to perform actions in the system based on their assigned roles.



Upper Right-Hand Navigation

You will see this menu on most FracFocus screens – this allows efficient navigation to other screens and to return to the dashboard. Options available to a user are dependent on the role assigned to them.

Find a Well

Directs you to the public disclosure interface on fracfocus.org to search for submitted disclosures.

About

Directs you to the About page which contains general information about FracFocus.

Dashhoard

Directs you to the Dashboard – your home screen.

Disclosures

Allows you to add/upload new disclosures, manage disclosures, and manage 3rd party chemicals.

Manage Organization

Allows you to manage your organization's profile, users, set up organizational defaults, and view the list of operators who have authorized your organization as a registered agent to upload, review, edit and

submit disclosures on their behalf. Only Registered Agents with the Supervisor role will see this in the navigation.

Operator Approvals

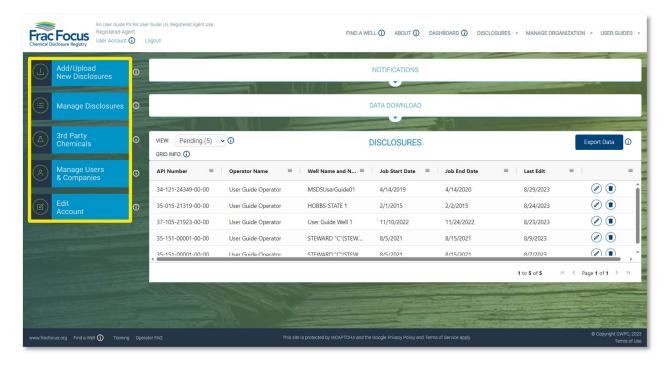
Allows you to view the list of operators who have authorized your organization as a registered agent to upload, review, edit and submit disclosures on their behalf. Only Registered Agents with the Data User role will see this in the navigation.

User Guides

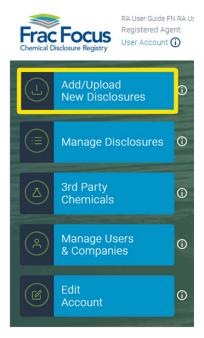
Directs you to the Schema Guide and User Guide.

Left-Hand Navigation

The Left-Hand Navigation options provide the user with quick access to specific menu selections. The available items in the Left-Hand Navigation menu will be dependent on the logged in user's roles. All the menu items are described below.



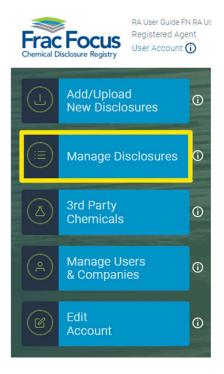
Add/Upload New Disclosures



Registered Agents with the "Data User" role will have this menu option. This menu item directs you to the New Disclosure page. You can also access this page from the Add/Upload New Disclosure drop-down item from the Disclosures option in the navigation menu.

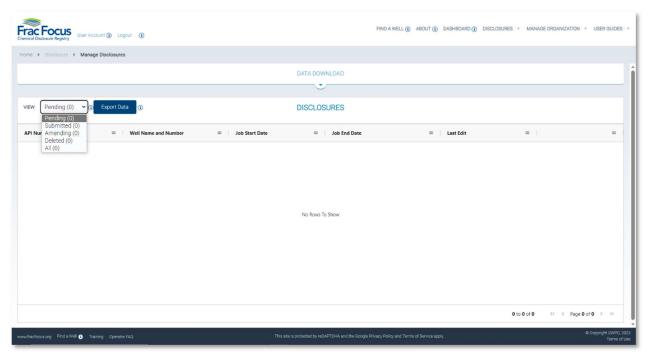
Refer to page 67 of this guide for additional information on adding/uploading new disclosures.

Manage Disclosures

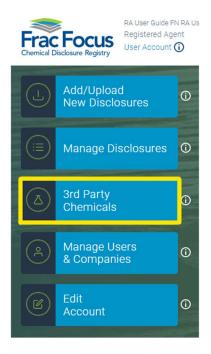


This menu item directs you to the Disclosures page. You can also access this page from the Manage Disclosures dropdown item from the Disclosures option in the navigation menu. Here, you can view submitted, pending, amending, deleted or all disclosures for supported operators. (Note: deleted are disclosures created during the process of editing/amending submissions and will be removed from the system after a 6-month holding period.)

Once on the disclosures page, use the View drop-down to narrow your disclosures based on status. You also have the option to export your data into an excel spreadsheet with the Export Data button for review while offline.



3rd Party Chemicals



This menu item opens the 3rd Party Chemicals page, which is used to enter additives and their chemicals in a list where they can be used by the operator to streamline addition to disclosure reports. Addition of a 3rd Party Chemical is presented below.

Users with the Data User role have the ability to add and edit 3rd party chemicals. Users with the Supervisor role can review the list only.

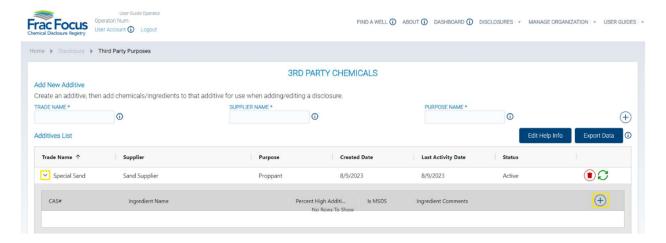
Add New Additive

Select the Operator associated with the new 3^{rd} Party Chemical by using the Operator drop-down. To create a new additive, input the Trade Name, Supplier Name, and Purpose Name then click + to add. After adding a new additive, the user can then add ingredients to it.

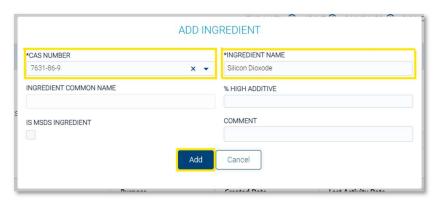


Adding Ingredients

To add an ingredient to an Additive, click the drop-down option (i.e., ">" arrow next to Trade Name of Additive) to view the Additive's ingredients. To add a new ingredient, click the symbol in the header portion of the drop-down.



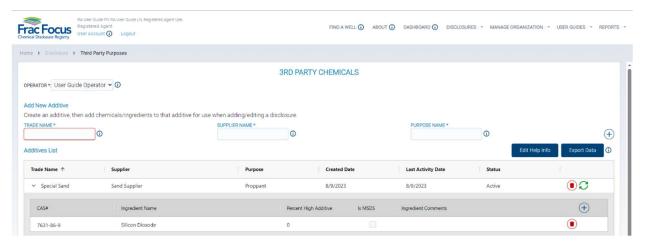
You will then be directed to enter the new ingredient information. The CAS Number and Ingredient Name are required fields. If you select a CAS Number from the existing drop-down list, the Ingredient Name will be populated. You can also enter the % High Additive and any additional comments



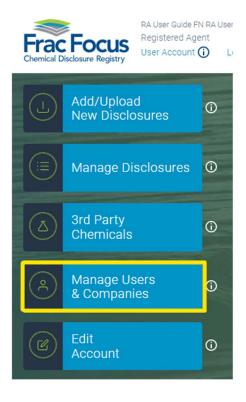
regarding the ingredient. The Ingredient Common Name Field is read-only and will be populated based on previous use of that chemical's CAS Number in FracFocus. For the special cases of "Proprietary", "Trade Secret", "CAS Not Assigned", and "Confidential", type in one of those values in the CAS Number field and hit the "Enter" key on your keyboard. This will add the value to the CAS Number Field.

If the ingredient is an MSDS ingredient, click the checkbox under "Is MSDS Ingredient". Both MSDS and non-MSDS ingredients can be entered for an Additive. After the information is entered, click the Add button to add the ingredient. If a special case has been entered for the CAS Number, claimant information will be able to be populated after adding.

Once the ingredient has been added, it will populate in the Additive List drop-down. By clicking on the fields of the ingredient in an Additive you can edit that ingredient.



Manage Users & Companies



For users with the Supervisor Role, this menu item directs you to the Organization Users page where you can:

- Add New Users to your Organization
- Add Existing Users to your Organization
- Manage User's roles
- Manage your Organization's User's access to FracFocus

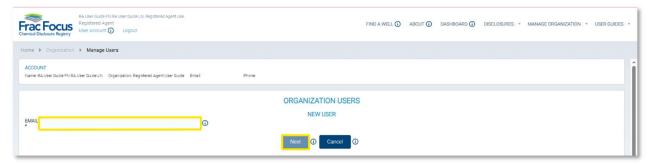
The system requires your organization to have at least one Supervisor. As a supervisor you cannot remove that role from your user account. If this role needs to be removed from your user account, another Supervisor of your organization can remove it. An organization can have multiple Supervisors and multiple Data Users. Users can also have both roles assigned.

Add a Registered Agent User or Supervisor (new to FracFocus)

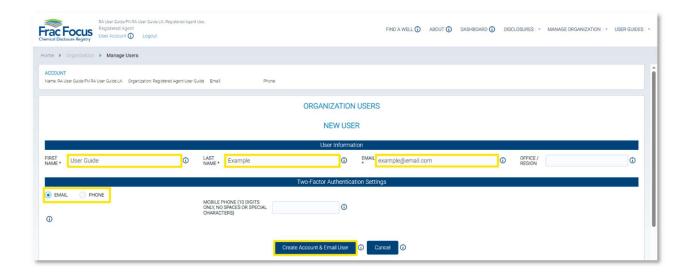
To add a new organization login under the registered agent, that is also new to FracFocus, click either New User or New Supervisor under the Users tab. (Note: graphics show New User option selected but same process is followed for a New Supervisor)



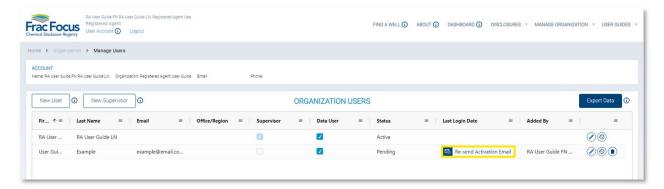
Next, enter the email address of the new organization login to verify the email address is not already registered in FracFocus. Once the email is entered, click Next to check for existing user and move forward.



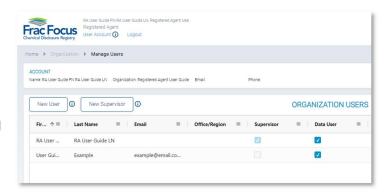
You will be directed to the New User/Account form. Enter the new user's required information: first name, last name, email address (pre-populated) and two-factor authentication settings. You can also assign an Office/Region to your staff. Then click Create Account & Email User. This will send a welcome email to the user with steps to complete their account setup and login for the first time.



The New User's account will be put in a pending state after the account is created. Before the user logs in for the first time, the New User's first name, last name, office/region, and email can be edited. If the email was entered incorrectly, it can be edited, and the welcome email can be resent by clicking the "Resend Activation Email". It can also be deleted at this time. Once the user has logged in, it cannot be deleted.



Once the User is added, the name of the new user will be added to the Organization Users list. The Supervisor then can adjust/add roles to the new user (Supervisor or Data User) by clicking the checkboxes that correspond to the desired role(s).



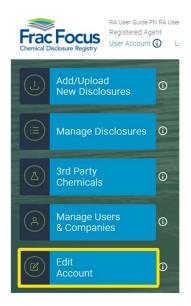
Add an Existing User

A new feature of FracFocus allows an Existing User of FracFocus to be associated with your organization. If you enter an email address of a user that has already been entered as a user in FracFocus, you will be prompted by the following dialog box:



If you click Yes and associate the existing user to your organization, you will be able to manage their roles and permissions to interact with your organization submission data. They will have the same ability as your organization's employees based on the roles you assign them.

Edit Account



This menu item directs you to the User Account page. This page allows you to view or edit your profile information and change your password. Registered agents can click Edit Profile to edit the following information on their accounts:

- First Name
- Last Name
- Phone Number
 - Primary
 - Cell
- Two-Factor Authentication Type

To change your password, click Change Password

Export Data

In FracFocus, any pages that present a list of data are able to be downloaded in an Excel Spreadsheet. To download any list, click the Export Data button to download the Excel Spreadsheet.



Creating a New Disclosure

In many cases, disclosure reports will be created by the Service Company and routed to the Operator or Registered Agent for review. In other cases, Data User Registered Agents may create a disclosure report for an operating company. Only Registered Agents with the Data User role are able to create new disclosures. In FracFocus, disclosures can be created using two separate approaches – the Default Systems Approach and the MSDS+ Approach.

Systems Approach: The Systems Approach allows users to input the data for all additives and all ingredients in common lists.

MSDS+ Approach: With the MSDS+ approach, the additives are split into two separate lists depending on whether the chemicals require preparation of an SDS (Safety Data Sheet) or not, MSDS Chemical Ingredients and Additional Non-MSDS Chemicals. Usually, water and sand are included in the MSDS Chemical Ingredients list even though they do not require preparation of an SDS.

Getting Started

To add a new disclosure, click the Add/Upload New Disclosures from the Left-Hand Navigation menu or click the Add/Upload New Disclosure from the Disclosures drop-down from the Upper Right-Hand Navigation menu.



You will be directed to the New Disclosure Form. You have the option to upload a valid XML file to complete the disclosure or if a valid XML file is not available, you can manually complete the form.

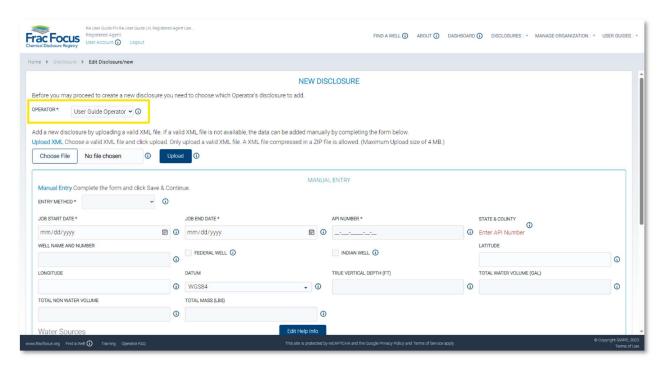


Please note the Edit Help Info button in the form. This will generate a pop-up with editing help, that describes how to edit the fields, add new items, and saving your information.

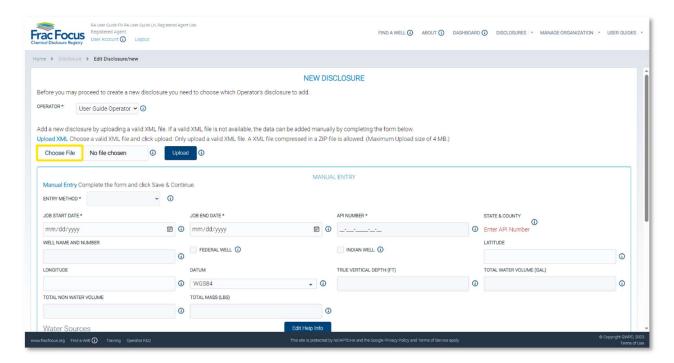
You will also note the tooltip icons. By hovering over these icons, they will provide explanations for key fields and action buttons.

Upload XML File

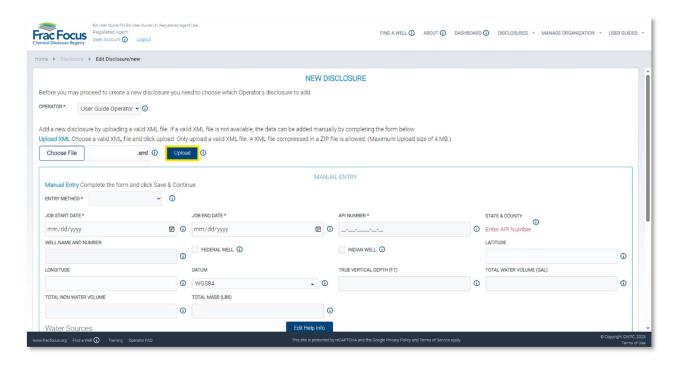
1. Ensure the disclosure is to be added under the correct Operator.



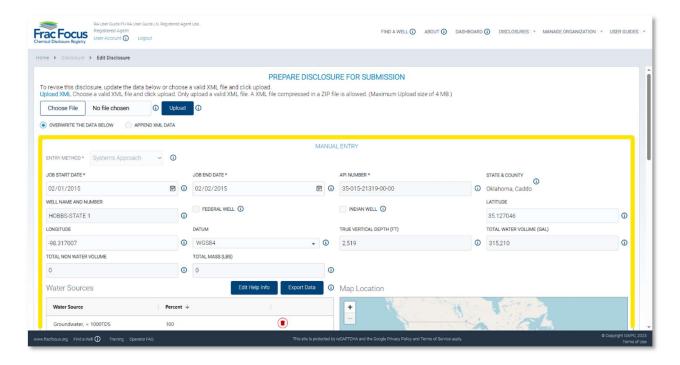
2. Click Choose File.



- 3. Select your valid XML file.
- 4. Click Upload.



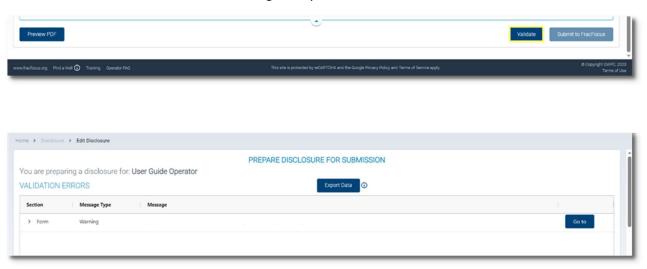
5. Information from the valid XML will populate the form.



6. To view a preview of the disclosure, click Preview PDF at the bottom of the page.



7. Once everything looks correct, click Validate to ensure there are no errors on the form for submittal. If there are any errors or warnings, they will populate at the top of the disclosure. You can submit a disclosure with warnings, but you cannot submit a disclosure with errors.

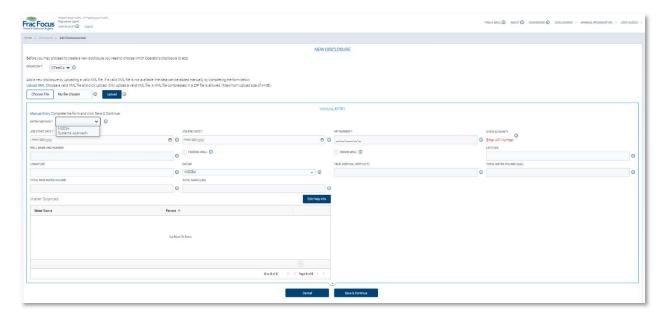


8. Only Registered Agents with the Data User role have access to submit disclosures to FracFocus once the disclosure has been validated.



Upload Manually

To enter disclosure information manually, first ensure the correct Operator is selected then fill out the required fields in the Disclosure Manual Entry form.



Fields of Note:

- Entry Method: In FracFocus, disclosures can be created using two separate approaches the default Systems Approach and the MSDS+ approach.
 - MSDS+: Includes header data, MSDS Chemical Ingredients List and Additional Non-MSDS Chemicals
 - Systems Approach: Includes header data, Additive List, and Ingredient List
- API Number: Must be in 14-digit format. Often, you will receive an API number in a shorter 10-digit format. If you enter the API as a 10-digit number, the four zeroes will be added automatically to the end of the API number. For most wells, the last 4 digits are "0" unless the well is a new lateral or new completion. Do not enter the dashes "-" between the sets of numbers these are added automatically
- Federal Well (checkbox): Indicate if the well is on Federal land or has Federal mineral interests, such that information would be reported to the U.S. Department of Interior's Bureau of Land Management (BLM)
- Indian Well (checkbox): Indicate if the well is on Indian land or has Indian mineral interests, such
 that information would be reported to the U.S. Department of Interior's Bureau of Land
 Management (BLM).
- Datum: Has a drop-down list including WGS84, NAD83, or NAD27. This choice should correspond with the coordinate system used to locate your company's well.
- Total Non Water Volume: Any base fluids besides fresh water are used in large amounts (e.g., CO2, Nitrogen, or recycled produced water)

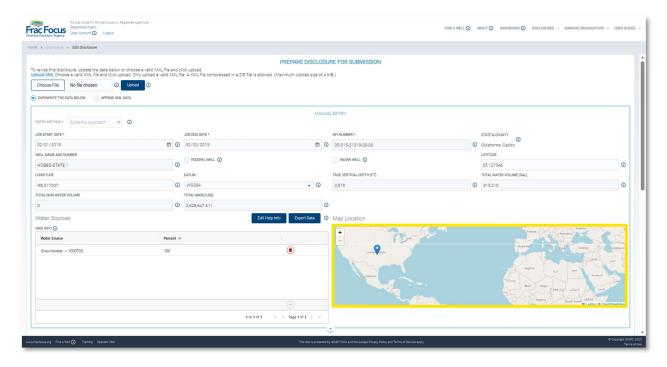
- Total Mass (lbs.): Information can be entered here if you need to recalculate the % HF Mass information in the ingredients portion of the form.
- Water Sources: Add and track the percentage of water source types used during the job.
 Select a type of water source with associated breakdown by TDS using the following codes:
 - a. Surface Water, <1000TDS
 - b. Surface Water, >1000TDS
 - c. Groundwater, <1000TDS
 - d. Groundwater, >1000TDS
 - e. Produced Water
 - f. Other, <1000TDS
 - g. Other, >1000TDS

You will then be able to enter a percentage of the job performed using the water type selected.

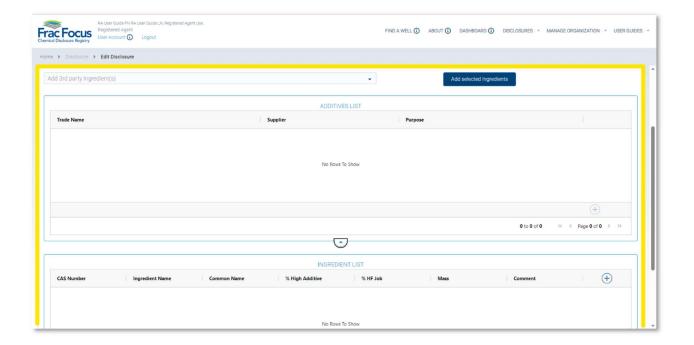
When all information is entered, click Save and Continue. At this point, you move on to the section of the disclosure where chemical additives and ingredients are entered. This step will follow either the MSDS+ approach or the Systems approach of data entry.

Systems Approach (default reporting method)

After the header information has been entered and you have clicked Save and Continue, the location of the well will show on the map. You can visually verify that the map shows the correct location of your well.



The Prepare Disclosure for Submission page allows entry of additives and their ingredients.



Systems Approach: Add 3rd Party Ingredients

1. Click the Add 3rd Party Ingredient(s) drop-down.



2. Select desired 3rd party ingredient(s).

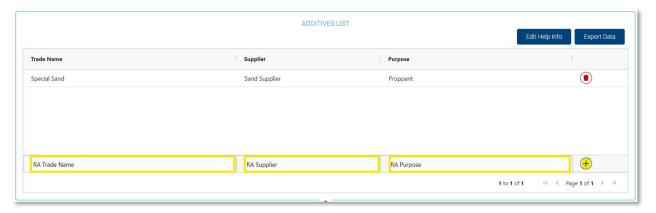


3. Click Add Selected Ingredients to add to the Additives and Ingredient List.



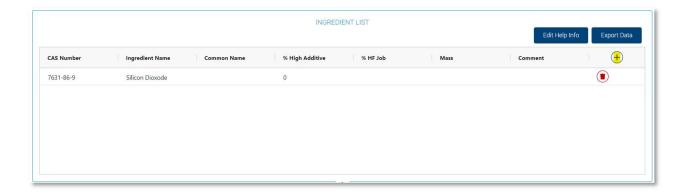
Systems Approach: Add Additives

Enter the Trade Name, Supplier, and Purpose for each additive. Data is stored as soon as you tab into a subsequent field. Once the information has been entered, click the \bigcirc to add it to the list.

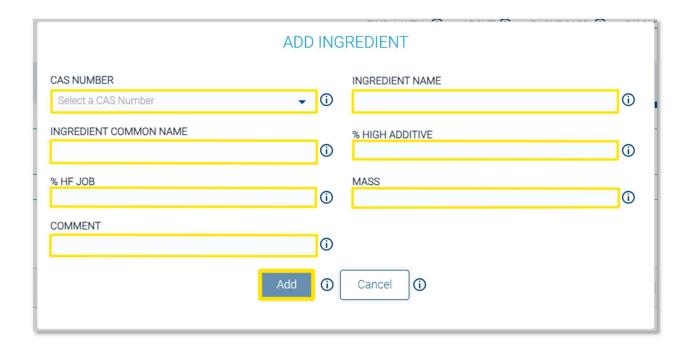


Systems Approach: Add Ingredients

Click the $\stackrel{\textstyle \longleftarrow}{}$ to add an ingredient to the list.



Ingredients are not linked to any specific additive, but rather are part of the overall list. For each ingredient, enter the CAS Number, Ingredient Name, % High Additive, and % HF job. You can also add the Mass and any Comments if applicable. Click Add to add to the Ingredient List. You are able to edit the information in the table by clicking the list fields.



Systems Approach: Submitting to FracFocus

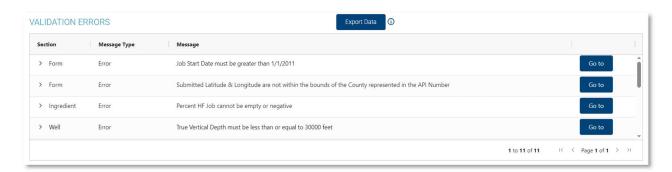
Please note, only Registered Agents with the Data User role can prepare and submit disclosures to FracFocus. Once the header information, Additives List and Ingredients List have been entered, you can preview your disclosure by clickining the Preview PDF button. The disclosure will be downloaded as a .pdf to your device for preview.

Preview PDF

To submit the disclosure, you will first need to click Validate to validate your information to check for any errors or warnings.

Validate

Any warnings or errors will populate in the Validation Errors list. In FracFocus, you can submit a disclosure with warnings. You must fix any errors in order to submit the disclosure to FracFocus. Use the Go to buttons to navigate to the error/warning.



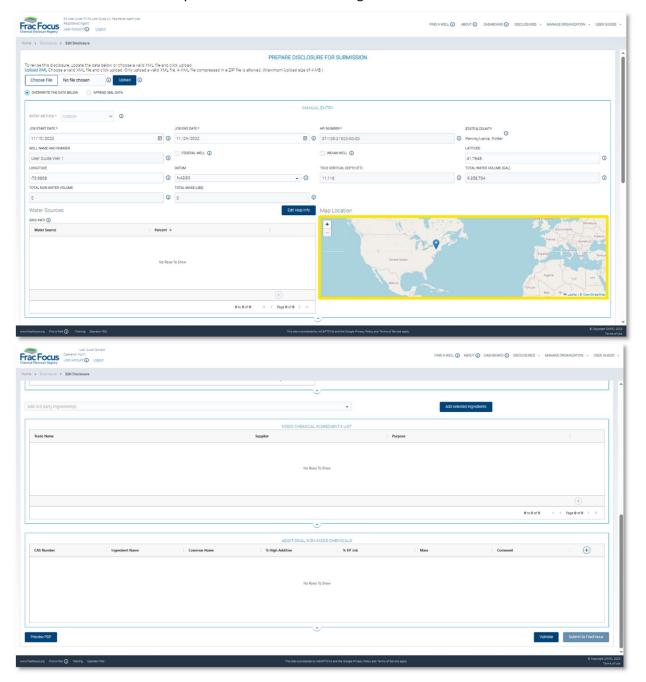
Once all errors have been fixed, click Validate again to validate your disclosure. Once validated, click Submit to FracFocus for submittal.

Submit to FracFocus

MSDS+ Approach

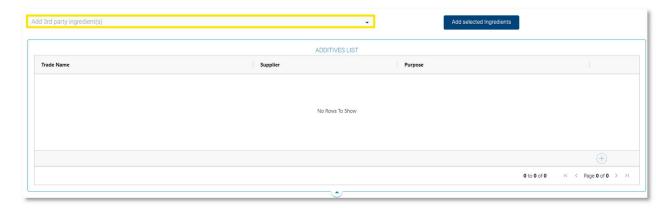
With the MSDS+ approach, the additives are split into two separate lists depending on whether the chemicals require preparation of an SDS or not, MSDS Chemical Ingredients and Additional Non-MSDS Chemicals. Usually, water and sand are included in the MSDS Chemical Ingredients list even though they do not require preparation of an SDS.

After the header information has been entered and you have clicked Save and Continue, the location of the well will show on the map. You can visually verify that the map shows the correct location of your well. This screen allows entry of the additives and their ingredients.

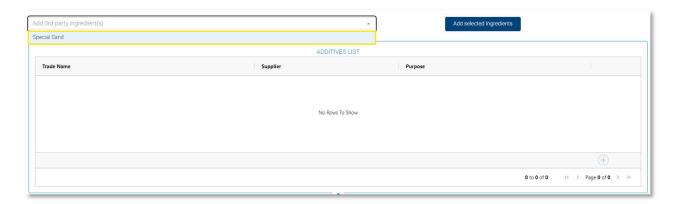


MSDS+ Approach: Add 3rd Party Ingredients

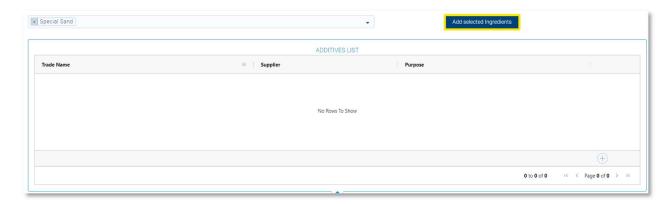
1. Click Add 3rd Party Ingredient(s).



2. Select desired 3rd party ingredients.



3. Click Add Selected Ingredients to add to the MSDS Chemical Ingredients and Additional Non-MSDS+ Chemicals Lists.



MSDS+ Approach: Add MSDS Chemical Ingredients

Under the MSDS Chemicals Ingredients List, enter:

- Trade Name
- Supplier
- Purpose

Click the + to add to the list.



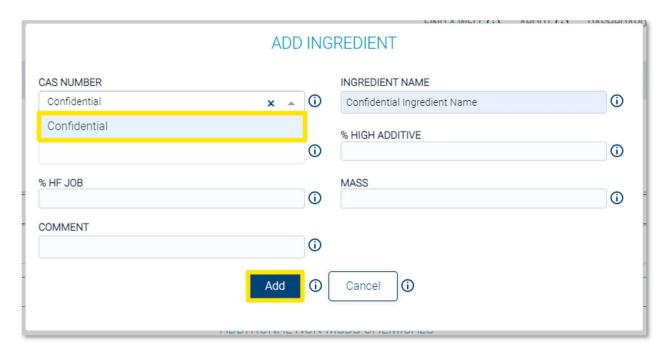
MSDS+ Approach: Add Additional Non-MSDS Chemicals

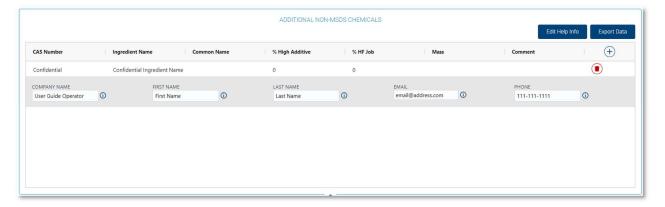
Click the + to add a non-MSDS chemical.



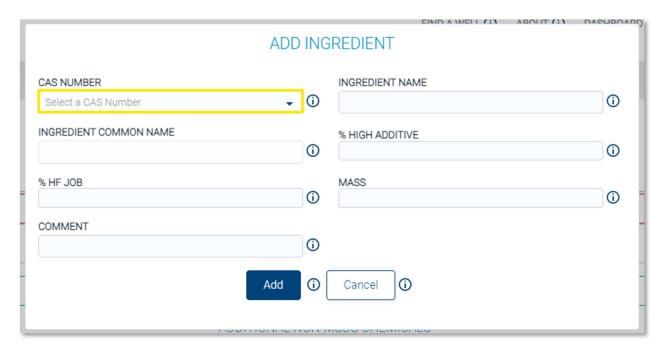
The Add Ingredient form will populate, where you will enter the CAS Number (if applicable), Ingredient Name, % High Additive, % HF Job, Mass, and Comments

If the ingredient is considered to be protected as a trade secret, as proprietary, or confidential business information, or if no CAS is assigned, type Trade Secret, Proprietary, or Confidential and click the corresponding choice from the drop-down. If one of these is selected, you must fill in the contact information box.





If the ingredient has a CAS number, enter it in the CAS Number box. Ensure you use the right format with numbers and dashes. If you enter it incorrectly, the ingredient will not populate in the drop-down. You can also enter the name of the ingredient or choose one of the options from the drop-down list provided by the system (based on the CAS number).



Fields of Note:

- % High Additive: Often the SDS shows the percentage of each ingredient as a range. You should enter the high end of the percentage range in the % High Additive box.
- % HF Job: For disclosures that you generate yourself (not those already prepared by the service company), you need to calculate the percentage by mass of the total frac job made up by each ingredient. You do not need to estimate the mass for water it is automatically calculated from the volume of water you entered in the header information. The proportions of all the other additives are then recalculated by FracFocus. For nearly all the ingredients other than water and sand, the % HF Job numbers will be very small (having several zeros behind the decimal point). When entering % HF Job numbers, it is important to enter the percentage rather than a decimal version of the number. For example, if the actual % HF is 0.00056%, and the decimal version is 0.0000056 the number that should be entered in the field is 0.00056.
- Mass: The ingredient Mass box is generally left blank. It is used, however, when a new additive is entered onto an existing disclosure report.

When finished, click Add to submit to the list. The additive is saved and populates in the Additional Non-MSDS Chemicals list. You can then enter information for more additives. If you want to remove a particular additive from the disclosure report, click the red trash can that corresponds with the additive.

Reviewing, Editing and Approving Disclosure Reports

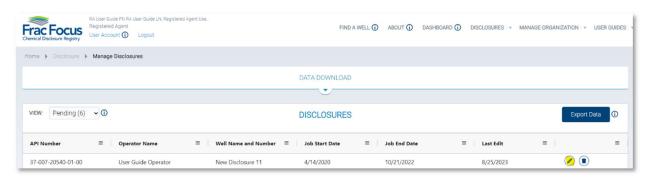
The previous section shows how a Registered Agent with the Data User role can create and submit a new disclosure. This is useful information for understanding data entry methods. However, most of the disclosure reports are created by the Service Companies and routed to the operator or registered agent's queue. The registered agent must review these disclosures and edit them as necessary. When disclosures are completed, the registered agent or operator sends them for validation by the FracFocus code. When validation is successful, the disclosures are submitted into the FracFocus registry, and the information is available to the public.

This section describes the procedures for reviewing, editing, validating, and submitting disclosures. It also explains how other additives, not included by the service companies, can be added to a disclosure.

Only Registered Agents with the Data User role have access to edit and submit disclosures to FracFocus. Registered Agents without the Data User role only have access to review the disclosures in the queue.

Reviewing and Editing Existing Disclosure Reports

Start at the Manage Disclosures page. Click the pencil to edit a pending disclosure report. Only Data Users are able to edit disclosure reports.



You will be directed to the Prepare Disclosure for Submission page with the header data, Additive List, and Ingredient List (Systems Approach Entry Method) or the Prepare Disclosure for Submission page with the header data, MSDS Chemical Ingredients List and Additional Non-MSDS Chemicals (MSDS+Entry Method).

To edit the disclosure, you can upload a valid XML to overwrite or append the data or you can edit the disclosure manually. To edit the data manually, simply click the desired field to make changes. Once the changes have been made, you will need to validate the disclosure.

Validating a Disclosure

When the Data User Registered Agent is satisfied that a disclosure report is complete, it is time to submit it for inclusion in FracFocus. At the bottom of the disclosure report, click Validate.



FracFocus makes some internal checks. If the disclosure does not meet FracFocus requirements, the disclosure will list the warnings and/or errors in the disclosure.

- Warnings: Warnings do not block validation but serve as reminders that something may not be completely correct. If the entered data is correct, the user can ignore the warnings and proceed to submittal. If the entered data is incorrect, the user can revise the data and submit the disclosure for validation again.
- Errors: An error means that the data does not meet the expected requirements of FracFocus and must be corrected prior to submittal.

After correcting all errors and/or warnings, you can click the Validate Disclosure button again for submittal.

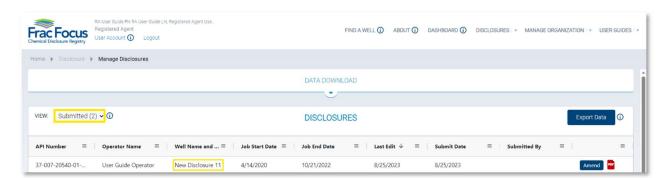
Submitting a Disclosure

At this point, the disclosure can be submitted by clicking the Submit to FracFocus button. Note that when the validation meets FracFocus requirements, the Submit to FracFocus button will become available.



The successfully submitted disclosure report now leaves the Pending view and appears under the Submitted view on the Manage Disclosures page.

Note that under the Submitted tab, there is an Amend button and a .pdf icon. Submitted disclosures can be modified by clicking on the Amend button. Click the .pdf icon to download a full .pdf version of the disclosure.



This is what the public can view.

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	04/14/2020		
Job End Date:	10/21/2022		
State:	Pennsylvania		
County:	Beaver		
API Number:	37-007-20540-01-00		
Operator Name:	User Guide Operator		
Well Name and Number:	New Disclosure 11		
Latitude:	40.790917		
Longitude:	-80.172917		
Datum:	NAD83		
Federal Well:	NO		
Indian Well:	NO		
True Vertical Depth:	3000		
Total Base Water Volume (gal)*:	10045446		
Total Base Non Water Volume:	12		



Water Source	Percent

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Special Sand	Sand Supplier	Proppant					
Items abo	ve are Trade	Names. Ite	ms below are the	individual ingredient	s.		
			Benzyl chloride	100-44-7	54.00000	50.25455	
			Diatomaceous silica	7631-86-9	0.00000	32.00000	
			Diatomaceous silica	7631-86-9	100.00000	21.58796	

Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
 Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

Adding Chemicals to an Existing Disclosure

In some situations, the registered agent receives a disclosure report from a service company that contains most, but not all the additives. For example, the operator may have purchased a specialty biocide from a different vendor. That biocide may not be included in the service company's disclosure. But to make a complete disclosure, the biocide must be included.

Typically, the service company has provided values of % HF Job for each ingredient. The registered agent will need to enter the additional additive(s) manually and account for the incremental percentage in the % HF job.

Start by opening the disclosure from the operator's queue under Manage Disclosures. The system has already calculated the mass of the full frac fluid. The mass of the new additive is entered, and FracFocus will provide an option to recalculate the % HF Job numbers to account for the incremental mass.

If the Operator permits, FracFocus will provide you the option to recalculate the HF% when:

- The mass data is fully populated, %HF Job is not fully populated, and the user has edited the ingredient records by adding an ingredient with mass (changing the mass of the system) and no %HF Job was entered on the ingredient record
- User uploads additional XML ingredients with mass values and zero/null %HF Job
- Mass is fully populated, and user has deleted an ingredient, changing the total mass of the system

If you consent to the recalculation, click Recalculate. If you do not consent, click Don't recalculate and you will be responsible for providing the values manually.



The new additive name, supplier, purpose, and ingredient information are entered. Numbers (pounds) are entered in the Mass box, not the % HF Job box.

The list of additives is updated to include the biocide. The % HF Job values are adjusted to reflect the incremental mass of the biocide. Compare the % HF Job values. They all shifted slightly to reflect the additional mass contribution of the biocide added manually.

Download Chemical Disclosures

In FracFocus, the Operator, Registered Agent, and Service Company are able to download their Pending, Submitted, and Amending disclosure reports. From the Dashboard or Manage Disclosure page, click the Data Download drop-down.



Filter your number of disclosures to be downloaded by entering the Job Start Date, Job End Date, State (where the desired wells are located), File Format and/or Operator. You'll notice the number of disclosures to be downloaded will change as more or less filters are applied.



Once desired filters have been applied, click Download and the .xml will download onto your device.

(x)

Additional BLM Requirements

The Bureau of Land Management is working on regulations that govern disclosure of chemicals used to fracture wells located on Federal or Indian lands. Anytime the Federal or Indian Well checkboxes are checked, a Disclosure Agreement pop-up will appear. By checking the Federal or Indian Well boxes you are agreeing to the disclosure agreement.

DISCLOSURE AGREEMENT

Per the Final Hydraulic Fracturing Rule on Federal and Indian Lands (FF Vol. 80, No. 58 / Thursday, March 26, 2015), #167;3162.3-3 (i)(8) I certify that:

- The operator complied with the requirements in #167;3162.3-3, paragraphs (b), (e), (f), (g), and (h) of the section;
- For Federal lands, the hydraulic fracturing fluid constituents, once they arrived on the lease, complied with all applicable permitting and notice requirements as well as all applicable Federal, State, and local laws, rules, and regulations;
- For Indian lands, the hydraulic fracturing fluid constituents, once they arrived on the lease, complied with all applicable permitting and notice requirements as well as all applicable Federal and tribal laws, rules, and regulations.

By checking the Federal or Indian Well boxes you are agreeing to the above statements

Close





FracFocus SERVICE COMPANY GUIDE

Chapter 6 – Using FracFocus as a Service Company

This chapter describes the activities a service company can perform within FracFocus.

A Service Company is a company that typically performs fracturing jobs and provides the initial data in a disclosure for operator's review and submission. There are two different roles that can be assigned to users employed by a service company:

- **Supervisor** A supervisor has overall responsibility for managing the organization's users and registration
- Data User A data user is responsible for entering, validating, and routing data to Operators for submittal

Getting Started as a Service Company

Registering a Service Company

The first thing a Service Company must do is register to participate in FracFocus. The person who makes the initial registration for a Service Company is automatically assigned the Supervisor role. If you registered for FracFocus previously, you do not need to register again. Registering a company implies that the company is not an existing organization registered in FracFocus. The system will test to see if your registration information matches previous registrations.

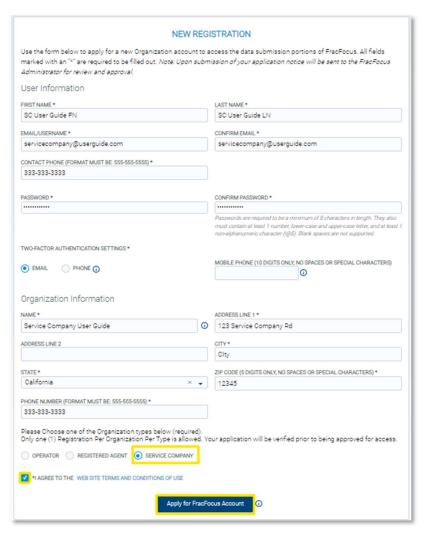
To Register: If you have not yet registered, click Register (at the top next to Login) or Register Company on the main screen.



You will be directed to the new registration form.

Enter the required information and create a password. Passwords are required to be a minimum of 8 characters in length. They also must contain at least 1 number, a lower-case and an upper-case letter, and at least 1 non-alphanumeric character (!@\$). Blank spaces are not supported.

For the two-factor authentication settings choose between email or phone. If you choose to receive authentication via the phone you will be required to enter a mobile phone number, that can receive text messages.



Select Service Company in the organization types list. When registering a new organization, you can only select one type of entity.

You must agree to the web site terms and conditions of use, then click the Apply for FracFocus Account button.

If the system finds a matching existing organization registration it will present those to you at the top of the form.

NEW REGISTRATION

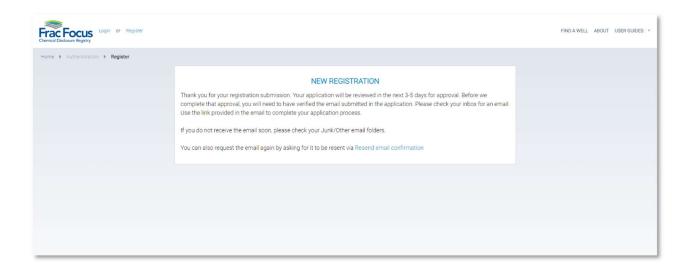
It appears that your company may already be registered with FracFocus. Please verify that your company is not already registered before proceeding with registration.

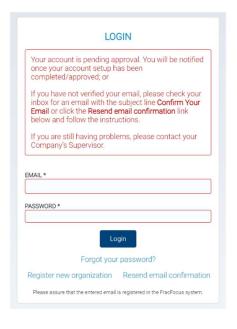
gwpc: 133 N. MacArthur Blvd. Oklahoma City OK 73142 - Registered as Operator

If your company is not represented in the list, scroll to the bottom and check the box confirming that the company you would like to register is not listed and click the Apply for FracFocus Account button again.



After your application has been submitted, you will receive an email to verify the email address associated with your account. Before your approval can be completed, you must verify the email submitted in the application.



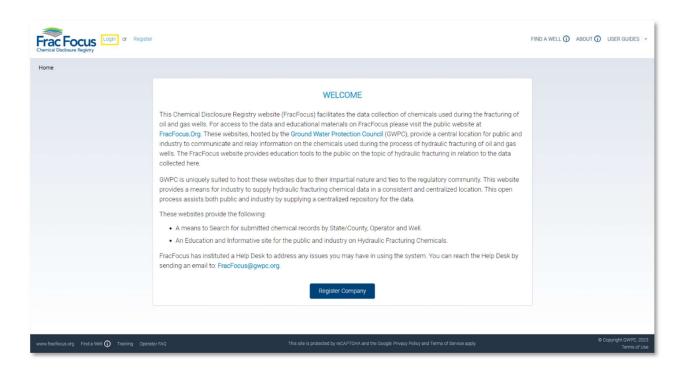


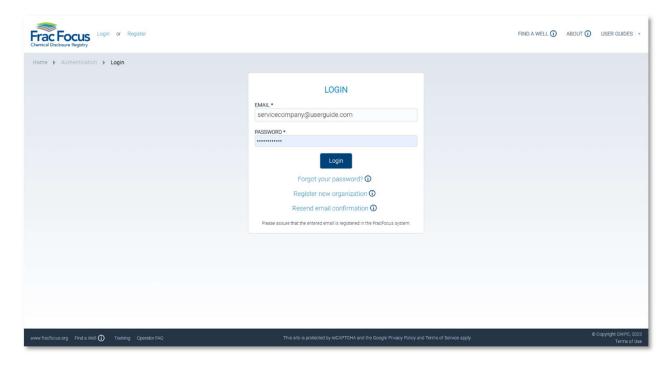
Once your email is verified, your application will be reviewed in the next 3-5 business days for approval by a FracFocus Support Administrator. Once you are approved, you will receive an email acknowledging your approval.

Please note – you will not be able to login to FracFocus until being approved. If you try, you will receive a note stating your account is pending approval.

Once approved, use the link from the email or return to https://www.fracfocusdata.org. Enter your email and password and complete the two-factor authentication when prompted.

To Login: Start at the FracFocus homepage (https://www.fracfocusdata.org). At the top left of the screen (next to the FracFocus logo), click Login. From there, you will be prompted to enter your email address, password, and complete the two-factor authentication to get started.



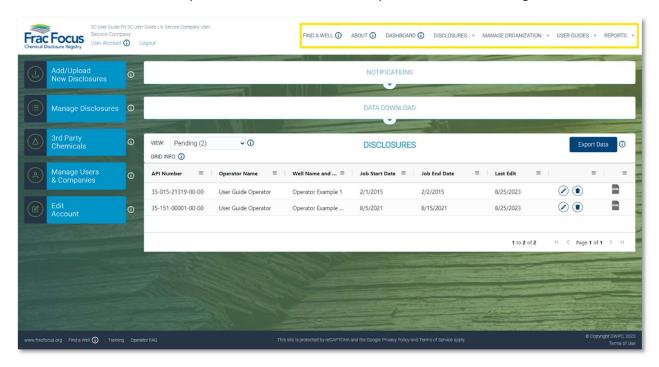


The Service Company Dashboard

After successfully logging in, you will be directed to the service company dashboard screen that shows Notifications, Data Download, Disclosures, a header menu system, and the left-hand navigation menu. Each of these dashboard components allows users to perform actions in the system based on their assigned roles.

Upper Right-Hand Navigation

You will see this menu on most FracFocus screens – this allows efficient navigation to other screens and to return to the dashboard. Options available to a user are dependent on the role assigned to them.



Find a Well

Directs you to the public disclosure interface on fracfocus.org to search for submitted disclosures.

Ahout

Directs you to the About page which contains general information about FracFocus.

Dashboard

Directs you to the Dashboard – your home screen.

Disclosures

Allows you to add/upload new disclosures, manage disclosures, and manage 3rd party chemicals.

Manage Organization

Allows you to manage your organizations profile, users, set up organizational defaults, and view the list of operators who have authorized your organization as a service company to enter, validate, and route data.

User Guides

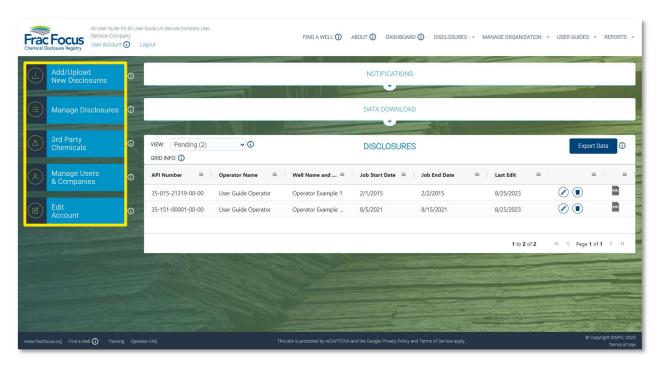
Directs you to the Schema Guide and User Guide.

Reports

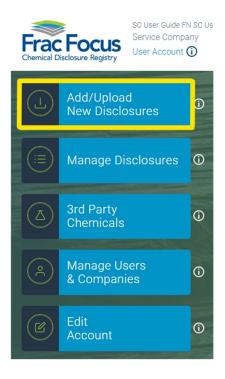
Directs you a set of Service Company Reports

Left-Hand Navigation

The Left-Hand Navigation options provide users with quick access to specific menu selections. The available items in the Left-Hand Navigation menu will be dependent on the logged in user's roles. All the menu items are described below.



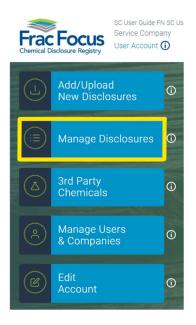
Add/Upload New Disclosures



Service Company users with the "Data User" role will have access to this menu option. This menu item directs you to the New Disclosures page. You can also access this page from the Add/Upload New Disclosure drop-down item from the Disclosures option in the navigation menu.

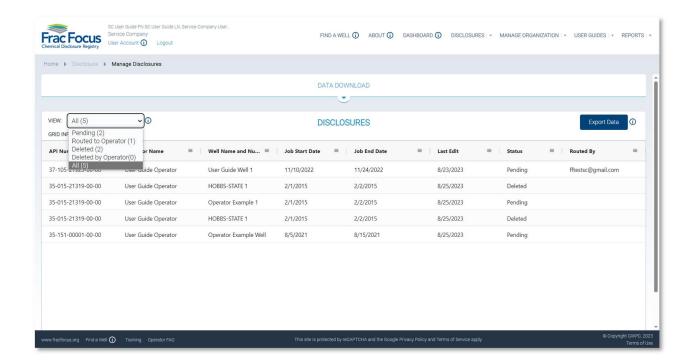
Refer to page 103 of this guide for additional information on adding/uploading new disclosures.

Manage Disclosures

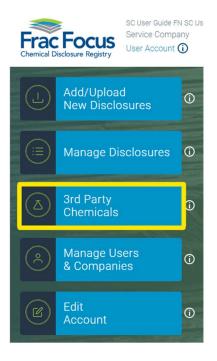


This menu item directs you to the Disclosures page. You can also access this page from the Manage Disclosures drop-down item from the Disclosures option in the navigation menu. Here, you can view, pending, routed to operator, deleted, deleted by operator or all disclosures. (Note: deleted and deleted by operator are disclosures created during the process of editing/amending submissions and will be removed from the system after a 6-month holding period.)

Once on the disclosures page, use the View drop-down to narrow your disclosures based on status. You also have the option to export your data into an excel spreadsheet with the Export Data button for review while offline.



3rd Party Chemicals



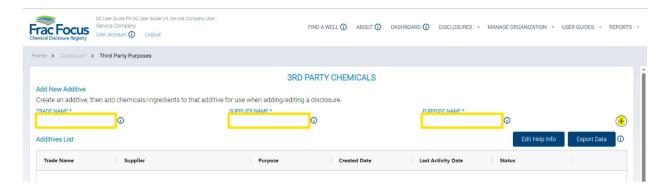
This menu item opens the 3rd Party Chemicals page, which is used to enter additives and their chemicals in a list where they can be accessed to streamline entry on future disclosure reports. Addition of a 3rd Party Chemical is presented below.

Users with the "Data User" role have the ability to add and edit 3rd Party Chemicals. Users with the Supervisor role can review the list only.

The Service Company only has access to the 3rd Party Chemicals that they enter in the system. They do not have access to the Operator's 3rd Party Chemicals.

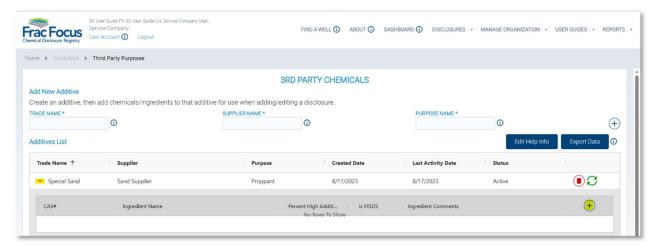
Add New Additive

To create a new additive, input the Trade Name, Supplier Name, and Purpose Name then click to add. After adding a new additive, the user can then add ingredients to it.

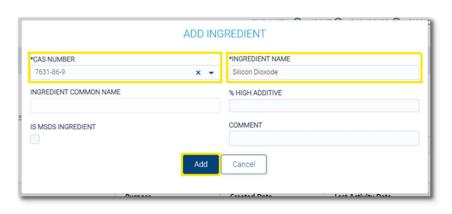


Adding Ingredients

To add an ingredient to the additive, click the drop-down option (i.e., ">" arrow next to Trade Name of Additive) to view the Additive's ingredients. To add a new ingredient, click the symbol in the header portion of the drop-down.

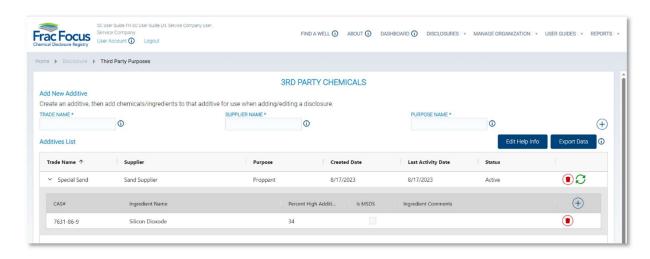


You will then be directed to enter the ingredient information. The CAS Number and Ingredient Name are required fields. If you select a CAS Number from the existing drop-down list, the Ingredient Name will be populated. You can also enter the % High Additive and any additional comments regarding the



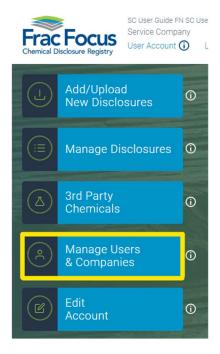
ingredient. The Ingredient Common Name field is read-only and will be populated based on previous use of that chemical's CAS Number in FracFocus. For the special cases of "Proprietary", "Trade Secret", "CAS Not Assigned", and "Confidential", type in one of those values in the CAS Number field and hit the "Enter" key on your keyboard. This will add the value to the CAS Number field.

If the ingredient is an MSDS ingredient, click the checkbox under "Is MSDS Ingredient". Both MSDS and non-MSDS ingredients can be entered for an Additive. After the information is entered, click the Add button to add the ingredient. If a special case has been entered for the CAS Number, claimant information will be able to be populated after adding.



Once the ingredient has been added, it will populate in the Additive List drop-down. By clicking on the fields of the ingredient in an Additive you can edit that ingredient.

Manage Users & Companies



For users with the Supervisor Role, this menu item directs you to the Organization Users page where you can:

- Add New Users to your Organization
- Add Existing Users to your Organization
- Manage User's roles
- Manage your Organization's User's access to FracFocus

The system requires your organization to have at least one Supervisor. As a supervisor you cannot remove that role from your user account. If this role needs to be removed from your user account, another Supervisor of your organization can remove it. An organization can have multiple Supervisors and multiple Data Users. Users can also have both roles assigned.

Add a Service Company User or Supervisor (new to FracFocus)

To add a new organization login under the service company, click either New User or New Supervisor under the Users tab. (Note: graphics show New User option selected but same process is followed for a new Supervisor)



Next, enter the email address of the new organization login to verify the email address is not already registered in FracFocus. Once the email is entered, click Next to check for existing user and move forward.



You will be directed to the Organization Users New User/Account form. Enter the new user's required information: first name, last name, email address (pre-populated) and two-factor authentication settings. You can also assign an Office/Region to your staff. Then click Create Account & Email User. This will send a welcome email to the user with steps to complete their account setup and login for the first time.



The New User's account will be put in a pending state after the account is created. Before the user logs in for the first time, the New Users' first name, last name, office/region, and email can be edited. If the email was entered incorrectly, it can be edited, and the welcome email can be resent by clicking the "Resend Activation Email". It can also be deleted at this time. Once the user has logged in, it cannot be deleted.



Once the User is added, the name of the new user will be added to the Organization Users list. The Supervisor then can assign roles to the new user (Supervisor or Data User) by clicking the checkboxes that correspond to the desired role(s).

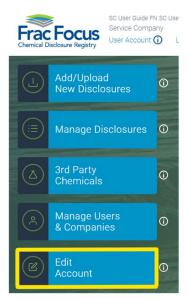
Add an Existing User

A new feature of FracFocus allows an Existing User of FracFocus to be associated with your organization. If you enter an email address of a user that has already been entered as a user in FracFocus, you will be prompted by the following dialog box:



If you click Yes and associate the existing user to your organization, you will be able to manage their roles and permissions to interact with your organization submission data. They will have the same ability as your organization's employees based on the roles you assign them.

Edit Account



This menu item directs you to the User Account page. This page allows you to view or edit your profile information and change your password. Service companies can click Edit Profile to edit the following information on their accounts:

- First Name
- Last Name
- Phone Number
 - Primary
 - Cell
- Two-Factor Authentication Type

To change your password, click Change Password.

Export Data

In FracFocus, any pages that present a list of data are able to be downloaded in an Excel Spreadsheet. To download any list, click the Export Data button to download the Excel Spreadsheet.



Creating a New Disclosure

In many cases, disclosure reports will be created by the service company and provided to the operator or registered agent for review. Only users with the Data User role under the Service Company have access to create new disclosures. In FracFocus, disclosures can be created using two separate approaches – the Default Systems Approach and the MSDS+ Approach.

Systems Approach: The Systems Approach allows users to input the data for all additives and all ingredients in common lists.

MSDS+ Approach: With the MSDS+ approach, the additives are split into two separate lists depending on whether the chemicals require preparation of an SDS (Safety Data Sheet) or not, MSDS Chemical Ingredients and Additional Non-MSDS Chemicals. Usually, water and sand are included in the MSDS Chemical Ingredients list even though they do not require preparation of an SDS.

Getting Started

To add a new disclosure, click the Add/Upload New Disclosures from the Left-Hand Navigation menu or click the Add/Upload New Disclosure from the Disclosures drop-down from the Upper Right-Hand Navigation menu.



You will be directed to the New Disclosure Form. You have the option to upload a valid XML file to complete the disclosure or if a valid XML file is not available, you can manually complete the form.

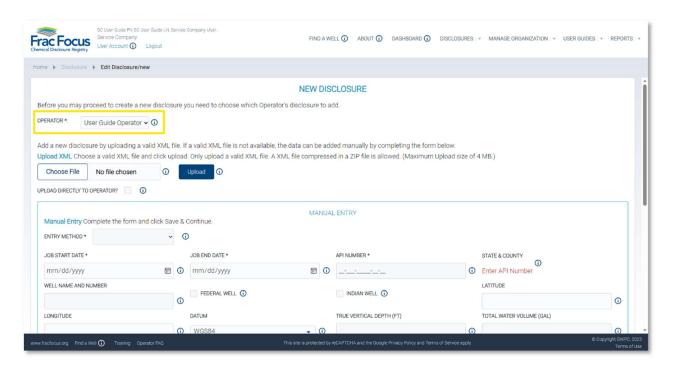


Please note the Edit Help Info button in the form. This will generate a pop-up with editing help, that describes how to edit the fields, add new items, and saving your information.

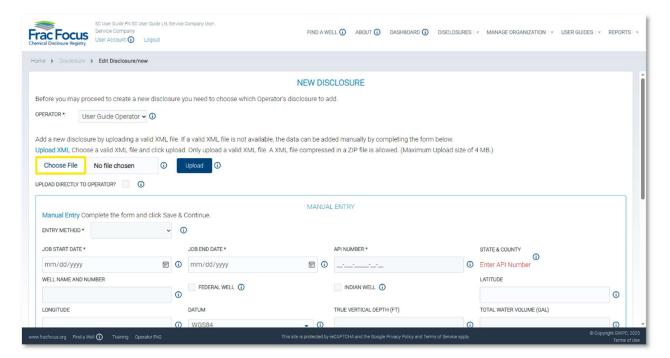
You will also note the tooltip icons. By hovering over these icons, they will provide explanations for key fields and action buttons.

Upload XML File

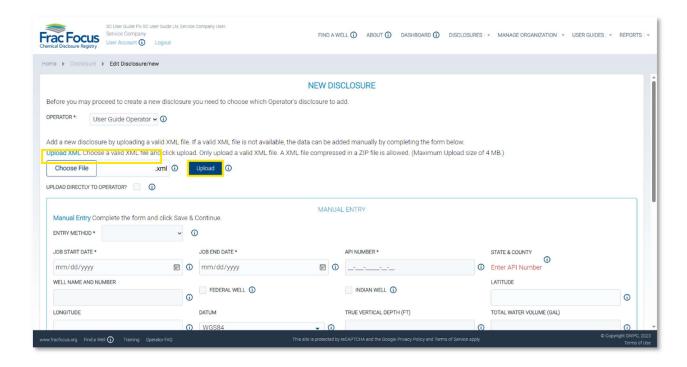
1. Ensure the disclosure is to be added under the correct Operator.



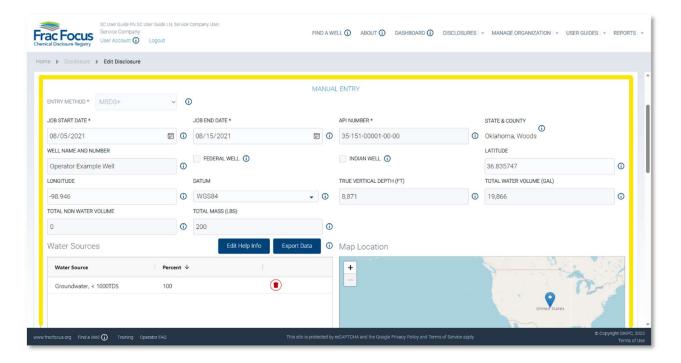
2. Click Choose File.



- 3. Select your valid XML file
- 4. Click Upload You can use the Upload Directly to Operator checkbox to route the disclosure directly to the Operator with no edits.



5. Information from the valid XML will populate the form.



6. To view a preview of the disclosure, click Preview PDF at the bottom of the page.



7. Once everything looks correct, click Validate to ensure there are no errors on the form.



If there are any errors or warnings, they will populate at the top of the disclosure.

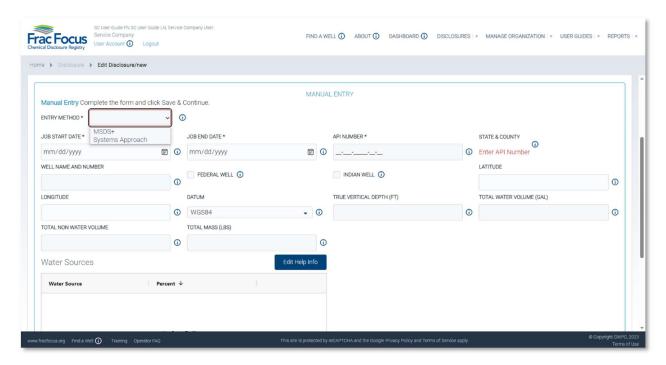


8. Once all errors have been fixed and the form has been validated, click Route to Operator to send to the operator's queue.

Route to Operator

Upload Manually

To enter disclosure information manually, first ensure the correct Operator is selected then fill out the required fields in the Disclosure Manual Entry form.



Fields of Note:

- Entry Method: In FracFocus, disclosures can be created using two separate approaches the default Systems Approach and the MSDS+ approach.
 - MSDS+: Includes header data, MSDS Chemical Ingredients List and Additional Non-MSDS Chemicals
 - Systems Approach: Includes header data, Additive List, and Ingredient List
- API Number: Must be in 14-digit format. Often, you will receive an API number in a shorter 10-digit format. If you enter the API as a 10-digit number, the four zeroes will be added automatically to the end of the API number. For most wells, the last 4 digits are "0" unless the well is a new lateral or new completion. Do not enter the dashes "-" between the sets of numbers these are added automatically.
- Federal Well (checkbox): Indicate if the well is on Federal land or has Federal mineral interests, such that information would be reported to the U.S. Department of Interior's Bureau of Land Management (BLM).
- Indian Well (checkbox): Indicate if the well is on Indian land or has Indian mineral interests, such that information would be reported to the U.S. Department of Interior's Bureau of Land Management (BLM).
- Datum: Has a drop-down list including WGS84, NAD83, or NAD27. This choice should correspond with the coordinate system used to locate your company's well.

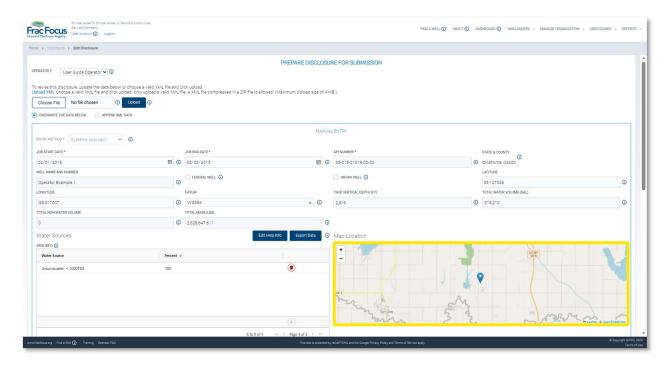
- Total Non Water Volume: Any base fluids besides fresh water are used in large amounts (e.g., CO2, Nitrogen, or recycled produced water).
- Total Mass (lbs.): Information can be entered here if you need to recalculate the % HF Mass information in the ingredients portion of the form.
- Water Sources: Add and track the percentage of water source types used during the job. Select a type of water source with associated breakdown by TDS using the following codes:
 - a. Surface Water, <1000TDS
 - b. Surface Water, >1000TDS
 - c. Groundwater, <1000TDS
 - d. Groundwater, >1000TDS
 - e. Produced Water
 - f. Other, <1000TDS
 - g. Other, >1000TDS

You will then be able to enter a percentage of the job performed using the water type selected.

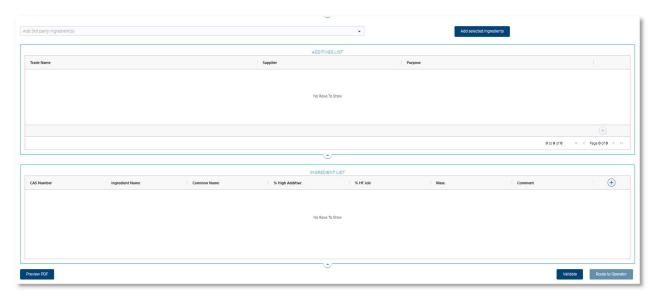
When all information is entered, click Save and Continue. At this point, you move on to the section of the disclosure where chemical additives and ingredients are entered. This step will follow either the MSDS+ approach or the Systems approach of data entry.

Systems Approach (default reporting method)

After the header information has been entered and you have clicked Save and Continue, the location of the well will show on the map. You can visually verify that the map shows the correct location of your well.

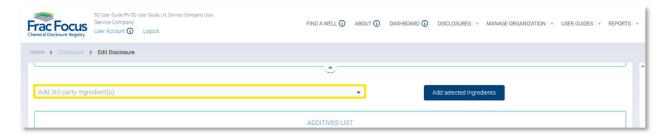


The Prepare Disclosure for Submission page allows entry of additives and their ingredients.

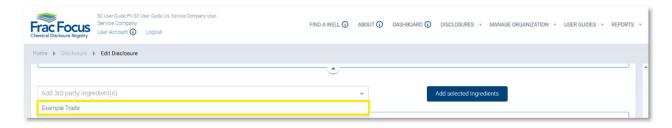


Systems Approach: Add 3rd Party Ingredients

1. Click the Add 3rd Party Ingredient(s) drop-down.



2. Select desired 3rd party ingredient(s)

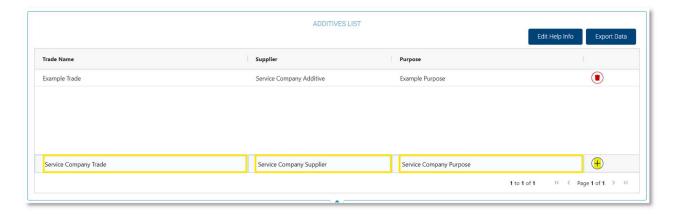


3. Click Add Selected Ingredients to add to the Additives and Ingredient List



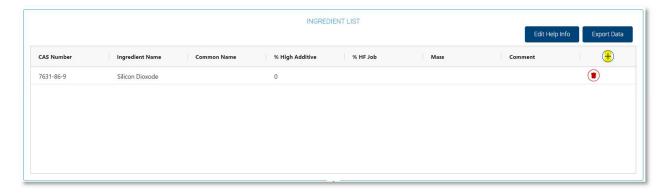
Systems Approach: Add Additives

Enter the Trade Name, Supplier, and Purpose for each additive. Data is stored as soon as you tab into a subsequent field. Once the information has been entered, click the to add it to the list.



Systems Approach: Add Ingredients

Click the \bigcirc to add an ingredient to the list.



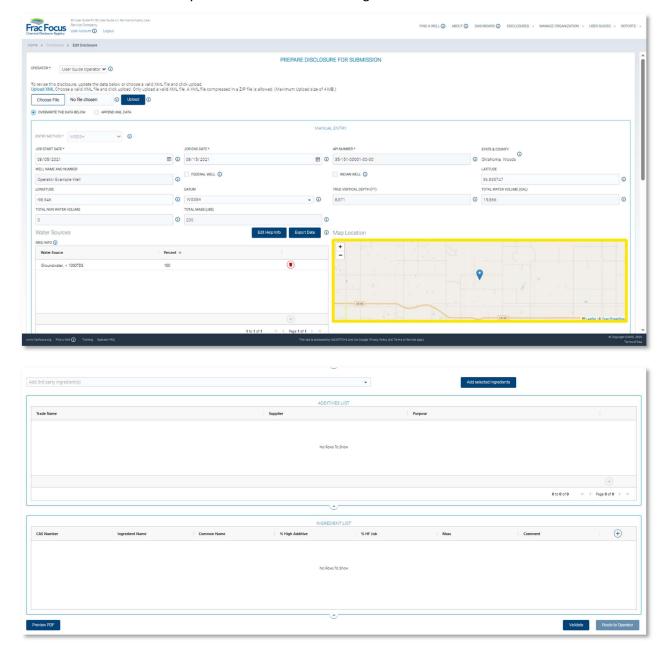
Ingredients are not linked to any specific additive, but rather are part of the overall list. For each ingredient, enter the CAS Number, Ingredient Name, % High Additive, and % HF job. You can also add the Mass and any Comments if applicable. Click Add to add to the Ingredient List. You are able to edit the information in the table by selecting the list fields.

ADD INGREDIENT			
CAS NUMBER Select a CAS Number	· 0	INGREDIENT NAME	
INGREDIENT COMMON NAME	0	% HIGH ADDITIVE	
% HF JOB	0	MASS ①	
COMMENT	0		
	Add	Cancel	

MSDS+ Approach

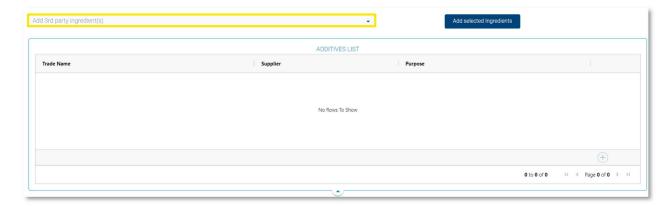
With the MSDS+ approach, the additives are split into two separate lists depending on whether the chemicals require preparation of an SDS or not, MSDS Chemical Ingredients and Additional Non-MSDS Chemicals. Usually, water and sand are included in the MSDS Chemical Ingredients list even though they do not require preparation of an SDS.

After the header information has been entered and you have clicked Save and Continue, the location of the well will show on the map. You can visually verify that the map shows the correct location of your well. This screen allows entry of the additives and their ingredients.

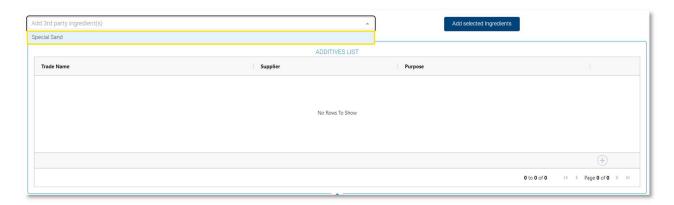


MSDS+ Approach: Add 3rd Party Ingredients

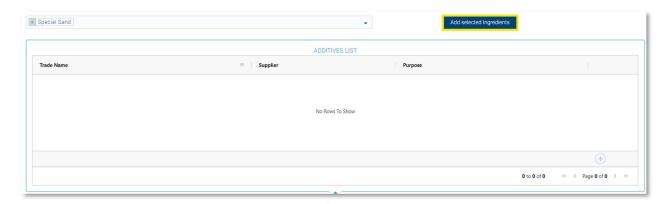
1. Click Add 3rd Party Ingredient(s).



2. Select desired 3rd party ingredients.



3. Click Add Selected Ingredients to add to the MSDS Chemical Ingredients and Additional Non-MSDS+ Chemicals Lists.



MSDS+ Approach: Add MSDS Chemical Ingredients

Under the MSDS Chemicals Ingredients List, enter:

- Trade Name
- Supplier
- Purpose

Click the + to add to the list.



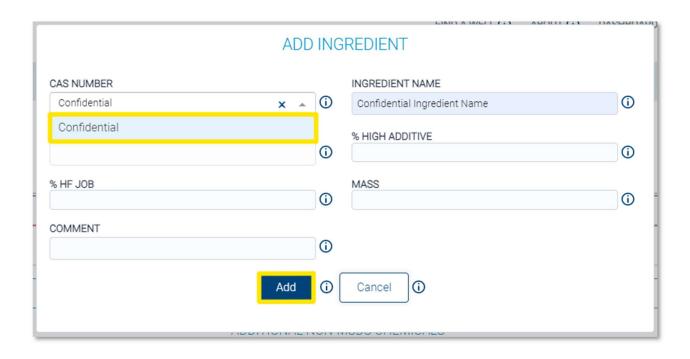
MSDS+ Approach: Add Additional Non-MSDS Chemicals

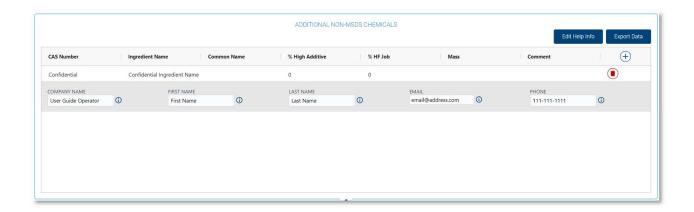
Click the + to add a non-MSDS chemical.



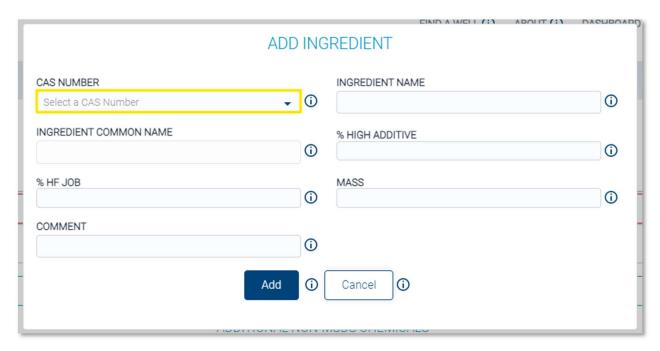
The Add Ingredient form will populate, where you will enter the CAS Number (if applicable), Ingredient Name, % High Additive, % HF Job, Mass, and Comments.

If the ingredient is considered to be protected as a trade secret, as proprietary, or confidential business information, or if no CAS is assigned, type Trade Secret, Proprietary, or Confidential and click the corresponding choice from the drop-down. If one of these is selected, you must fill in the contact information box.





If the ingredient has a CAS number, enter it in the CAS Number box. Ensure you use the right format with numbers and dashes. If you enter it incorrectly, the ingredient will not populate in the drop-down. You can also enter the name of the ingredient or choose one of the options from the drop-down list provided by the system (based on the CAS number).



Fields of Note:

- % High Additive: Often the SDS shows the percentage of each ingredient as a range. You should enter the high end of the percentage range in the % High Additive box.
- % HF Job: For disclosures that you generate yourself (not those already prepared by the service company), you need to calculate the percentage by mass of the total frac job made up by each ingredient. You do not need to estimate the mass for water it is automatically calculated from the volume of water you entered in the header information. The proportions of all the other additives are then recalculated by FracFocus. For nearly all the ingredients other than water and sand, the % HF Job numbers will be very small (having several zeros behind the decimal point). When entering % HF Job numbers, it is important to enter the percentage rather than a decimal version of the number. For example, if the actual % HF is 0.00056%, and the decimal version is 0.0000056 the number that should be entered in the field is 0.00056.
- Mass: The ingredient Mass box is generally left blank. It is used, however, when a new additive is entered onto an existing disclosure report.

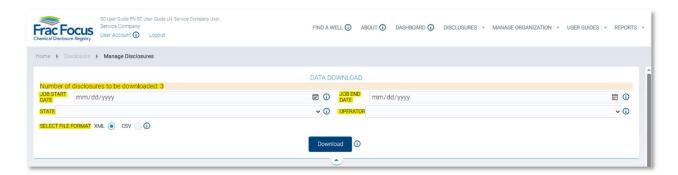
When finished, click Add to submit to the list. The additive is saved and populates in the Additional Non-MSDS Chemicals list. You can then enter information for more additives. If you want to remove a particular additive from the disclosure report, click the red trash can that corresponds with the additive.

Download Chemical Disclosures

In FracFocus, the Operator, Registered Agent, and Service Company are able to download their Pending, Submitted, and Amending disclosure reports. From the Dashboard or Manage Disclosure page, click the Data Download drop-down.



Filter your number of disclosures to be downloaded by entering the Job Start Date, Job End Date, State (where the desired wells are located), File Format and/or Operator. You'll notice the number of disclosures to be downloaded will change as more or less filters are applied.



Once desired filters have been applied, click download and the .xml will download onto your device.



(x)

Additional BLM Requirements

The Bureau of Land Management is working on regulations that govern disclosure of chemicals used to fracture wells located on Federal or Indian lands. Anytime the Federal or Indian Well checkboxes are checked, a Disclosure Agreement pop-up will appear. By checking the Federal or Indian Well boxes you are agreeing to the disclosure agreement.

DISCLOSURE AGREEMENT

Per the Final Hydraulic Fracturing Rule on Federal and Indian Lands (FF Vol. 80, No. 58 / Thursday, March 26, 2015), #167;3162.3-3 (i)(8) I certify that:

- The operator complied with the requirements in #167;3162.3-3, paragraphs (b), (e), (f), (g), and (h) of the section;
- For Federal lands, the hydraulic fracturing fluid constituents, once they arrived on the lease, complied with all applicable permitting and notice requirements as well as all applicable Federal, State, and local laws, rules, and regulations;
- For Indian lands, the hydraulic fracturing fluid constituents, once they arrived on the lease, complied
 with all applicable permitting and notice requirements as well as all applicable Federal and tribal
 laws, rules, and regulations.

By checking the Federal or Indian Well boxes you are agreeing to the above statements

Close





FracFocus APPENDIX

Additional Support

This user guide explains the main features and mechanisms but cannot anticipate every possible situation or complication that users may experience.

Questions relating to this guidance guide should be addressed to William Blackwell, the IT & FracFocus Support Specialist for GWPC.

Ground Water Protection Council 13308 N. MacArthur Blvd. Oklahoma City, OK 73142 405-516-4972 wblackwell@gwpc.org

XML Schema

XML provides more options for managing and reviewing data, but it is less user-friendly for those who are not trained in information technology (IT). The graphic below shows an example of data in XML format. Knowledge of XML is essential for IT personnel who may be programming or converting existing company documents into XML files for submission to the FracFocus system. However, the persons directly involved with entering data into FracFocus do not need to know how to create XML documents – the screens programmed into the FracFocus interface do the conversion automatically.

```
<?xml version="1.0" encoding="UTF-8"?>
<StateExtract xmlns="StateExtractFracFocus3_0.xsd" xmlns:xsi="http://www.w3.org/2001
 - <FractureJob>
       <RecordGUID>13daa26e-b68c-4fd5-97bb-d791ffe961aa</RecordGUID>
      <SubmissionDate>2014-02-24T14:45:02.277</SubmissionDate>
      <OriginalSubmissionDate>2014-02-24T14:45:02.277</OriginalSubmissionDate>
      <APINumber>37131203210000</APINumber>
      <AmendFlag>false</AmendFlag
      <JobStartDate>2014-02-12T00:00:00</JobStartDate>
      <JobEndDate>2014-02-19T00:00:00</JobEndDate>
      <OperatorName>Chief Oil & Gas</OperatorName>
      <WellName>Garrison Unit 4H</WellName>
      <SurfLongitude>-75.9378</SurfLongitude>
      <SurfLatitude>41.625047</SurfLatitude>
      <Datum>NAD83</Datum>
      <FederalWell>false</FederalWell>
      <IndianWell>false</IndianWell>
      <TVD>7850</TVD>
      <TotalBaseWaterVolume>9350712</TotalBaseWaterVolume>
       <TotalBaseNonWaterVolume>0</TotalBaseNonWaterVolume>
      <EntryMethod/>
       <DisclosurePDF>JVBERiOxLjMNCjEgMCBvYmoNClsvUERGIC9UZXh0IC9JbWFnZUIgL0l
     - <Purposes>
          <RecordGUID>2f7c4a26-bbf6-4999-810a-26fbe1502516</RecordGUID>
          <TradeName>MCB-8614</TradeName>
          <Supplier>MULTI-CHEM</Supplier>
          <Purpose>BIOCIDE</Purpose>

    <Ingredients>

             <RecordGUID>ea08cb54-cfac-4f9b-96de-3e11882f78ea</RecordGUID>
             <MSDSYN>true</MSDSYN>
             <IngredientName>ALKYL (C12-16) DIMETHYLBENZXYLAMMONIUM CHLORIDE
             <CASNumber>68424-85-1</CASNumber
             <PercentHighAdditive>5</PercentHighAdditive>
             <PercentHFJob>0.003</PercentHFJob>
          </Ingredients>

    <Ingredients>

             <RecordGUID>eac913fa-5fb0-438a-b519-15176daeb008</RecordGUID>
```

For more information visit FracFocus Schema Requirements.pdf (fracfocusdata.org)

FracFocus Data Field Dictionary

	Header Data			
Field Name	Field Type	Field Description	Validation Checks	
Entry Method	Drop-down	Select disclosure format as either Systems Disclosure or MSDS+ Disclosure	A selection must be made before the record can be entered	
Job Start Date	Date as mmddyyyy	Enter the date on which fracturing of the formation or lateral was initiated	Must be a valid date	
API Number	Numeric (Masked)	Enter the 10-14 digit API Number without dashes where the first two numbers represent the county and the last 5-9 number represents the well and special attributes	Must be a valid state and county number	
State & County	Alpha	Automatically generated from the first 5 numbers of the API Number		
Well Name	Alpha	Enter the name of the well as listed by the company		
Latitude	Numeric	Enter the latitude of the surface location of the well in decimal degrees e.g. nn.nnnnnn	Must be between 15.0 and 75.0 degrees	
Longitude	Numeric	Enter the longitude of the surface location of the well in decimal degrees e.g. nnn,nnnnnn	Must be between - 180.0 and -63.0 degrees	
Datum	Pulldown	Select the datum used to plot the surface location of the well's latitude and longitude		
Federal Well	Checkbox	Select this box if the surface or bottomhole location of the well is on Federal land		
Indian Well	Checkbox	Select this box if the surface or bottomhole location of the well is on Indian land		
True Vertical Depth (ft)	Numeric	Enter the deepest depth reached by the wellbore	Should not be >30,000	
Total Water Vol (gal)	Numeric	Enter the total volume of water used as the base fluid for the fracturing job	Warning if >40,000,000	
Total Non-Water Vol	Numeric	Enter the volume, weight, cubic footage etc of the base fluid if other than water		

Total Mass (lbs.)	Numeric	Enter the total mass of the	
,		fracturing job including all	
		ingredients, if known	
Water Source			
		Systems Disclosure	
		Additives List	
Field Name	Field Type	Field Description	Validation Checks
Trade Name	Alpha	Enter the name of the product by its trade name	Must not be the same name as the Purpose
Supplier	Alpha	Enter the name of the individual or company that supplied the product	
Purpose	Alpha	Enter the reason for the products use e.g., Proppant, Biocide etc	Must not be the same name as the Trade Name
Insert Fields		·	
CAS Number	Pulldown	Select the CAS number for Water (7732-18-5)	No entries other than 7732-18-5
Ingredient Name	Alpha	Enter the name of the ingredient if water e.g., Water, Re-cycled Water, Brackish Water, Produced Water etc	
Percent HF Job	Numeric	Enter the percentage of the ingredient in the total fracturing fluid e.g., 88.2	
Comment	Alpha	Enter a comment about the ingredient or product	
Ingredients List			
CAS Number	Alpha	Enter the CAS number for an ingredient and select from the pulldown list or enter Proprietary, Confidential, Trade Secret or CAS. NOTE : If one of the above is entered you must enter the contact information for the entity asserting a claim as shown in green below	Must be a valid CAS number or a valid data entry. E.g., Trade Secret
Company Name	Alpha	Enter the name of the company asserting the claim	
First Name	Alpha	Enter the first name of the company	
Last Name	Alpha	Enter the last name of the company contact	

Email	Alpha	Enter a valid e-mail address	Must be a valid e-
-1		for the company contact	mail address
Phone	Numeric (Masked)	Enter the phone number of	
		the company contact	
Ingredient Name	Alpha	Accept the ingredient name	
		from the CAS number	
		pulldown list suggestion or	
		type in another ingredient	
27.11.1.2.1111	 	name	
% High Additive	Numeric	Enter the maximum percent	
		of the ingredient in the trade	
0/11=1	 	name product	
% HF Job	Numeric	Enter the percentage of the	Total for all
		ingredient in the total.	ingredients plus
		fracturing fluid e.g., 0.0005	base fluid should
			be within three
			percent of 100
Comment	Alpha	Enter a comment about the	percent
Comment	Alpha	ingredient	
Mass	Numeric	Enter the mass of the	
171033	Numeric	ingredient, if known	
	MSDS	+ Disclosure	
MSDS Chemical Ing		· Disclosure	
<u>_</u>		Fill Book total	Maliata de Compania
Field Name	Field Type	Field Description	Validation Checks
Trade Name	Alpha	Enter the name of the	Must not be the
		product by its trade name	same as the
Cupplior	Alpha	Enter the name of the	Purpose
Supplier	Alpha		
		individual or company that supplied the product	
Purpose	Alpha	Enter the reason for the	Must not be the
ruipose	Aiplia	products use e.g., Proppant,	same as the Trade
		Biocide etc	Name
CAS Number	Alpha	Enter the CAS number for an	Must be a valid
	, uprid	ingredient and select from	CAS number or a
		the pulldown list or enter	valid data entry.
		Proprietary, Confidential,	E.g., Trade Secret
		Trade Secret or CAS. NOTE: If	2.8.,
		one of the above is entered	
		you must enter the contact	
		information for the entity	
		asserting a claim as shown in	
		green below	
Company Name		1 -	
company reamic	Alpha	Enter the name of the	

First Name	Alpha	Enter the First Name of the	
First Name	Alpha	company contact	
Last Namo	Alpha	Enter the last name of the	
Last Name	Alpha	company contact	
Email	Alpha	Enter a valid e-mail address	Must be a valid e-
		for the company contact	mail address
Phone	Numeric (Masked)	Enter the phone number of	
		the company contact	
Ingredient Name	Alpha	Accept the ingredient name	
		from the CAS number	
		pulldown list suggestion or	
		type in another ingredient	
		name	
% High Additive	Numeric	Enter the maximum percent	
		of the ingredient in the trade	
		name product	
% HF Job	Numeric	Enter the percentage of the	Total for all
		ingredient in the total	ingredients plus
		fracturing fluid e.g., 0.0005	base fluid should
			be within three
			percent of 100
			percent
Comment	Alpha	Enter a comment about the	
		ingredient	
Mass	Numeric	Enter the mass of the	
		ingredient, if known	
		Chemical Ingredients	T
Field Name	Field Type	Field Description	Validation Checks
Trade Name	Alpha	Enter the name of the	Must not be the
		product by its trade name	same as the
			Purpose
Supplier	Alpha	Enter the name of the	
		individual or company that	
		supplied the product	
Purpose	Alpha	Enter the reason for the	Must not be the
		products use e.g., Proppant,	same as the Trade
		Biocide etc	Name
CAS Number	Alpha	Enter the CAS number for an	Must be a valid
		ingredient and select from	CAS number or
		the pulldown list or enter	valid data entry.
		Proprietary, Confidential,	E.g., Trade Secret
		Trade Secret or CAS. NOTE: If	
		one of the above is entered	
		you must enter the contact	
		information for the entity	
		asserting a claim as shown in	
		green below.	

Alpha		
	company asserting the claim	
Alpha	Enter the first name of the	
	company contact	
Alpha	Enter the last name of the	
	company contact	
Alpha	Enter a valid e-mail address	Must be a valid e-
	for the company contact	mail address
Numeric (Masked)	Enter the phone number of	
	the company contact	
Alpha	Accept the ingredient name	
	from the CAS number	
	pulldown list suggestion or	
	type in another ingredient	
	name	
Numeric	Enter the maximum percent	
	of the ingredient in the trade	
	name product	
Numeric	Enter the percentage of the	Total for all
	ingredient in the total	ingredients plus
	fracturing fluid e.g., 0.0005	base fluid should
		be within three
		percent of 100
		percent
	Alpha Alpha Numeric (Masked) Alpha Numeric	Alpha Enter the first name of the company contact Alpha Enter the last name of the company contact Alpha Enter a valid e-mail address for the company contact Numeric (Masked) Enter the phone number of the company contact Alpha Accept the ingredient name from the CAS number pulldown list suggestion or type in another ingredient name Numeric Enter the maximum percent of the ingredient in the trade name product Numeric Enter the percentage of the ingredient in the total

Converting Volume to Mass

If the amounts of the additives are expressed in gallons rather than pounds, it will be necessary to convert to pounds. This is an easy calculation, but you must know the density or specific gravity of each ingredient (available from the SDSs) and make the calculation separately for each ingredient. Use either of these formulas:

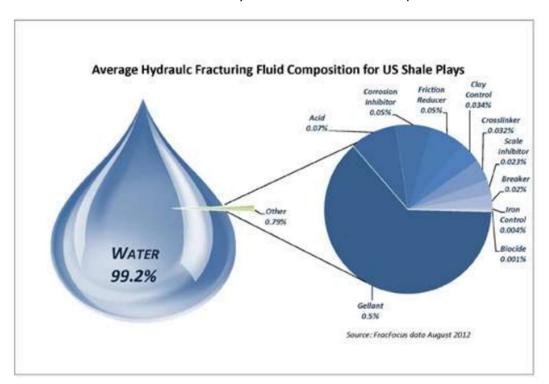
- 1. Mass (lbs.) = Volume (gallons) x density (lbs./gallon)
- 2. Mass (lbs.) = Volume (gallons) x specific gravity x 8.34 lbs./gallon

Water has a density of 8.34 lbs./gallon. Specific gravity is the ratio of the density of one substance divided by the density of water. So, if the specific gravity is shown as 1.2, the density would be $1.2 \times 8.34 = 10.01$ lbs./gallon.

Frac Fluids

FracFocus was created to provide more information about the process of hydraulic fracturing and the frac fluids that are used in the process. Frac fluids are injected into a newly drilled and perforated well to stimulate a formation and create pathways for oil and gas to flow to the well.

Different types of frac fluids are used in different geological formations. One of the more common fracturing technologies used in many shale gas wells is known as a "slickwater frac". Typically, the fluid used for slickwater fracs contains approximately 90% water, roughly 10% sand or other proppant material to keep newly created cracks open, and various other chemical additives used for well control purposes. The other additives collectively make up less than 1% of the total frac fluid volume. The figure shown below is taken from the Shale Gas Primer. It shows the types of chemicals that are often used in relatively small amounts to make up slickwater frac fluids.



The figure shows the products listed by generic category (e.g., biocide, corrosion inhibitor). For each of these product categories, there are likely to be many different individual products that all provide a similar function within the well. Often the chemical supplier, whether a frac service company or a separate chemical company, will blend several ingredients to make up the functioning additive and will give a company product name to the additive. To give a hypothetical example, Ajax Chemical Company could name a biocide additive Ajax B-597. That additive name gives no indication of the individual chemical ingredients in the additive or their relative volumes or masses within the product.

Safety Data Sheets (formerly Material Safety Data Sheets)

Information on additives and their ingredients should be provided by the service companies. In the event that additional information is needed, the best place to look is on Safety Data Sheets (SDSs) prepared by the chemical companies.

The U.S. Occupational Health and Safety Administration (OSHA) requires creation of an SDS for any product that contains hazardous or carcinogenic materials of specific threshold values (1.0% and 0.1% respectively). SDSs are required for hazardous or carcinogenic chemicals but not for all chemical products. Some products have multiple ingredients, some of which are considered hazardous or carcinogenic chemicals, while other ingredients are considered non-hazardous or inert. Often when a chemical is diluted with water to make a final product, the water is not listed on the SDS.

In some cases, the chemical supplier has used a proprietary formula when constituting a chemical additive. In those cases, disclosure of the actual ingredients and their concentrations is subject to each state's laws and regulations concerning confidential business information.