

LMEpassport User Guide

Version 4.0 – May 2022

Please respond to:

LMEpassport Support Team Imepassport.support@lme.com



Contents

1	Intr	oduction	.5
2	Pla	tform governance	.5
	2.1	Accessing LMEpassport	. 5
	2.1.		
	2.1.		
	2.1.	··· · · · · · · · · · · · · · · · · ·	
	2.2	Platform administration	
	2.3	Scope of LMEpassport	
	2.4	Users of LMEpassport	
	2.4.	·	
	2.4.	•	
	2.4.	.3 Types of users	. 7
	2.4.		
	2.4.	.5 Permissions	. 8
	2.5	Records in LMEpassport	. 9
	2.5.	·	
	2.5.		
	2.5.	.3 COA data	11
	2.5.	.4 Supported COA formats	11
	2.5.	''	
	2.5.		
	2.6	Data flows	
	2.6.	.1 Entering data into LMEpassport	13
	2.6.	·	
	2.7	General administration.	
	2.7.	.1 Auditing activity	14
	2.7.	2 Notifications	14
	2.7.	.3 End User Licence Agreement and Terms of Use.	15
3	Na	vigating LMEpassport	16
,			
	3.1	Landing page	
	3.2	Application footer	
	3.3	Dashboard	
	3.4	My Records	
	3.4. 3.4.	•	
	3.4. 3.4.	, , , , , , , , , , , , , , , , , , ,	
	3.5 3.5.	Records Management	
	3.5.		
	3.5. 3.5.	1 1 1	
		11	
	3.6	Manage Sustainability Profile (Producers only)	
	3.7	Activity Logs	
	3.8	Admin Tasks (User Admin only)	
	3.8. 3.8.	, ,	
		· ·	
	3.8.	.3 Manage Permissions	21



	3.8	.4 Manage Records	28
	3.9	Help & Downloads	29
4	Re	gistering and getting set up	30
•			
	4.1	LMEpassport webpage	
	4.2	Registering your company for LMEpassport	
	4.3	Registering new users with LMEpassport	
	4.4	Setting your password and password management	
	4.5	Logging into LMEpassport	
	4.6 4.7	Accepting the LMEpassport EULA and TOU	
	4.7	Resetting your password	33
5	Ge	etting the most from the My Records List	38
	5.1	Reviewing My Records List	38
	5.2	Organising structured data in the My Records List - hide columns	41
	5.3	Organising structured data in the My Records List - reorder columns	42
	5.4	Searching by LMEpassport ID in the My Records List	43
	5.5	Using the Save/View Filters feature in the My Records List	43
	5.6	Viewing chemical composition of records from the My Records List	45
	5.7	Viewing value-add certifications and disclosures from the My Records List	46
	5.8	Adding approved records to the My Records List	47
	5.9	Search thresholds and erroneous searches	49
6	Ge	etting the most from the Create Record page	51
		·	
	6.1	Filtering in the Create Record task list	
	6.2	Searching in the Create Record task list	
	6.3	Actions from the Create Record task list	52
7	Cre	eating records	54
	7.1	Creating Basic or Enhanced Records by OCR	54
	7.1	·	
	7.1	S .	
	7.1	<u> </u>	
	7.1		
	7.1	·	
	7.1		
	7.2	Creating records using the LMEpassport Excel upload template	
	7.3	Creating records using the LMEpassport CSV upload template	
	7.4	Creating records through the LMEpassport API	
	7.5	Creating records from the To Do List	
	7.6	Reviewing and approving records	
	7.7	Assigning records	
	7.8	Appending value-add certification and disclosures	
	7.9	Editing or removing value-add certification and disclosures	
8	Ex	porting data from LMEpassport	91
-	•		
	8.1	Exporting from the My Records List to Excel	
	8.2 8.3	Exporting from the My Records List via API	92 92
	(),)	1.77.181.181.181.181.181.181.181.181.18.18.1	97



	8.4	Bulk downloading COA files	92
	8.5	Exporting the Activity Logs to Excel	94
9	Sr	nartphone app	95
	9.1	Downloading the app	95
	9.2	Logging into the LMEpassport app	
	9.3	Manually searching for PCRs	
	9.4	Taking a photo of PCRs	
	9.5	Logging out of the LMEpassport app	
10) Ac	Iministrative tasks	.101
	10.1	Updating company information	101
	10.2	Creating a new user	
	10.3	Editing, suspending and re-activating users	
	10.4	Editing user permissions	
	10.5	Editing record approval permissions	
	10.6	Updating record details	.106
	10.7	Responding to update requests	.110
	10.8	Reviewing the Activity Logs	.112
11	l Co	ontact us and further information	.114
	11.1	Email us	.114
	11.2	LMEpassport homepage on the LME website	114
	11.3	Sustainability	.114
12	2 Ap	pendix 1: Basic Record data fields	.115
13	3 Ap	pendix 2: Enhanced Record data fields	.116
14	1 Ap	ppendix 3: Supported Industry Standards and Permitted Grades in LMEpassport.	.118
15	5 Ar	opendix 4: Data field definitions	110



1 Introduction

The purpose of this document is to guide users of LMEpassport, a digital document register provided by the London Metal Exchange ("LME" or "the Exchange").

The platform is a market utility, providing convenience and integration with current market practices when transacting and handling physical units of metal. The LME passport application is accessible through a web browser or through a companion mobile app (Android and Apple). As some users may also wish to interface LME passport with their own systems an application programming interface ("API") is provided as part of the system architecture.

The primary function of LMEpassport is a digital register. As such, it will digitise, store and maintain essential provenance documents and information for metal traded in the LME ecosystem. It acts as a centralised library available to all stakeholders along the metal value chain.

LMEpassport permits the registration of detail from two sources of information. Principally, a certificate of analysis ("COA") document, and value-add certifications and disclosures as supplementary information. Individual COA records in LMEpassport are created at a granular level and are applicable to each individual unit of physical metal. As a rule, each identifiable parcel of metal with a corresponding chemical analysis found within a COA will constitute a record. The reference term used to identify these granular parcels of metal varies between producers and products. For the purposes of this document this granular reference will be termed the production cast reference ("PCR"). Each PCR recorded in the service will be registered under a unique identifier termed the LMEpassport ID.

LME passport is designed to work with current market practices and LME requirements in the warranting process. This includes the use of COA documentation and underlying production cast references as a framework for the service. The PCR is of high importance to LME passport, providing the nexus between documentation, whether digital or not, and to the physical parcel of metal.

2 Platform governance

The LME manages and administrates the functions, users, accounts and permissions of LMEpassport. The following segment provides an overview of the governance underpinning the platform.

2.1 Accessing LMEpassport

Ease of access to information held in LMEpassport is essential in creating a true utility service for the market.

LME passport is accessible through three different mechanisms allowing for the use and consumption of registered information. The three channels aid user adoption and maximise the operational efficiencies realised across a range of Stakeholder Types.

2.1.1 Webpage

The principle channel to access to interact with LMEpassport is through a web-based portal where users create and maintain accounts. The portal is designed with an intuitive set of functions including the option to browse, search, and filter through previously requested records.

Users can access the webpage through the URL www.lmepassport.com.



2.1.2 Application program interface

For users of LMEpassport with compatible systems an API is available allowing systems to communicate directly. This channel allows users to create an automated work flow using a query interface with LMEpassport. Users are permitted to request COA and value-add detail which can be fed through to their own enterprise resource planning ("ERP") or stock management software.

2.1.3 Smartphone application

Additionally a smart phone application is available alongside the web-based portal. The smart phone application is an extension of the user portal and requires users to have a registered account. The smart phone application particularly aids stakeholders who frequently work with the physical units of metal and are responsible for reconciling that metal to essential documentation. Within the LME lifecycle this need predominantly arises with warehouse operating staff on the warehouse floor.

2.2 Platform administration

Administration of LMEpassport is managed by the LME's Platform Administrator or Platform Admin. The Platform Admin is responsible for the good functioning of LMEpassport and has a broad range of permissions to execute this role.

The Platform Admin is responsible for the authorisation of new Entities and the User Admin accounts created in LME passport. This will include the determination of Stakeholder Type and the permissions of the Entity.

The Platform Admin is empowered to suspend or terminate accounts or Entities failing to meet the obligations set out in the service's End User Licence Agreement ("EULA") and Terms of Use ("TOU") or for any other reason deemed reasonable by the LME.

The Platform Admin will aid resolution of any record conflicts in LMEpassport. Where conflicts arise, users will be communicated with through the LMEpassport notifications feature.

2.3 Scope of LMEpassport

LME passport will support the registration of COAs for all metal contracts physically settled at the LME.

2.4 Users of LMEpassport

LME passport is intended for use by a broad range of stakeholders from the metals market. To ensure each user can use and enjoy the most relevant features in the application all accounts are categorised under the system's user regime.

2.4.1 Entity

Each and every company or corporation making use of LMEpassport must be registered as an Entity. This allows for the capture of requisite corporate information and to associate users to an appropriate parent. Accessible permissions are also determined by the characteristics of the registered Entity.

2.4.2 Contact details

The Main Contact is the formal, principle contact recorded against each Entity in LME passport. Any issues or details that need to be formally communicated to the Entity will be done so through the Main Contact. The



first user registered under an Entity will become the Main Contact by default. To update the Main Contact please contact the Platform Admin.

2.4.3 Types of users

Each Entity in LMEpassport is categorised based upon their core business activity and then classified as a defined Stakeholder Type in the platform; Producer, Warehouse Company, LME Member and Metal Owner. Each Stakeholder Type will use and engage with LMEpassport in different ways and will require a differing set of permissions to meet the needs of the role they undertake. Some users of LMEpassport span Stakeholder Types. When setting up an account, the LME will work with these stakeholders to identify the most appropriate Stakeholder Type. For the avoidance of doubt determination of Stakeholder Type and their afforded permissions will be at the sole discretion of the LME.

The identified Stakeholder Types are explained in greater detailed below in Table 1:

Stakeholder Types			
Producer	Producers are corporate entities whose principle business activity is that of smelting, casting or producing metal products. This may include the producers of LME approved brands. All brands approved for good delivery against LME contracts must conform to strict requirements on quality, shape and weight, as outlined by the Exchange.		
Warehouse Company	Warehouse companies are corporate entities responsible for the storage of metal. Warehouse companies include LME approved warehouses. To support the mechanism of physical delivery the LME approves and licenses a network of warehouses and storage facilities around the world. Warehouse companies must meet strict criteria before they are approved for the handling of warranted LME metals.		
LME Member	For the purposes of this definition LME members are defined as Category 1, 2, 3 or 4 members eligible to trade on the LME on behalf of clients or on a proprietary basis. LME members comprise of trading houses, brokers, banks and proprietary traders.		
Metal Owner	Metal owners are the title owners of a given parcel of metal. Metal owners will frequently employ other Stakeholder Types as their agent. Where a metal owner is otherwise categorised as a producer, warehouse company or LME member this categorisation will take precedence.		

Table 1: LMEpassport Stakeholder descriptions

2.4.4 User accounts

Users of LME passport, whether through the web-based portal or the smartphone application, access the service through a dedicated user account. Dedicated user accounts enable the service to be tailored to individual users and form a pillar of the information security requirements. User accounts will be aggregated and managed under the following account taxonomy in order to allow corporate entities to self-serve and manage their users.



2.4.4.1 User Admin

User Admin accounts manage other accounts, their permissions and oversee the activity of all users within the Entity. Each Entity must have at least one User Admin at any given time. The current User Admin may create additional User Admins for the Entity with all the responsibilities and permissions associated with the account type. The first account created by a new Entity will, by default, be a User Admin.

The principle responsibility of the User Admin is to create and manage Individual User accounts for the Entity. This includes the granting and withdrawing of permissions within the array of permissions extended to the Entity on the basis of Stakeholder Type.

The User Admin will be responsible for the suspension or cancellation of unused or unwanted Individual Users of the Entity.

The User Admin additionally has access to the Entity's Activity Log. This log records a summary of all actions undertaken by all users associated to the Entity. The log is immutable and provides an auditable record of LMEpassport use. The Activity Log is exportable from LMEpassport in a human and machine readable format.

2442 Individual User

Individual User accounts allow users to interact with LMEpassport's core functions as a digital document register. Each Individual User account must be linked to and created under a corporate email address at the domain registered to the Entity. Each Individual Account will have its own set of permissions defined by the User Admin within the permissions extended to the Entity based upon its Stakeholder Type.

2.4.5 Permissions

The flexible permissions structure of LMEpassport is intended to increase the service's utility to the market. The LME, as the platform administrator retains the right to revise the permissions extended at any level of the service. This includes but is not limited to Stakeholder Types, specific Entity, account types or individual users. The right to revise permissions is the sole prerogative of the LME. This right enables the LME to maintain a well-functioning service to the benefit of all users.

Each Entity's User Admin may manage Individual Users and their permissions to meet the operational needs of the Entity's business.

Permission definitions			
Read	Permission to access and view data held in the LMEpassport platform via the web portal, smartphone application or API connectivity. This applies to both COA information and value-add certifications and disclosures.		
Export	Permission to export COA or value-add data held within LMEpassport. The format of exported detail will be limited by the underlying record types. Enhanced Records may be exported in a variety of supported formats. Basic Records only contain an electronic copy of the original documentation.		



Write	Permission to register COA detail and documentation to create new records in LMEpassport. Write permission can be limited to Basic Records only, or may permit enhanced and Basic Records.
Overwrite	Permission to register structured COA detail for a PCR already registered as a record. The product of this action is to update a record created by a Warehouse Company or LME Member to one created by a Producer either Enhanced or Basic Record type.
Append	Permission to append value-add certifications and disclosures to COA record types through the "Manage Sustainability Profile" page (given to Producers only). This includes Basic and Enhanced Records.

Table 2: LMEpassport permissions

Stakeholder Type	Read	Export	Write	Overwrite	Append
Producer Producer brand only	✓ Producer created records only		✓	✓	√
Warehouse Company	✓	✓	✓ Basic Records only		
LME Member	✓	✓	✓ Basic Records only		
Metal Owner	✓	✓			

Table 3: LMEpassport permissions per stakeholder

2.5 Records in LMEpassport

Each identifiable parcel of metal with a corresponding chemical analysis found within a COA will constitute a record. The reference term used to identify these granular parcels of metal varies between producers and products. For the purposes of this document this granular reference will be termed the production cast reference ("PCR"). Each PCR recorded in the service will be registered under a unique identifier termed the LMEpassport ID.

2.5.1 Types of record

Two levels of record will be permitted within LMEpassport. The type of record created depends on a number of factors including the quality and availability of documentation, and the Stakeholder Type of the user



creating the record. A description of each record type can be seen below. A full list of supported data fields and their definition can be found in the Appendix.

2.5.1.1 Enhanced Records

The Enhanced Record comprises structured data held in a readily searchable form. This structured data is supported by original versions of documentation. Structured data allows for extensive search and reporting functionality in LMEpassport. In the case of LME branded metal LMEpassport automatically reviews the COA detail against the LME's Special Contract Rules. In doing so LME branded metal is indicated as meeting or failing to meet LME warranting requirements. Enhanced Records enable users to manipulate and export detail in a number of supported formats.

2.5.1.2 Basic Records

Basic Record types complement the more detailed Enhanced Record type. The Basic Record comprises a centrally stored digital version of the COA document supported by meta-data making the document searchable. For the avoidance of doubt Basic Records must comprise of a producer's COA document or that of a professional assayer detailed under the LME's Listed Samplers and Assayer ("LSA"). COAs issued by any other organisation will not be valid for the purposes of LME passport.

Each Basic Record requires a page reference to direct the user to the correct page of the underlying document containing PCR-specific detail. The underlying document is complemented by a handful of high level data fields which are parsed by OCR and validated by the user. The Basic Record type provides a practical means to register COA detail of metal already in the warehousing ecosystem. This will typically require detail to be registered by a user other than the Producer.

2.5.1.3 Potential Records

During the OCR process, LMEpassport will extract as much information as possible for the user to validate and submit. Where PCRs are identified in the COA document but not approved by the user the system will record these PCRs as part complete records named Potential Records.

Users searching the system for an approved record may be presented a Potential Record as the closest match. The user is required to review and approve the Potential Record against the associated COA document before it can be used for any onward purpose.

2.5.2 Record statuses

The following record statuses are in use on the platform.

2.5.2.1 Approved

The record has been fully reviewed and approved in the system. The record can be used for any permitted onward purpose such as export or appending sustainability data.

2.5.2.2 Potential

Please see the definition of Potential Records above.

2.5.2.3 Not found

The record cannot be found in the platform and the user must create and approve the record for use in any onward purpose.



2.5.3 COA data

All three registration channels can be used to register COA detail. See the Appendix for a complete list of COA data fields supported by the application.

Metal produced under an LME brand and deliverable against LME contracts must meet purity and quality requirements detailed by the LME's respective Special Contract Rules. Inclusive within the Special Contract Rules are a number of requirements relating to the content of COAs. Prescribed COA content varies between metals but fundamentally a list of chemical impurities and the tolerated percentage of each must be detailed within the document. These and other COA requirements, outlined in the Special Contract Rules, must be adhered to when registering COA data in LMEpassport.

2.5.3.1 Determining PCR

For the purposes of this document and LMEpassport each granular reference found in a COA document with its own corresponding chemical analysis will constitute a production cast reference.

2.5.3.2 Determining COA date

Wherever clearly labelled the COA date should be used to populate the COA Date field in LMEpassport. This is the date the analysis was undertaken and the document created. Date of production is a different data field.

Where the COA date is ambiguous or multiple dates are shown on the document the user should make an educated decision as to which date should be used.

Where users feel unable to make an educated guess the earliest date provided on the document should be used.

2.5.3.3 Determining COA reference

Wherever clearly labelled the COA reference should be used to populate the COA Reference field in LMEpassport.

Where a COA reference is not clearly listed or the document reference is ambiguous users should use the first PCR number in the document as the COA reference. This provides a predictable and standardised approach for determining a COA reference in lieu of a clearly listed term.

Where the COA reference is ambiguous and the first PCR number cannot be used for any reason (eg another COA with the same first PCR has already been registered using that first PCR as the COA reference) then users should make an educated decision to use an alternative reference term. To the best of the user's ability this should be a reference term unique to the document.

2.5.4 Supported COA formats

The LME passport platform has been designed to accept a wide variety of COA formats. Two principle forms of document exist in the metals market; single analysis documents and bulk analysis documents. These are depicted below including the typical location of essential COA information.



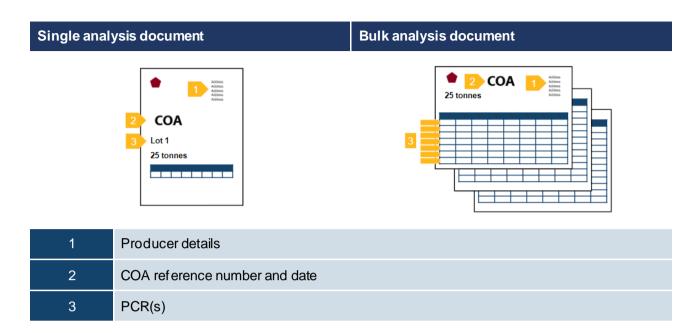


Table 4: Supported COA formats

2.5.5 Forming LMEpassport IDs

Unique records are created at the granular production cast reference level and are referenced by a unique identifier entitled the LME passport ID. This unique identifier is the concatenation of the LME brand with the relevant PCR separated by a pipe-delimiter (eg Brand|PCR Number). This methodology provides robust and unique identifiers and prevents record clashes between two producers using similar PCR taxonomies.

2.5.6 Sustainability data

Value-add certification and disclosure detail is captured in LMEpassport at the corporate or entity level, brand level, and/or the individual record held at the PCR level and registered under an LMEpassport ID. The registration of value-add detail is enabled for Producers through a dedicated "Manage Sustainability Profile" function. Users are required to select the disclosure they've reported or comply with, and in cases where the disclosure pertains to the PCR level, search or filter for LMEpassport IDs and select the units of metal for which the disclosure or certification is relevant. The records each user may append to are limited to those created by the Entity.

The LME maintains a progressive suite of themes and disclosure. Under each theme an array of recognised certifications, membership schemes and metrics are supported. The LME will maintain sole discretion over the disclosures supported. Where additions are desirable the Exchange is committed to working with industry participants to determine the form and content of new certifications and disclosures. The LME will not unreasonably withhold addition of certifications or disclosures to the recognised list. Users are permitted to add disclosure information in 4 steps:

2.5.6.1 Theme of certification or disclosure

Users must select the thematic area under which they wish to make a disclosure. Users select the desired area of disclosure from a drop-down list of recognised themes.



2.5.6.2 Disclosure or certification met

Users are next required to state the high level certification met or disclosure statistic. Representative statistics must meet the prescribed format permitted by LMEpassport. Users select and populate the desired certification or disclosure from a drop down list.

2.5.6.3 Proof point

Supporting documentation or content is required to register value-add certifications and disclosures. This will likely comprise of original certificates or standards documentation provided by an industry body or audit reports published by a third party. Users appending documentation must have the right to do so. This criteria must be satisfied in order to register the value-add certification or disclosure.

2.5.6.4 Framework details (if separate from Proof Point)

Users must summarise a description of the framework used under the disclosure or certification. This field provides essential information on how the certification was met, statistics calculated, or how to interpret the information provided. This may include the attachment of supporting documents or a link to an external website detailing this information. Users are required to populate this field satisfactorily in order to register the value-add certification or disclosure.

2.6 Data flows

Working as a digital register, LMEpassport's principle function is to collect and communicate provenance information. The mechanisms for which are outlined below.

2.6.1 Entering data into LMEpassport

The mechanisms to register information with LMEpassport are designed to provide flexibility and user choice to market participants. This allows LMEpassport to fit with current business models and practices. Not all channels are available to all market participants. To ensure effective control of LMEpassport the LME has carefully considered which mechanisms will be permissioned for each Stakeholder Type and users of the service. Permissions are complemented by obligations for due care to register details accurately and responsibly. Three channels of data submission are supported by LMEpassport and are designed to cater for the most common formats of documentation.

2.6.1.1 Optical character recognition

LMEpassport allows for soft documents and scanned images of documents, converted to a PDF format, to be uploaded and registered with the service. A redact function allows users to permanently obscure any sensitive information held on the original document before submission. LMEpassport then makes use of optical character recognition ("OCR") software, a functionality that interprets documents and captures relevant data fields. OCR enables quick and effective creation of structured data from a document, including the many forms of COA found in the metals market. The artificial intelligence underlying OCR technology means it learns and adapts to new document types and formats, becoming increasingly reliable and consistent in data capture over time. The OCR function, through the capture of COA meta-data, supports the record creation process in LMEpassport.

2.6.1.2 Uploading supported data files

LME passport enables the creation of records through the sharing of supported data files. Submission of information via this route creates more detailed records comprising of structured and searchable data. The submitting party is required to log into the LME passport web-based portal and upload the desired file. To



support structured data held in the system users will be prompted to share the corresponding COA in PDF format.

2.6.1.3 Application program interface

Users of LMEpassport with the desire to communicate through the API are able to connect to the service through a query interface. This permits users to schedule the regular submission of PCR numbers and their corresponding detail as an automated process. Submission of data through this mechanism creates more detailed records comprising of structured and searchable data. This mechanism is only available to users permissioned to do so. The technical details of the API are available on request. Please contact the LMEpassport Support Team at lmepassport.support@lme.com.

2.6.2 Exporting data from LMEpassport

LME passport provides an exporting function. This function allows users to search, filter and sort registered records. Individual or subsets of LME passport records can be exported for use. Records can be exported in a number of supported formats including the original document or as a supported data file.

2.6.2.1 Original documents (.pdf)

Original COAs registered with LMEpassport may be exported as a digital version for use off platform. Where supporting documents have been registered as part of an appended value-add certification or disclosure users are permitted to export these also.

2.6.2.2 Excel (.xlsx)

LME passport allows registered users to export COA and value-add information in supported data formats. Structured data related to LME passport records can be exported in a Microsoft Excel (.xlsx) format from a number of pages in the application.

2.6.2.3 Application program interface

LME passport permits registered users to export structured data relating to a selected sub-set of COA Records via API. The API supports the communication of both COA detail and value-add certifications and disclosures.

2.7 General administration

2.7.1 Auditing activity

LME passport records all activity on the service in a central Activity Log. The Activity Log provides a summary view on all records created, viewed and exported, all changes to accounts and all changes in permissions. User Admins are permitted to view the entries in the Activity Log related solely to their Entity. This view of the Activity Log is exportable in human and machine readable format by a User Admin for audit purposes.

The Platform Admin is permitted to view and export all entries held on the Activity Log. The LME Platform Admin is responsible for auditing activity of all users and Entities on LME passport.

2.7.2 Notifications

LMEpassport provides an internal and external notification system. Notifications are used to inform users of updates to services and functions, revisions to held records in the service, and changes to LMEpassport's terms. See the section below on End User Licence Agreement and Terms of User. Notifications deemed essential by the LME are pushed to all account types.



Internal notifications will appear as a pop-up message in the LMEpassport portal. External notifications are sent to the registered email address of each LMEpassport account.

2.7.3 End User Licence Agreement and Terms of Use

Every user is required to accept LMEpassport's End User Licence Agreement ("EULA") and Terms of Use ("TOU") when logging into the platform for the first time. A pop-up message will appear requiring the user to accept the EULA and the TOU in order to gain access to the application. The pop-up box also includes a hyperlink to the EULA and TOU language which allows the user to review before accepting. A user who does not agree to the EULA and TOU will be denied access and should close the browser.

A further link to the EULA and TOU can be found in the footer throughout the LME passport application. Users can reference and review both documents at their convenience.

From time to time the LME will update the EULA and TOU. In this instance a push notification will be made to each and every user in the application. A pop up message will immediately appear in the user's browser if logged in or at the next log-in if not. This pop up message will contain the revised EULA and TOU. Each user must accept and agree to the revised wording in order to continue accessing the application. A user who does not agree to the EULA and TOU will be denied access and should close the browser.



3 Navigating LMEpassport

3.1 Landing page

Users can navigate to LMEpassport using any web browser using the website: www.lmepassport.com.



LMEpassport landing page

The following features can be found on the landing page:

- 1. "Login"
- 2. "Register Now" button
- 3. LMEpassport support team contact details
- 4. A short description of LMEpassport

3.2 Application footer

The application footer contain a number of convenient and important links to relevant information. The footer appears throughout each view and page in LMEpassport.



LMEpassport footer

The following features can be found on the application footer:

1. Footer links



3.3 Dashboard

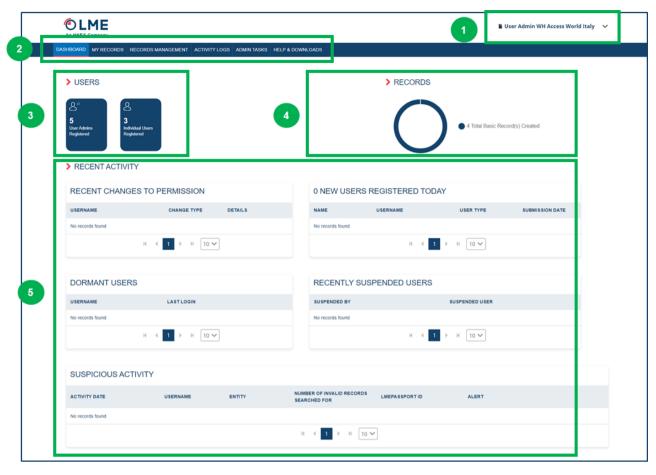
The Dashboard provides the User Admin or Individual User with a range of metrics and statistics. This summary view provides a quick snapshot of the most recent activities undertaken within LMEpassport by the user's Entity.

The dashboard is dynamic and differs for User Admins and Individual Users. These features ensures varying users are presented relevant data only. Table 5. below summarises what each user type will see on the dashboard.

	User Admin	Individual User
Total number of users associated to the Entity	Х	Х
Total number of records created	х	х
Recent changes to permissions	х	
New users registered today	х	
Dormant users (Users who have not logged into LMEpassport in 30+ days)	X	
Recently suspended user	X	
Suspicious activity (Such as invalid or incorrect record requests)	Х	X

Table 5: Dashboard dynamic view





User Admin Dashboard

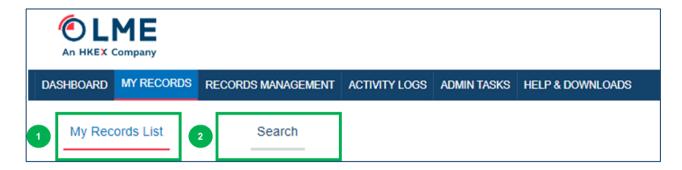
The following features can be found on the dashboard:

- 1. User details
- 2. Header ribbon
- 3. Users infographic
- 4. Records infographic
- 5. Summary views of recent activity

3.4 My Records

The main characteristic of the My Records page provides users with a rich and granular view of the LMEpassport records they have accessed. The My Records tab consists of two pages; the My Records List and Search.





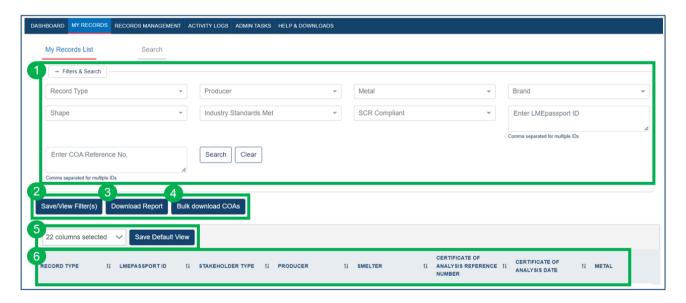
My Records tab

The following features can be found on the landing page:

- 1. "My Records List"
- 2. "Search"

3.4.1 My Records List

The My Records list facilitates quick and easy scrutiny of the populated records using an array of filters and a free text search function. Users can further make use of the meta-data held in this view by exporting it to Microsoft Excel. This includes all COA related data fields as well as value-add themes and disclosures. The COA documents supporting each record can be quickly reviewed and exported in PDF format for use off platform.



My Records List

The following features can be found on the My Records List:

- 1. "Filters & Search" box
- 2. "Save/View Filer(s)" button
- 3. "Download Report" button
- 4. "Bulk download COAs" button
- 5. Column selector and "Save Default View" button
- 6. Records table



The records held in this view are populated in one of two ways. Firstly, all records approved by the user's Entity will automatically be pushed here. Secondly, where a user is provided a list of known LMEpassport IDs they can use the My Records – Search function to locate and add these records to the pool through a dedicated user interface.

3.4.2 Further record detail accessed through the My Records List

Further detail related to each approved record can be easily accessed from the My Records List.

For Enhanced Records, clicking on the "View Chemical Composition" link under the Chemical Composition column in the records table will allow users to view the detailed chemical composition associated with the unit of metal. Based on the chemical composition, the platform calculates if the metal is LME Special Contract Rule compliant. This information is found under the "SCR Compliant" column within My Records List. The following statues may appear within the SCR Compliant column:

- Compliant all required chemical components have been listed against an Enhanced Record in LMEpassport and the system can confirm these components, both in isolation and in specified combinations, meet the chemical purity standards set out in the corresponding section of the Special Contract Rules, as set out in the LME Rulebook.
- Check COA LME passport is unable to derive the compliance of a particular PCR against the chemical purity standards set out in the corresponding section of the Special Contract Rules, as set out in the LME Rulebook.
- Non-Compliant at least one chemical component has been listed against an Enhanced Record in LMEp assport and the system can confirm at least one of these components, either in isolation or in a specified combination, fails to meet the chemical purity standards set out in the corresponding section of the Special Contract Rules, as set out in the LME Rulebook.

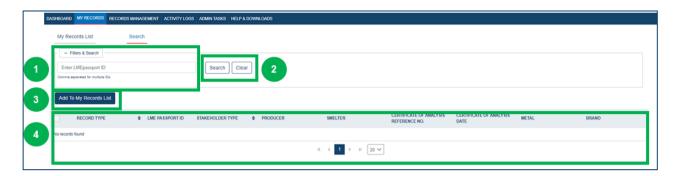
Similarly, the user can download/view the original COA by clicking on "Export Original COA" link under Original COA/Additional Documents column in the records table.

Finally users can view appended sustainability and value-add disclosure information by clicking on "Details" under the Value Add Themes & Disclosures column in the records table.

3.4.3 My Records - Search

The Search page permits users to locate records from across the platform's database and add to their My Records List. The user is required to input LMEpassport ID(s) to return the corresponding record(s). Users should note that this search function is intended for use with known LMEpassport IDs. It is not a function to speculatively search the platform for records. Users making a high number of searches where no record is returned in the system will have their accounts suspended pending investigation from the LME Platform Admin.





My Records - Search

The following features can be found on the My Records – Search page:

- 1. "Filters & Search" box
- 2. "Save" and "Clear" buttons
- 3. "Add to My Records" button
- 4. Search results table

3.5 Records Management

The Records Management tab will be one of the main tabs on the platform, which is accessible to Producers, Warehouse Companies, and LME Members. This page includes different functions based on the user's permissions. This tab consists of two sub tabs – Create Record and Approved Records.



Records Management

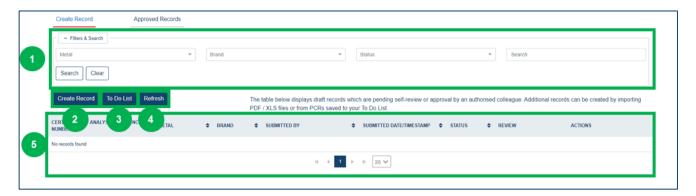
The following features can be accessed under the Records Management tab:

- 1. "Create Record"
 - a. To Do List
 - b. Review Screen
- 2. "Approved Records"

3.5.1 Create Record

The Create Record page is the starting point for any user wishing to register COA information with the platform. Here, users can initiate and manage the workflows to create records via one of the offered channels of record creation.





Create Record

The following features can be found on the Create Record page:

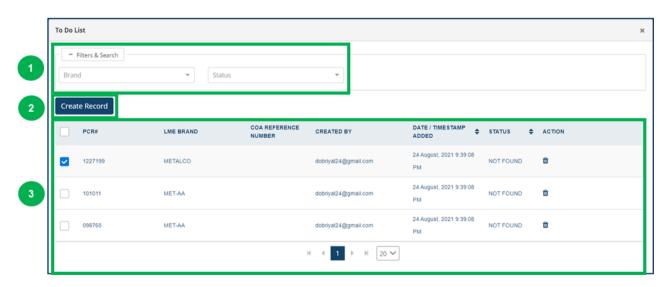
- 1. "Filters & Search" box
- 2. "Create Record" button
- 3. "To Do List" button
- 4. "Refresh" button
- Task list table

3.5.2 To Do List pop up

At the outset of the create record workflow users are prompted to search the system to ensure the record does not already exist. Records with a status of Not Found or Potential can be created immediately or added to the Entity's To Do List to be actioned at a later date.

The To Do List can also be populated by searching for PCR numbers using the LMEpassport smartphone app. Where a search fails to return an approved record the user is prompted to add the PCR to their To Do List.

Users can create any record added to the To Do List by clicking the checkbox next to the PCR number, then clicking "Create Record". The PDF or Excel upload process can then be completed to create the record.



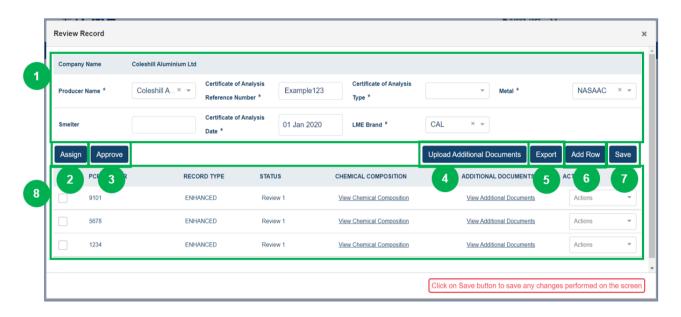
To Do List

The following features can be found in the To Do List pop up:



- 1. "Filters & Search" box
- 2. "Create Record" button
- 3. To Do List table

3.5.3 Review Record pop up



Review Record

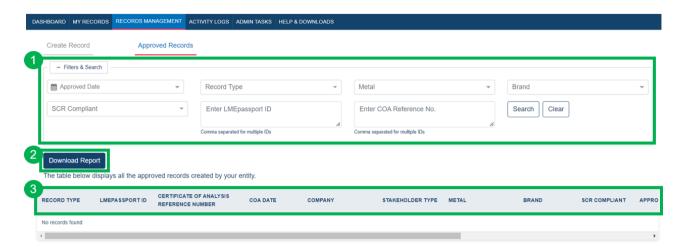
The following features can be found in the Review Record pop up:

- 1. "Filters & Search" box
- 2. "Assign" button
- 3. "Approve" button
- 4. "Upload Additional Document" button
- 5. "Export" button
- 6. "Add Row" button
- 7. "Save" button
- 8. Record table



3.5.4 Approved Records

The Approved Records page is a repository listing the records created and approved by all users of an Entity.



Approved Records

The following features can be found on the Approved Records page:

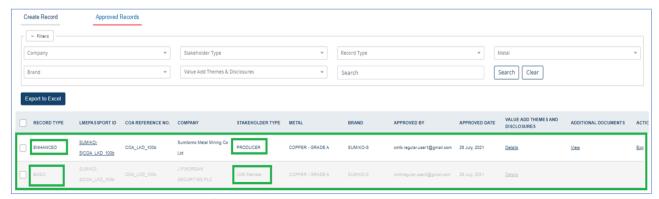
- 1. "Filters & Search" box
- 2. "Download Report" button
- 3. Approved records table

3.5.4.1 Overwritten records in the Approved Records page

Any record created by a Warehouse Company or LME Member can be Overwritten by the Brand Producer.

Producers may create records in the application for COAs already registered with LMEpassport. In these cases the Producer's version is given precedence and the incumbent record is replaced, or overwritten, by the senior Producer record.

Users who created and approved overwritten records will automatically be provided access to the new, Producer created record. In the Approved Records page the overwritten record is greyed out to denote this status. The same is true of records added to the My Records List using the LMEpassport ID reference term.



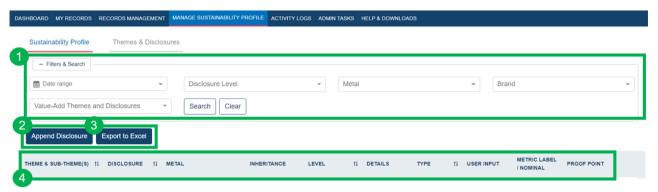
Overwritten records in Approved Records



An overwritten Basic Record is shown adjacent to the new Enhanced Record. The two entries share the same LMEpassport ID.

3.6 Manage Sustainability Profile (Producers only)

The Manage Sustainability Profile page, available to Producers only, allows users to both view all available Themes & Disclosures within LME passport and upload value-add themes and disclosures at multiple levels – the entity, brand, or record level.



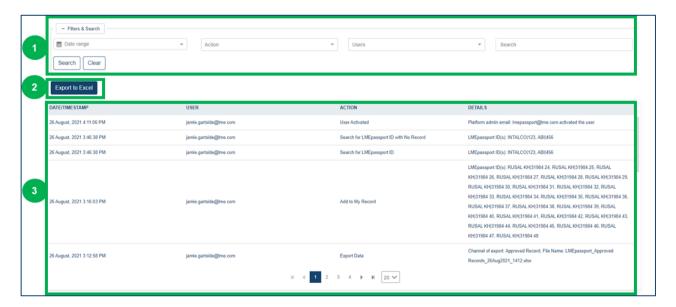
Manage Sustainability Profile

The following features can be found on the Sustainability Profile page:

- 1. "Filters & Search" box
- 2. "Append Disclosure" button
- 3. "Export to Excel" button
- 4. Activity table

3.7 Activity Logs

The Activity Logs page is a real-time audit trail of all actions taken in LMEpassport. This page is dynamic and will show differing scope of information based upon the user type.





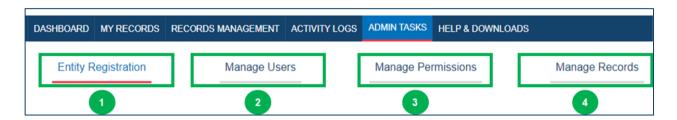
Activity Logs

The following features can be found on the Activity Logs page:

- 1. "Filters & Search" box
- 2. "Export to Excel" button
- 3. Activity table

3.8 Admin Tasks (User Admin only)

The Admin Tasks tab is only available to User Admins. The tab provides a link to a number of administrative pages where the Entity's users, permissions, records and details can be managed.



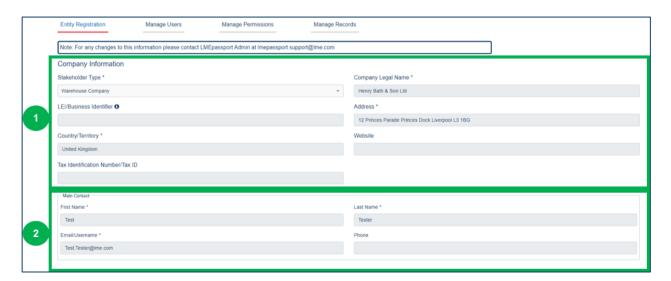
Admin Tasks

The following features can be found under the Admin Tasks tab:

- 1. "Entity Registration" page
- 2. "Manage Users" page
- 3. "Manage Permissions" page
- 4. "Manage Records" page

3.8.1 Entity Registration

The Entity Registration page details the registered Entity's company information and the contact details of the main contact.





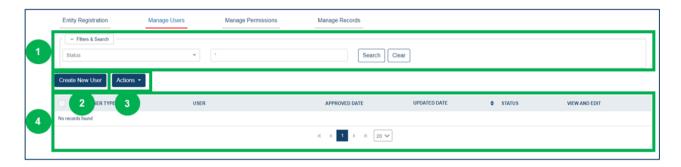
Entity Registration

The following features can be found on the Entity Registration page:

- 4. Company Information
- 5. Main Contact details

3.8.2 Manage Users

The Manage Users page allows User Admins to quickly and easily review and manage the user accounts associated with the Entity. This includes revising permissions, changing details and suspending unwanted accounts.



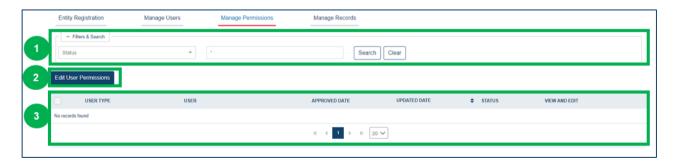
Manage Users

The following features can be found on the Entity Registration page:

- 1. "Filters & Search" box
- 2. "Create New User" button
- 3. "Actions" drop-down button
- 4. Users table

3.8.3 Manage Permissions

The Manage Permissions page allows User Admins to quickly and easily review and update the permissions of users belonging to the Entity.



Manage Permissions

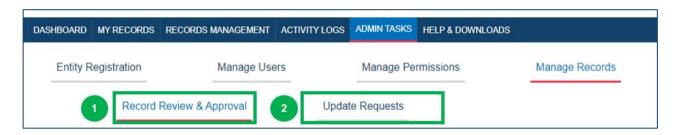
The following features can be found on the Manage Permissions page:

- 1. "Filters & Search" box
- 2. "Edit User Permissions" button
- 3. User Permissions table



3.8.4 Manage Records

This subtab allows User Admins to configure the workflow for record review i.e. whether records created by a user associated to the Entity require second review or not, and secondly to approve record update requests from Individual Users.



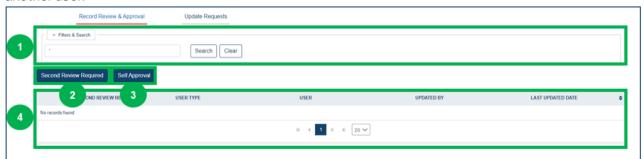
Manage Records

The following sub-pages can be found on the Manage Records page:

- 1. "Record Review & Approval" page
- 2. "Update Request" page

3.8.4.1 Record Review & Approval

The User Admin can configure if users can self-approve records or whether a four-eyes check is required by another user.



Record Review & Approval

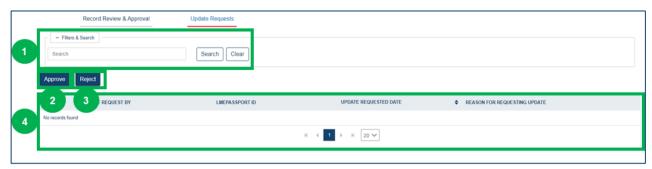
The following features can be found on the Manage Records – Record Review & Approval page:

- 1. "Filters & Search" box
- 2. "Second Review Required" button
- 3. "Self-Approval" button
- 4. Review & Approval Requirements table

3.8.4.2 Update Requests

Users requesting to update or revise approved records must seek approval from a User Admin. Approval is sought and accepted/rejected from this page.





Update Requests

The following features can be found on the Manage Records – Update Requests page:

- 1. "Filters & Search" box
- 2. "Approve" button
- 3. "Reject" button
- 4. Review & Approval Requirements table

3.9 Help & Downloads

The Help & Downloads page is available to all users of LMEpassport.

Within this page, users can access training documentation and videos, user guides, and other material deemed useful by the LME.



Help & Downloads

The following features can be found on the Help & Downloads page:

1. Links to resources and reference material



4 Registering and getting set up

4.1 LMEpassport webpage

The LME passport webpage can be accessed through any browser by heading to the dedicated website: www.lmepassport.com.

4.2 Registering your company for LMEpassport

To register for LMEpassport, users should navigate to the LMEpassport landing page.

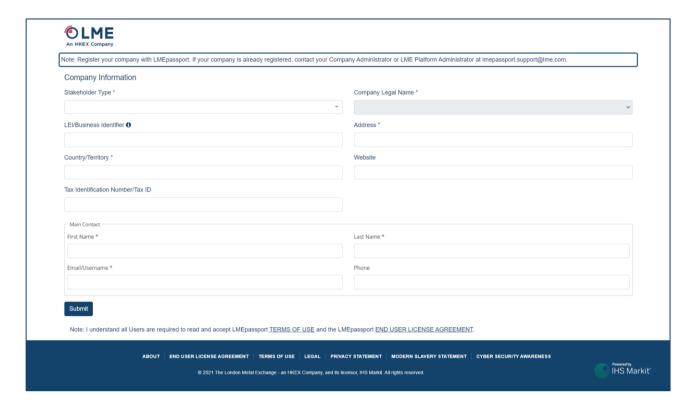
• On the LME passport landing page click "Register Now". On the Company Information page, select the relevant Stakeholder Type from the dropdown menu



Register Now on the Landing Page

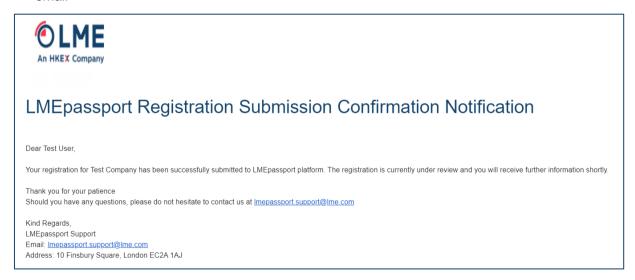
- The user should provide all required information
- All fields marked with an asterisk (*) are mandatory without which the user will not be able to submit the registration form





Registration page

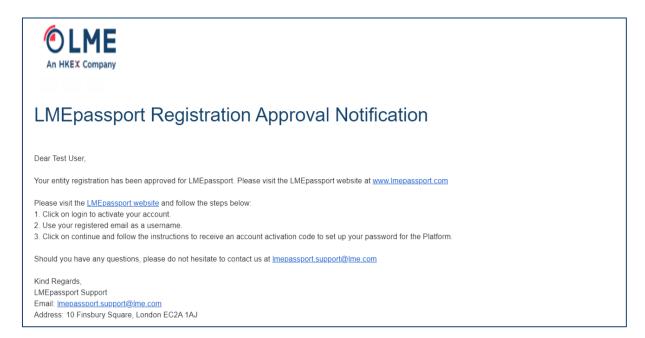
- Once the registration form has been submitted, an automated email notification will be sent to the main contact's email address
- The Platform Admin will also be alerted of the pending request.
- After the Platform Admin review has been completed, users will be notified of account approval via email



Registration Confirmation Notification

 An automated email will be sent to the main contact's registered email address inclusive of instructions to activate their username (i.e., email address)





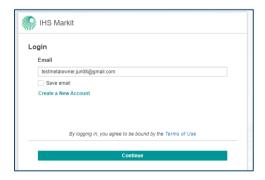
Registration Approval Notification

4.3 Registering new users with LMEpassport

Once the Entity has been created and the first User Admin is active on the platform new users can be created through the User Admin's account. Please see the section entitled *Creating a new user* for more details.

4.4 Setting your password and password management

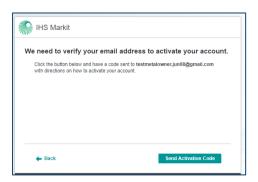
- On the LME passport landing page click "Login"
- Input your registered email address when prompted, then click "Continue"



Email login

• When prompted, click on the "Send Activation Code" button which will trigger the system to send an activation code to the user's registered email address





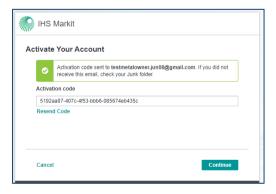
Email verification

• The user will shortly receive an email to their registered address with the subject line 'IHS Markit Account Activation'



IHS Markit activation code

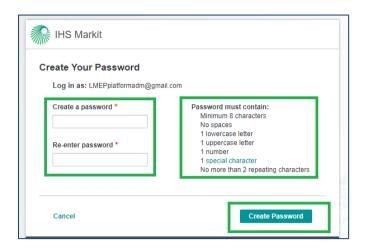
 The Activation Code must be copied or typed into the "Activation Code" text box before clicking "Continue"



Activate your account

 On the next page the user is prompted to Create Your Password. Users must create a password in accordance with the platform's password requirements. These are listed on the page for convenience.
 Each requirement is marked as complete while inputting the new password





Creating your password

• Once all requirements are met, the user should click the "Create Password" button to proceed

The LME strongly encourages users to create pass-phrases for use with the LME passport application. This
more robust approach to generating system passwords will enhance the security profile of using the platform.

4.5 Logging into LMEpassport

Users should login to the platform from the LMEpassport land page: www.lmepassport.com.



Landing page "Login" button

Users should click "Login" to be redirected to the login page where username (registered email address) and password/pass-phrase are required.



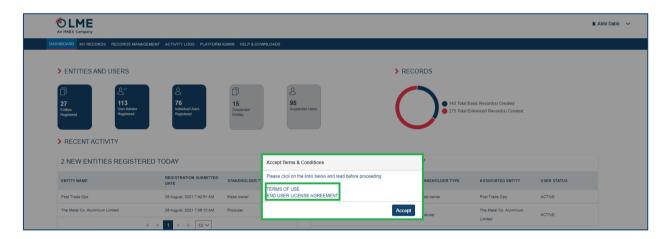
4.6 Accepting the LMEpassport EULA and TOU

Every user is required to accept LMEpassport's End User Licence Agreement ("EULA") and Terms of Use ("TOU") when logging into the platform for the first time.

A pop-up message will appear requiring the user to accept the EULA and the TOU in order to gain access to the application. The pop up box also includes a hyperlink to the EULA and TOU documents which allows the user to review before accepting. A user who does not agree to the EULA and TOU will be denied access and should close the browser.

A further link to the EULA and TOU can be found in the footer throughout the LME passport application. Users can reference and review both documents at their convenience.

From time to time the LME will update the EULA and TOU. In this instance a push notification will be made to each and every user in the application. A pop up message will immediately appear in the user's browser if logged in or at the next log-in if not. This pop up message will contain the revised EULA and TOU. Each user must accept and agree to the revised wording in order to continue accessing the application. A user who does not agree to the EULA and TOU will be denied access and should close the browser.



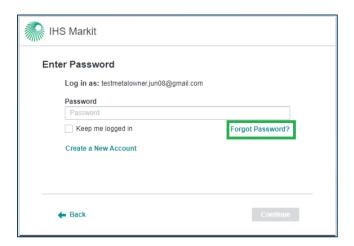
Accepting the EULA and TOU

4.7 Resetting your password

Users can easily reset their password by using the "Forgot Password?" feature available on the login page. Users should follow the prompted workflow:

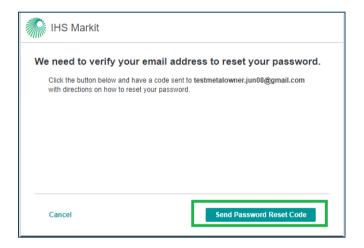
- On the LMEpassport landing page click "Login"
- Input registered email address when prompted, then click "Continue"
- On the next page, click "Forgot Password?" button to initiate the password reset workflow





Forgot password button

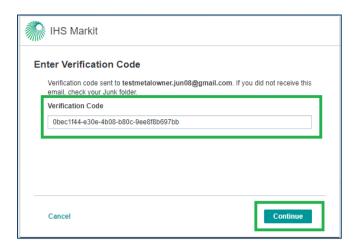
• When prompted, click on the "Send Password Reset Code" button which will trigger the system to send a password reset code to the user's registered email address



Requesting a password re-set code

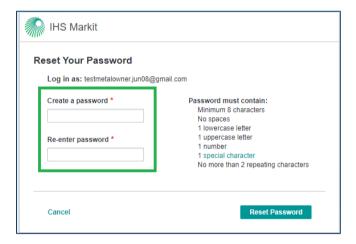
- The user will shortly receive an email to their registered address with the subject line 'IHS Markit Verification Code'
- The Verification Code must be copied or typed into the "Enter Verification Code" text box before clicking "Continue"





Verification code

- On the next page the user is prompted to Reset Your Password. Users must create a new password in accordance with the platform's password requirements. These are listed on the page for convenience.
 Each requirement is marked as complete while inputting the new password
- Once all requirements are met, the user will should click the "Reset Password" button to proceed



Creating a new password

- The LME strongly encourages users to create pass-phrases for use with the LME passport application.
 This more robust approach to generating system passwords will enhance the security profile of using the platform
- After the password is reset, the user is required to input the new password to be able to login to the
 platform. The user should click on the "Continue" button which triggers the authentication system to
 verify the user. The user is then redirected to the platform



5 Getting the most from the My Records List

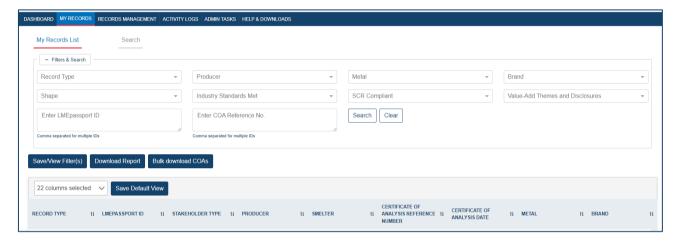
5.1 Reviewing My Records List

The My Records List displays all records accessed by the user's Entity. It is the richest view of LMEpassport records provided in the platform. Along with structured data captured from COAs users can view the original COA, exported as a PDF, view any additional documents attached to the PCR, view LME Special Contract Rule (SCR) Compliance of the metal, and view value-add certifications and disclosures appended to the record

The My Records List is populated in one of two ways:

- 1. All records created and approved by users of an Entity are pushed to the My Records List automatically
- 2. Users can search the platform for records approved by other Entities using LMEpassport IDs and add these to the My Records List

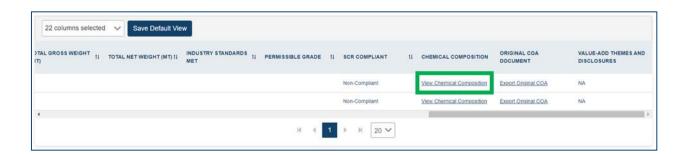
For ease of use the My Records List can be manipulated through a range of dynamic filters and a free-text search box to search key words in record meta-data.



Filters & Search bar of the My Records List

Users can view more granular detail related to records through the My Records List:

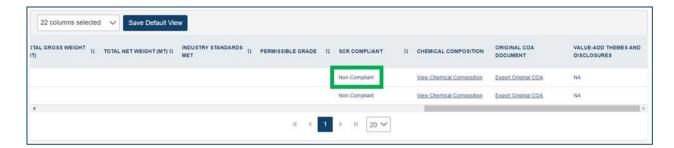
 Users can view the chemical composition by clicking on the "View Chemical Composition" link under the Chemical Composition column



Viewing the Chemical Composition from the My Records List

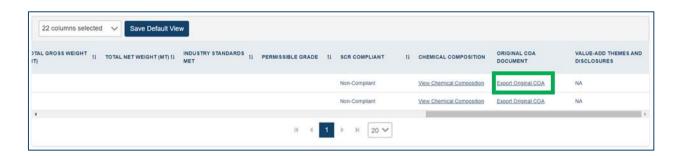
• Users can view the Special Contract Rule compliance by referencing the text under the SCR column





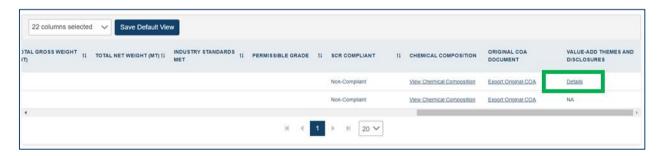
Viewing Special Contract Rule (SCR) Compliance from the My Records List

• Similarly, the user can download/view the original COA by clicking on "Export Original COA" link under Original COA/Additional Documents column



Export Original COA from the My Records List

 Or view value-add themes and disclosures by clicking on "Details" under the Value Add Themes & Disclosures column.



Viewing value-add certifications and disclosures from the My Records List

Please note that the user will need to use the scroll bar at the bottom of the table to view the columns in the far right.

The general search box within the Filters & Search section can be used to search for keywords.

In addition, users can search by one or many LMEpass port IDs. To search for multiple, enter comma-separated LMEpassport IDs into the search.





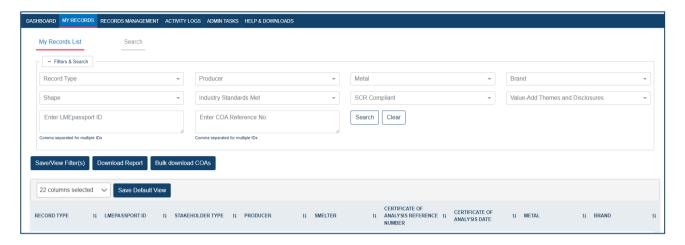
Searching for multiple LMEpassport IDs in the search bar

The dynamic characteristic of the filters function is helpful in identifying a desired subset of records in the My Records List. Filters include:

- Record type Filter data by Basic or Enhanced Record type
- **Producer** Filter data by Producer name
- **Metal** Filter data by metal: High-Grade Zinc, Primary Nickel, High Grade Primary Aluminium, NASAAC, Tin, Lead, Aluminium Alloy, Cobalt, and Copper Grade A
- Brand This filter works in conjunction with the metal. Each metal has its own list of brands. Choosing
 a Brand without choosing the metal will not show any values to choose from. Users must first choose a
 metal in order to select a Brand
- **Shape** Filter by the shape of the metal such as Briquette, Coarse grain powder, Cut Cathode, Full plate cathode, Ingot, Pellet, Round, Sow, and T-Bar
- SCR compliant where Enhance Records contain an appropriate level of detail in the Chemical Composition the platform will provide an indication of whether the record is compliant with the relevant Special Contract Rules setting our requirements for LME deliverable material. For the avoidance of doubt this indication applies only to the chemical characteristics of the metal. This field will return three possible values:
 - "Compliant" all required chemical components have been listed against an Enhanced Record in LME passport and the system can confirm these components, both in isolation and in specified combinations, meet the chemical purity standards set out in the corresponding section of the Special Contract Rules, as set out in the LME Rulebook.
 - "Check COA" LME passport is unable to derive the compliance of a particular PCR against the chemical purity standards set out in the corresponding section of the Special Contract Rules, as set out in the LME Rulebook.
 - "Non-Compliant" at least one chemical component has been listed against an Enhanced Record in LMEpassport and the system can confirm at least one of these components, either in isolation or in a specified combination, fails to meet the chemical purity standards set out in the corresponding section of the Special Contract Rules, as set out in the LME Rulebook.
- Industry standards met –This filter works in conjunction with metal. Users must first choose a metal in order to select any relevant Industry Standards associated to it
 - Example: "High Grade Zinc" would show industry standards such as "BS EN 1179:2003", "ISO 752:2004", "ASTM B6-12", "GB/T 470-2008"



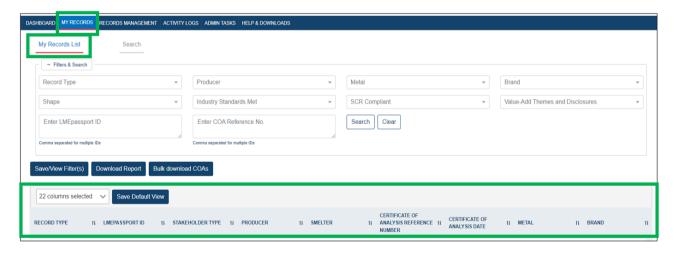
 Value-add themes & disclosures – Filter by value-add themes and disclosures arranged in a hierarchy. The themes and disclosures include Environmental, Social, and Governance (ESG) and provenance disclosures or awarded certifications that demonstrate characteristics about metal



My Records List

5.2 Organising structured data in the My Records List - hide columns

Columns within the My Records List table of structured data can be displayed, hidden, or reordered according to user preference.

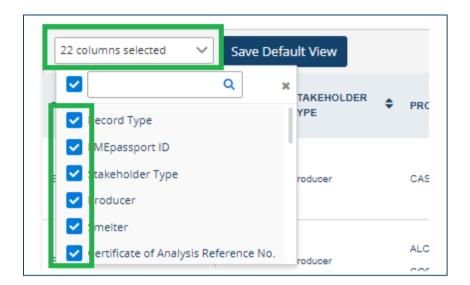


Customising visible fields in the My Records List

To remove columns:

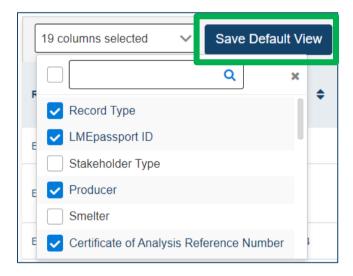
Click the "22 columns selected" dropdown





Column selector

- Deselect any columns you wish to remove from view
 - o The column will be removed in real-time
- To save this view as the default: Click "Save Default View"
- The next time the user logs into LMEpassport, the saved view will be displayed



Selecting columns

5.3 Organising structured data in the My Records List – reorder columns

To adjust the sequence in which columns are displayed within the My Records List:

- Click a column header
- While holding down the mouse/curser, drag the column to the desired location
- "Drop" the column by releasing your mouse/curser



5.4 Searching by LMEpassport ID in the My Records List

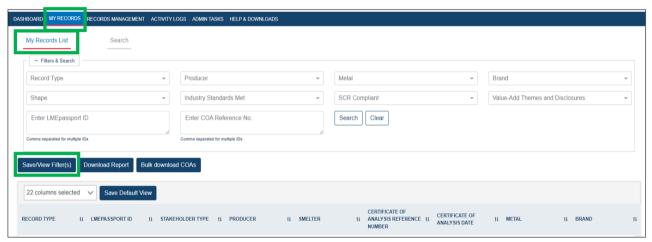
Within the My Records List, users can search for one or more comma-separated multiple LME passport IDs from currently available records in the bottom section of the page.

5.5 Using the Save/View Filters feature in the My Records List

Users can save and name their current filter selection allowing them to re-use it in the future. This feature retains the selected filters/parameters under a specific title created by the user. They can save as many filters as they would like. Users can then select any saved filter from the list and click Submit to display those filter results immediately.

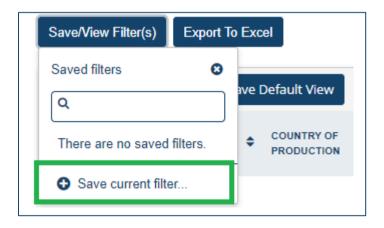
To save a new filter:

Click "Save/View Filter(s)"



Save/View Filter(s) feature

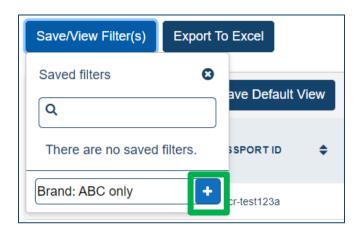
Click "+Save current filter"



Saving selected filters for future use

Enter a title for the filter then click the "+" symbol



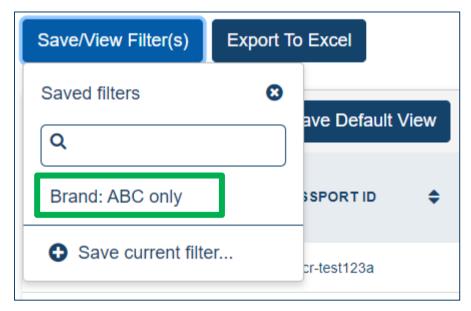


Naming save filter

• The filter has now been saved

To utilise that filter in the future

- Click "Save/View Filter(s)"
- Click the title of the previously saved filter



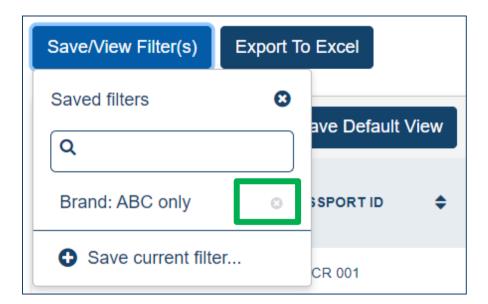
Saved filter

• The table will automatically display the filtered results

To delete a previously saved filter:

- Click "Save/View Filter(s)"
- Click the "X" icon next to the filter title





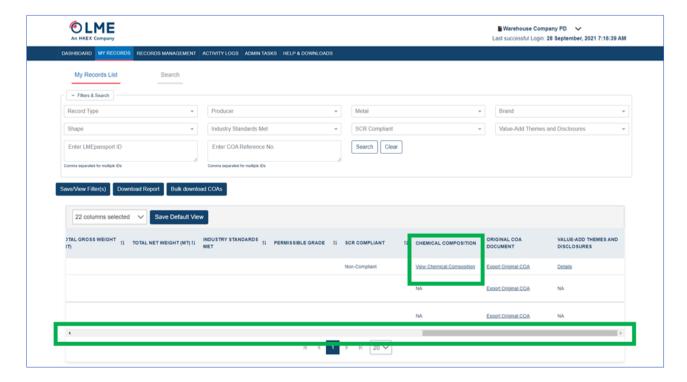
Deleting unwanted filters

• The filter will be immediately deleted

5.6 Viewing chemical composition of records from the My Records List

Within the My Records List, scroll to the bottom of the page where the table is visible.

Use the horizontal scroll bar to move to the far right of the table



Horizontal scroll bar in the My Records List

• In the Chemical Composition column, click "View Chemical Composition"



A pop-up window will appear displaying all elements listed in the composition of the metal



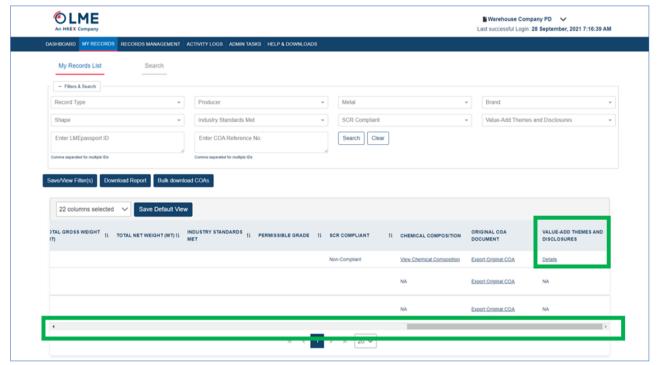
Chemical Composition pop up

Click "OK" to exit

5.7 Viewing value-add certifications and disclosures from the My Records List

Within the My Records page, scroll to the bottom of the page where the table is visible.

• Use the horizontal scroll bar to move to the far right of the table



Horizontal scroll bar

- In the Value-Add Themes and Disclosures column, click "Details"
- A pop-up window will appear displaying all certifications, memberships, or metrics associated with the record





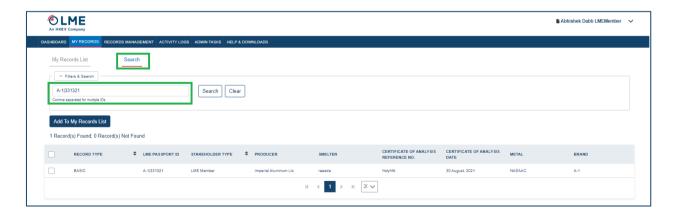
Value-add Themes and Disclosures Details

- Click the link in the Proof Point column to download the proof document or be redirected to the link listed
- Click the link in the Framework Employed column to download the framework document or be redirected to the link listed
- Click "OK" to exit

5.8 Adding approved records to the My Records List

All records created and approved by an Entity will automatically be moved to the My Records List. Users can further add known LMEpassport records through the Search page within My Records to locate and retrieve a single or batch of LMEpassport IDs.

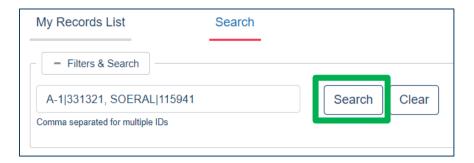
- Enter an LMEpassport ID in the search box
- Users can add multiple IDs by separating them with commas
- For example: LMEpassport IDs "TESTBRAND|123" and "DEMOBRAND|456" should be entered as "TESTBRAND|123, DEMOBRAND|456"



My Records – Search page

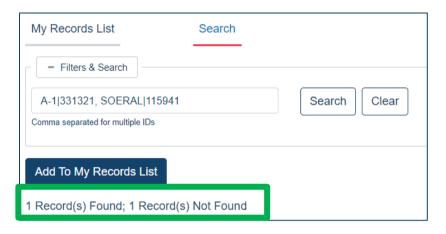
Click on the "Search" button





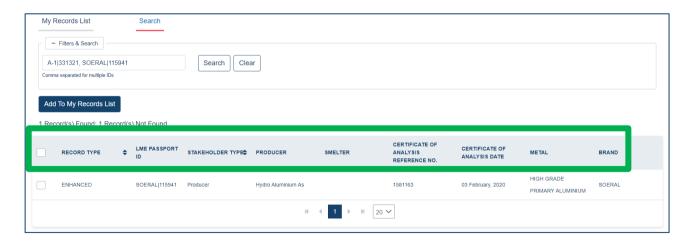
Searching for LMEpassport IDs

Users will be notified if the record is found or not found



Search result notification

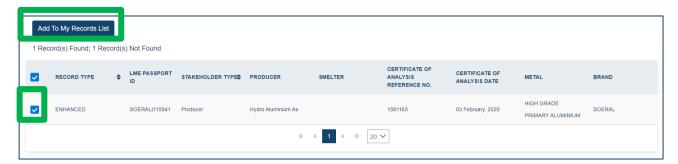
If found, the results will be displayed below with the following information:



Returned LMEpassport records

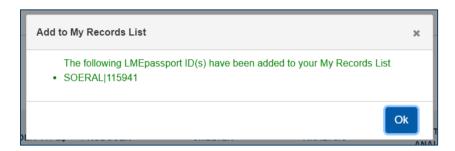
 To add the record to your My Records List, select the checkbox next to the record(s), then click "Add to My Records List"





Adding your results to My Records List

Once added, users will receive a "success" pop-up message



Confirmation of added records

If the record already exists in their My Records List, an error message will appear



Error where records already exist in My Records List

5.9 Search thresholds and erroneous searches

Users should note that the My Records – Search is intended to be used to search for incumbent LME passport records. Users should have confirmation that the searched for items are approved records in the system.

Please note: This search feature should not be used to speculatively search the system.

For example the My Records – Search function could be used by a metal owner who has been emailed a list of LMEpassport IDs from their warehouse company. These can be batch-searched in the system to allow the metal owner to add the relevant records to their My Records List



High volumes of speculative searches, that is a search failing to return a record, will result in account suspension and investigation from the LMEpassport Platform Admin. Suspension of accounts is automated where users speculatively search for records above a defined threshold.



A summary of recent erroneous searches in the Suspicious Activity box is found on the dashboard



6 Getting the most from the Create Record page

6.1 Filtering in the Create Record task list

The filters function is helpful in structuring the available records in different forms while the user changes the parameters in the filters. There following filters available to users:

- Stakeholder type This filter displays all 4 stakeholder types: LME Member, Metal Owner, Producer and Warehouse Company so that the Platform Admin can search for a specific type
- **Metal** It allows the Platform Admin to choose from the available list of metals such as High-Grade Zinc, Primary Nickel, High Grade Primary Aluminium, NASAAC, Tin, Lead, Aluminium Alloy, Cobalt, Copper Grade A
- **Brand** This filter works in conjunction with the metal. Each metal has its own list of brands. Choosing a Brand without choosing the metal will not show any values in the dropdown. The user must first choose a metal in order to choose the Brand associated to it
- **Status** This filter shows the different statuses such as Digitising, Digitised, Review 1 or Review 2. Please see Table 6. below for status definitions

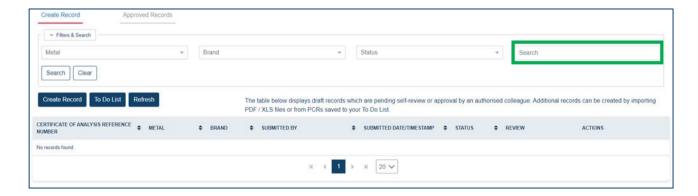
Status	Description
Digitising	Record is undergoing Optical Character Recognition (OCR) processing. Users cannot open the record. This status appears while OCR technology is extracting information from the COA.
Digitised	Once the OCR extraction process is complete, the record is Digitised. Opening a record with this status will display the OCR review screen where users can see all extracted data. Users can then add, edit, or delete and submit the information.
Review 1	When the digitised document is reviewed and submitted, the status will change to Review 1.
Review 2	Records that require a second approval will move from the Review 1 status to Review 2. This varies from user to user. If a user is required to go through Review 2, then the status of the record would change to Review 2 upon approval, otherwise, it would change to Approved.
Approved	Record has been approved and LMEpassport ID has been generated.

Table 6: Task list status definitions



6.2 Searching in the Create Record task list

The free-text search function provided in the Filters & Search box allows the users to search records by keywords.



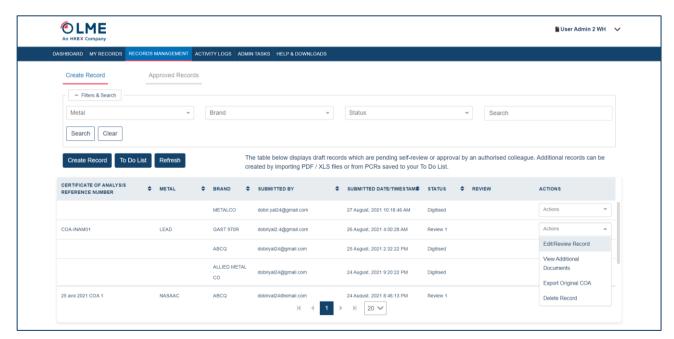
Free-text search function in the Create Record task list

All search results will be displayed matching the searched for key word(s). Additional details can be viewed by clicking on the row.

6.3 Actions from the Create Record task list

A number of actions can be taken from the Create Records task list. These actions can be taken through the action buttons provided on screen or by selecting actions from the "Actions" drop down in the Create Record task list

A user can further take actions from the detailed view of a record.



Record actions in the Create Record task list

View Row Details: The user can view details of each record by clicking on the row



A summary of available actions from the Create Record task list is detailed in Table 7. below.

Function	Description
Upload Additional Documents	Clicking on Upload Additional Documents button allows the user to upload supplement documents to the selected record.
Export	Clicking on the Export allows the user to export the data in the excel format.
Add Row	Clicking on the Add Row allows the user to add additional row(s). A pop-up "Add Row" will appear with the following information. Once the user inputs value(s), clicking on Add Row at the bottom of the pop-up will add a new row.
Save	This allows the user to save any changes.
Assign	The user can assign the record to another user for further review. Clicking on Assign will open a pop-up "Assign for Review" with the list of users Admin user can choose from. Once assigned, the status of the record changes to Review2.
Approve	This action allows the user to approve the selected record(s) as a result of which the record moves to the "Approved Records" tab.

Table 7: Create Record task list functions

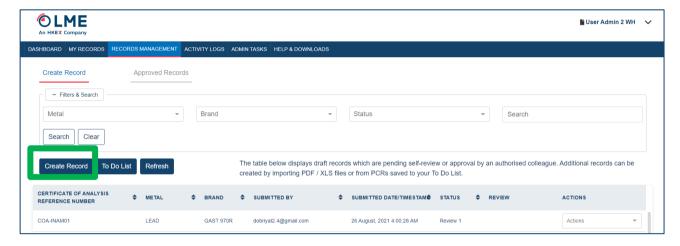


7 Creating records

7.1 Creating Basic or Enhanced Records by OCR

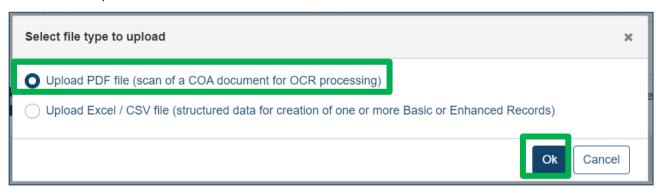
COAs in PDF format can be uploaded directly into LME passport. To upload a PDF document navigate to the Create Record page under Records Management:

Click "Create Record"



The Create Record button

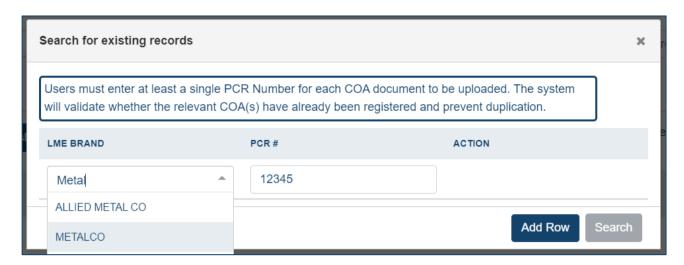
Select "Upload PDF File" then "OK"



Selecting which file type to upload

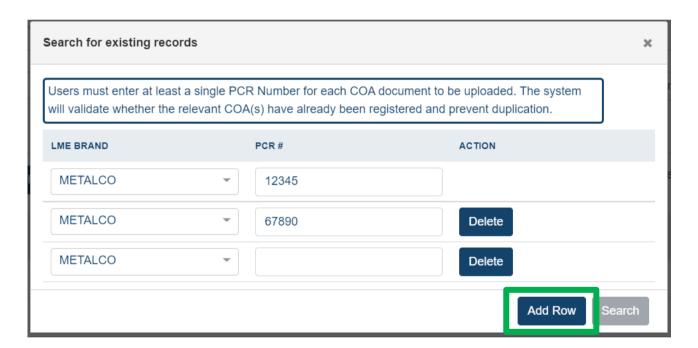
- Select the Brand listed on the COA document
- Input a Production Caste Reference (PCR) number listed on the COA document





Selecting LME Brand and populating the PCR number to search for existing records

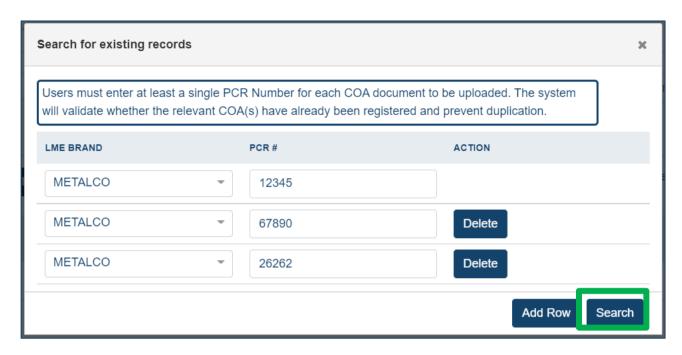
- To add multiple PCR numbers, click the "Add Row" button or enter all PCRs for a single brand in commaseparated format.
 - o For example: 12345, 67890, 10111



Adding rows to the search

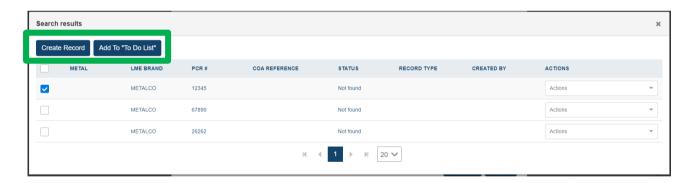
Once all PCRs have been added, click "Search"





Searching for existing records

- The platform will check if the input combination of Brand and PCR already exists within LMEpassport
- If the Brand + PCR does not exist, the status will return Not Found
- Users can select the record(s) and "Add to To-Do List" or "Create Record" immediately



Actions from the search results pop up

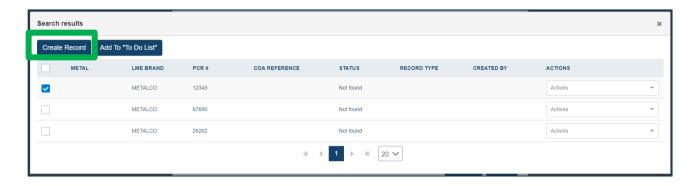
- If the Brand and PCR does exist, the status will return Approved
- If another user from their Entity had already created the record, user can Preview (view the original COA document) or Edit the record





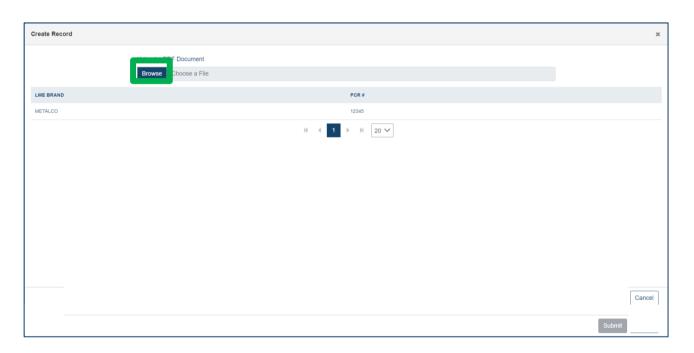
Actions for "Found" records

- If the record was created by another Entity, users can Preview (view the original COA document) or Flag the record (if inconsistencies are found), then add to My Records List
- If the Brand and PCR does exist, but has not been approved, the status will return Potential
- Users can select the record(s) and "Add to To-Do List" or "Create Record" immediately
- Select the records to be created now and click "Create Record"



Select records to start the Create Record workflow

Click "Browse" to find and attach the PDF file



Browsing for PDF version of the COA to upload

See the sections Redacting sensitive information and Using the OCR review screen for next steps.



7.1.1 Redacting sensitive information

- Select any confidential information that should be redacted from the document by holding down your mouse to create a box around the confidential information
- If the wrong information was initially selected, click on the red box to display a Delete button. Click "Delete" to remove the redact box



Redacting sensitive information from COA documents

Click "Redact" in the top left corner and "Submit" on the bottom right corner to proceed



Results of redacting COA documents

Users will be redirected back to the Records Management page of LMEpassport

7.1.2 Using the OCR review screen

The COA document will be processed by an Optical Character Recognition (OCR) system to facilitate the data extraction process.

When processing is complete, the status of the document will change from Digitising to Digitised.





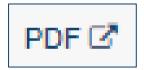
Status of records in the Task List

To extract data from the uploaded COA, begin by selecting "View Record" from the Actions dropdown.

The OCR review window will open where the document itself is visible on the left side of the screen, and an Excel-like table is visible on the right.

Note: if you're having trouble with the PDF loading, please try opening the PDF outside of LMEpassport and 'Print to PDF'. This will remove some of the metadata in the file which may be interfering with the OCR and it will also reduce the size of the file and time to process.

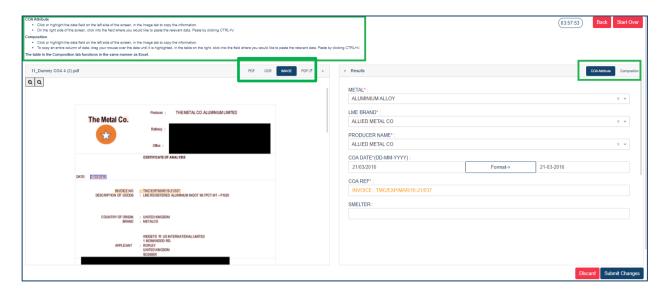
- The document view on the left is comprised of three tabs PDF and IMAGE
 - PDF View the original document uploaded by the user. This tab is for viewing purposes only.
 No action can be taken from the "PDF" tab
 - IMAGE View the original document uploaded by the user, with additional highlighting to indicate characters (numbers, word, dates, names, etc.) captured by OCR. This tab should be utilised to copy and paste onto the COA Attribute and Composition pages to the right
- The original PDF document can be exported from left side of the screen by clicking



Export PDF button

Guidance on how to use the OCR screen are detailed in the top left of the window





The OCR screen

- The Results table on the right is comprised of two tabs COA Attribute and Composition
 - o COA Attribute Captures information that applies to all PCRs within the document
 - o Composition Captures specific information relevant to a single PCR
- Columns can be displayed or hidden by selecting/unselecting them from the dropdown list



Configuring the column order

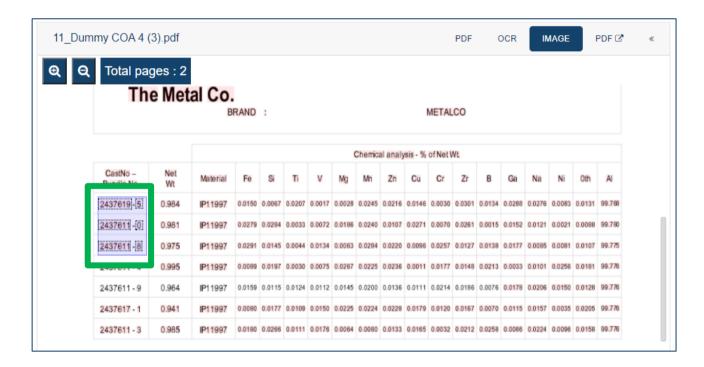
Columns can be rearranged by grabbing the header and dragging it to the desired location. Please
note that only the "PCR Number" and "PCR Page Number" columns will be visible to the user when
creating Basic Records

During OCR processing, a number of fields on the COA Attribute and Composition pages may be populated. Users are responsible for reviewing each field extracted by OCR.

To edit data:



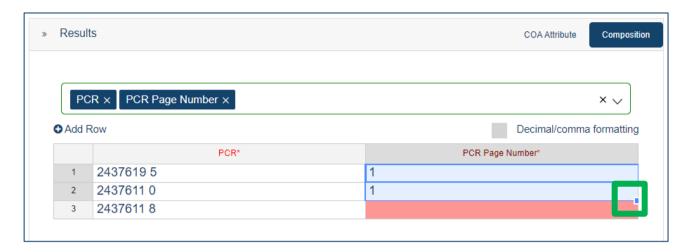
- Users can manually edit/type into the field in the Results window or;
- Users can copy and paste values from the IMAGE tab on the left to the COA Attribute and Composition tabs on the right (instructions below)
- To copy and paste a single value from the IMAGE tab to the table in the Results window. Click the value to copy, then click CTRL+V to paste in the desired location on the Results page
- To copy and paste multiple values from the IMAGE tab to the table in the Results window drag your mouse over the text to create a highlighted box around the values



Highlighting PCR numbers in the "IMAGE" screen

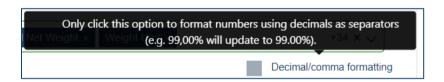
- The platform works best when:
 - Highlighting entire values (i.e., do not begin dragging your mouse in the middle of a number or word)
 - Highlighting entire columns or rows one at a time
 - o Dragging your mouse from left to right and top to bottom
- The table within the Composition tab acts similarly to Excel
 - Users can drag data from one cell down an entire column or across an entire row
 - Users can double-click the bottom-right corner of a cell to populate an entire column





Using auto-fill function

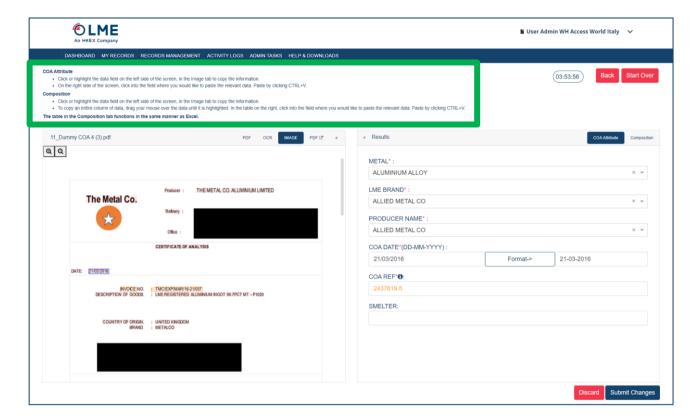
- LME passport accepts UK number formatting (i.e., using decimals as separators rather than commas)
- After inserting quantitative values into the Composition tab, click "Decimal/comma formatting" to convert all values that use a comma separator into decimal-separated format
- Example: Number inserted as "99,00%" will be converted to "99.00%"



Decimal/comma formatting tool tip

 Additional instructions can be found on the top of the OCR review screen to review extracted data or add new data



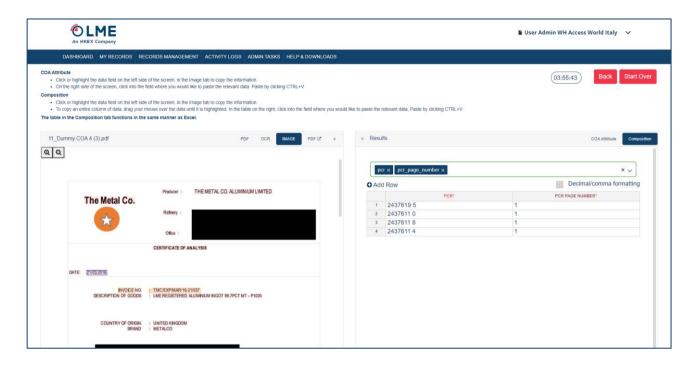


Instructions in the OCR review screen

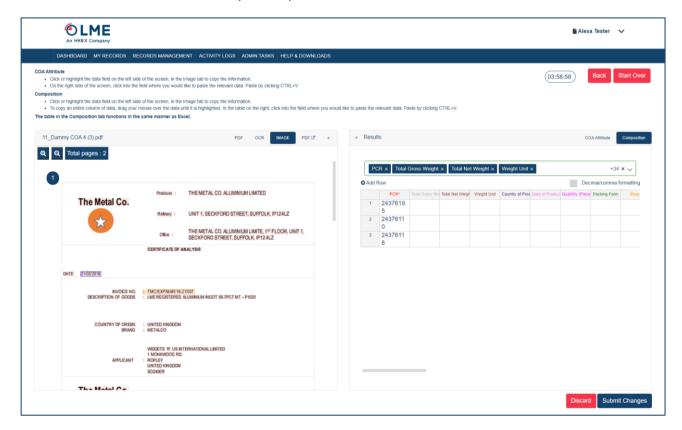
Note: The OCR review screen is available to any user for a 4-hour period. During this time, the document is "locked" by the user that has the OCR review screen open. This means that another user from that Entity cannot view the record. If the user who has the OCR review screen open would like to "unlock" the document, click "Back".

- Once all information is in the table on the right within the Composition tab, click "Submit" Users will be redirected back to the records management page of LMEpassport where the status of the document will become Review 1.
- To delete the document and structured data entirely, click "Discard"





Sample Composition tab for a Basic Record



Sample Composition tab for an Enhanced Record

7.1.3 Adding to the To Do List

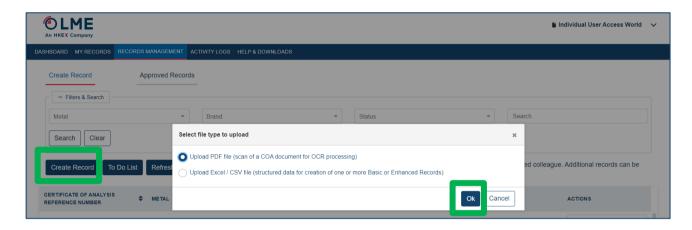
Note: The To Do List is a shared list visible to all users of a single Entity. The To Do List displays record details including the Brand, PCR, COA Reference (when available), date/timestamp when the PCR was



added to the To Do List, the username of the individual who initiated the creation of the record, and the record's current status.

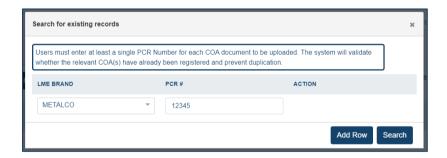
When creating records, users must first search the LMEpassport database in case the record already exists.

• Users initiate the search by clicking "Create Record" within the Records Management page, then "Upload PDF File", and "OK"



Selecting file type to search

Users should search for any Brand and PCR combination



Searching for existing records

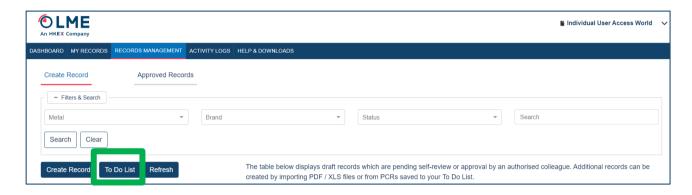
- After clicking "Search", search results will appear indicating a status of Approved, Potential, or Not Found
- Any record with the status of Potential or Not Found can be added to the user's To Do List
- Check the box on the record row, then click "Add To To-Do List"





Search results

 The record has now been added to your Entity's To Do List and can be viewed by clicking "To Do List" on the Create Record page within Records Management

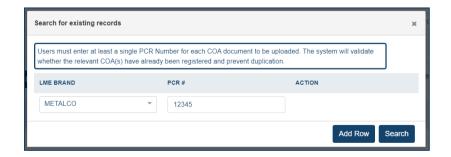


Opening the To Do List

7.1.4 Adding found records to the My Records List

Records which are searched for at the start of the Create Record workflow and returned as Found can be reviewed and added to the My Records List.

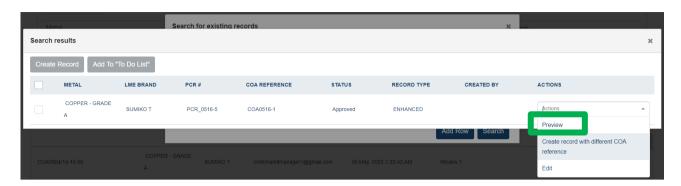
Users should search for any Brand and PCR combination



Searching for existing records

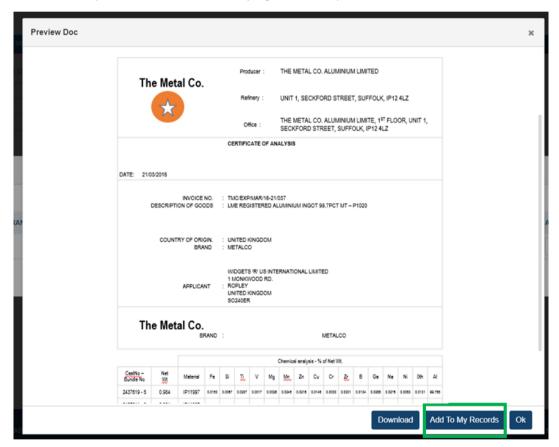
- Records that are already Approved in the system will be returned as Found
- Users can select the "Preview" option from the Actions drop down in the Search Results table





Search results

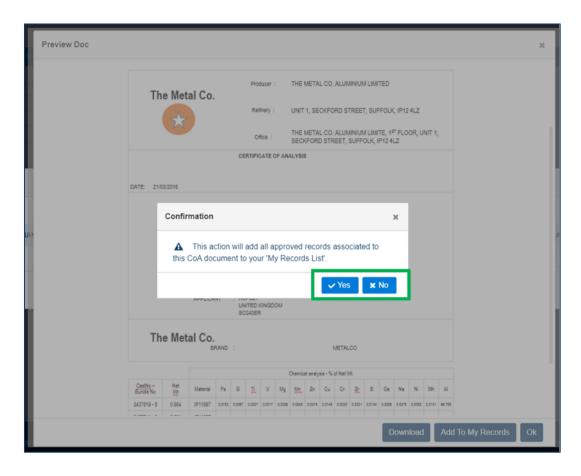
The user will be presented with the underlying COA as a preview



COA Preview

- Where the COA matches that of the material to be registered the user should click "Add to My Records"
- The user will be presented with a pop up asking for confirmation that all LMEpassport records associated with the COA should be added to the user's My Records List





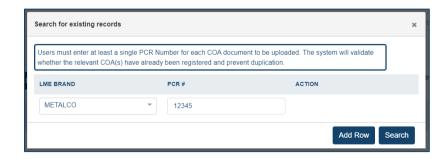
Confirmation pop up

Click "Yes" to add all LMEpassport records associated with the COA to the My Records List

7.1.5 Adding new COAs from existing records

Scenarios may arise where the same PCR number is utilized under the same brand. However, in such cases, the COA document may be different. If a particular brand and PCR combination is Found at the start of the Create Record workflow, users can preview the existing document (outlined above in section 7.1.4) then create a new record with the correct COA.

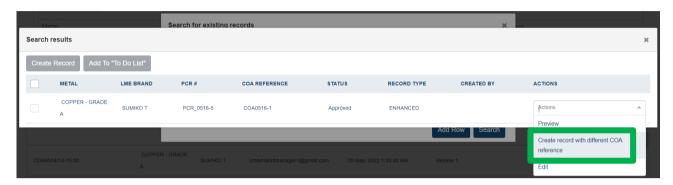
Users should search for any Brand and PCR combination



Searching for existing records



- Records that are already Approved in the system will be returned as Found
- Users can select the "Preview" option from the Actions drop down in the Search Results table
- If the document does not match what the user currently possesses, users can choose to "Create record with different COA reference"



Search results

• Users will be redirected back to the upload document screen where the new COA can be uploaded and structured accordingly (see sections 7.1.1 and 7.1.2).

7.1.6 Flagging an inconsistent record

If any information seems incorrect, users can raise a flag against a specific record.

• The "Flag" option can be selected within the Actions dropdown for each individual record.



Search results

When flagging a record, users must input a reason describing why the record may be incorrect.





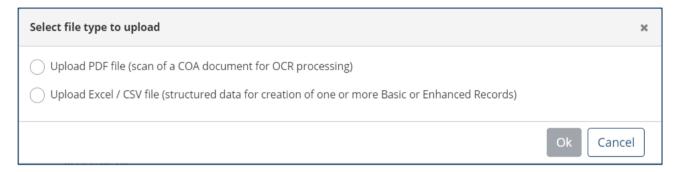
Flagging inconsistent records

• The "flag" is sent to the Platform Admin for investigation.

7.2 Creating records using the LMEpassport Excel upload template

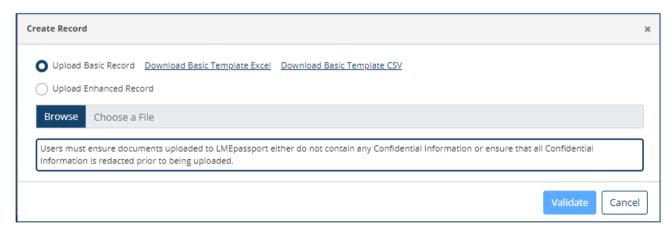
Structured COA data can be uploaded directly into LMEpassport via an Excel template. To download the template:

- Click "Create Record"
- Select "Upload Excel File" then "OK"



Select file type for upload

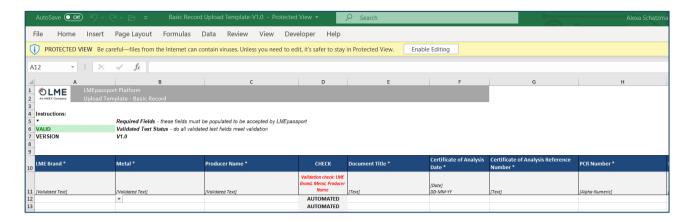
- Select the type of records to create (Enhanced or Basic) based on user permissions
- Only Producers can create Enhanced Records. All other users will only have access to the Basic Record template.
- Select the file to download Excel



Downloading file templates

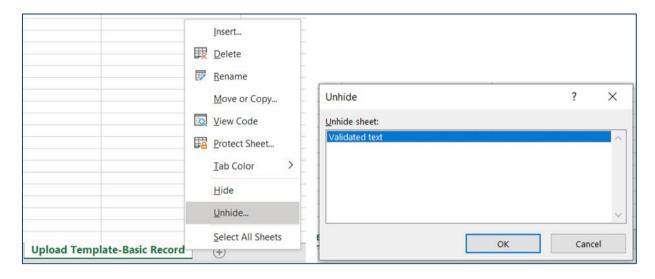
The file will download to the user's computer to be completed outside of LMEpassport.





The Excel template

- The Excel template consists of a number of validation checks to ensure data consistency
- For example: When entering Producer, Metal, and Brand information, the system will check that the combination is valid
- Refer to the Validated text tab to view correct data field naming conventions



Validated text tab in the Excel template

Once all data has been entered into the template, it can be uploaded into LMEpassport.

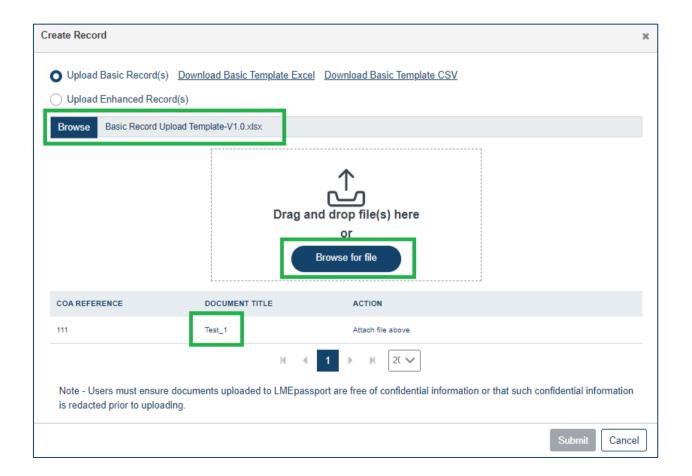
- Click "Create Record"
- Select "Upload Excel File" then "OK"
- Select the type of records to create (Enhanced or Basic) based on user permissions
- Click "Browse" to find and attach the Excel file





Browsing for a file to upload

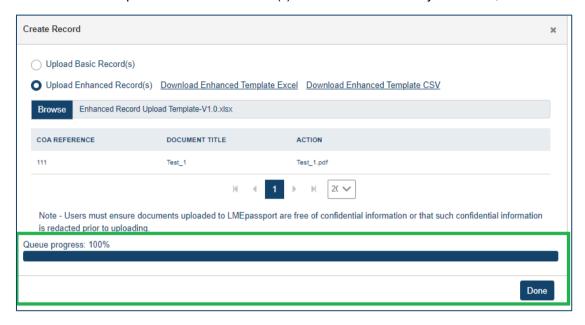
- Click "Validate" to confirm that all information was entered correctly (i.e. all formulas align, etc.)
- A pop-up message may appear detailing any errors within the file that must be remedied before uploading
- Once the file has successfully been uploaded, users should upload the associated COA documents
- The name of the COA documents should match the names input in the "Document Title" column of the Excel file





The user is prompted to upload PDF versions of the COA documents to be digitised

After the Excel template and COA document(s) have been successfully submitted, click "Done"



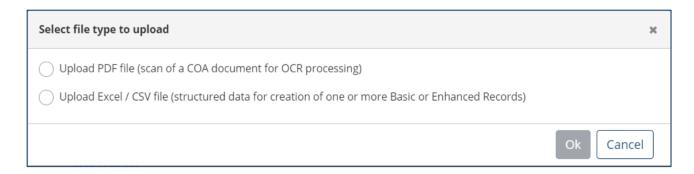
Queue progress bar

 Users will be redirected back to the Records Management page of LMEpassport where the status of the document will become Review 1

7.3 Creating records using the LMEpassport CSV upload template

Structured COA data can be uploaded directly into LME passport via a CSV template. To download the template:

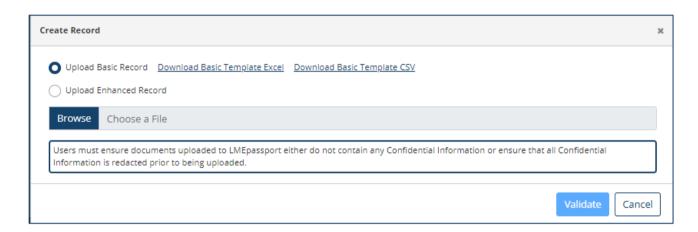
- Click "Create Record"
- Select "Upload Excel / CSV File" then "OK"



Select file type to upload

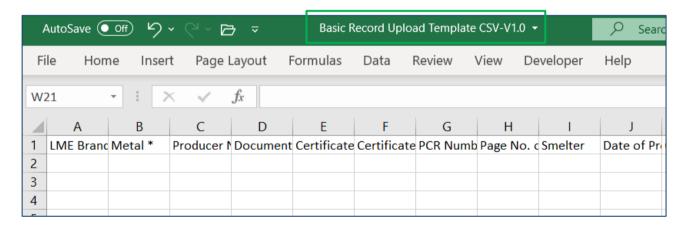


- Select the type of records to create (Enhanced or Basic) based on user permissions
- Only Producers can create Enhanced Records. All other users will only have access to the Basic Record template
- Select the file to download CSV



Download file template

The file will download to the user's computer to be completed outside of LMEpassport.



Upload template version number

Once all data has been entered into the template, it can be uploaded into LMEpassport.

Note: Please do not change/edit the file name or any column header names for successful upload.

- Click "Create Record"
- Select "Upload Excel / CSV File" then "OK"
- Select the type of records to create (Enhanced or Basic) based on user permissions
- Click "Browse" to find and attach the Excel file





Uploading the populated template file

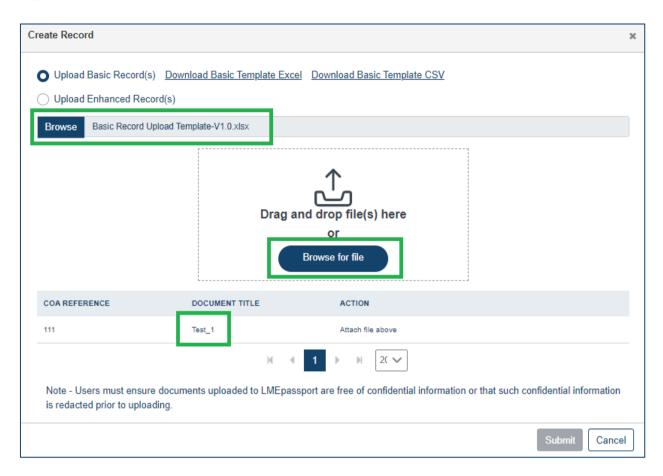
- Click "Validate" to confirm that all information was entered correctly (i.e. all formulas align, etc.)
- The system will perform a number of validation checks to ensure data consistency
- For example: When entering Producer, Metal, and Brand information, the system will check that the combination is valid
- A pop-up message may appear detailing any errors within the file that must be remedied before uploading



Upload error message

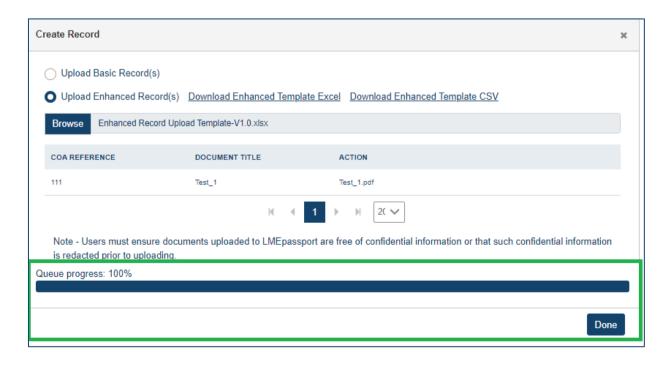
- Once the file has successfully been uploaded, users should upload the associated COA documents
- The name of the COA documents should match the names input in the "Document Title" column of the Excel file





User is prompted to upload PDF versions of the COA document to be digitised

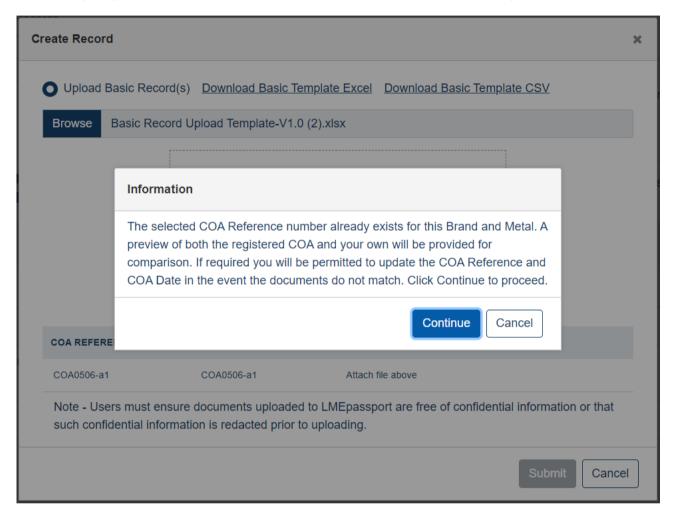
• After the Excel template and COA document(s) have been successfully submitted, click "Done"



Queue progress



- Users will be redirected back to the Records Management page of LMEpassport where the status of the document will become Review 1
- In some cases, the COA reference number provided in the Excel file may already exist within LMEpassport. If so, users will receive a notification at the time of document upload



Notification of existing COA reference number in LMEpassport

 Click "Continue" to be redirected back to the Records Management page of LME passport where the status of the document will become Review 1

7.4 Creating records through the LMEpassport API

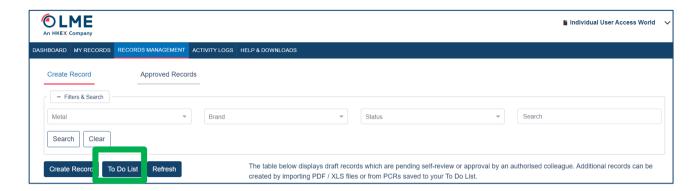
For details on how to create using records through the LMEpassport API please contact the LMEpassport Support Team at lmepassport.support@lme.com.

Please note that only Enhanced Records may be created through the API feature.

7.5 Creating records from the To Do List

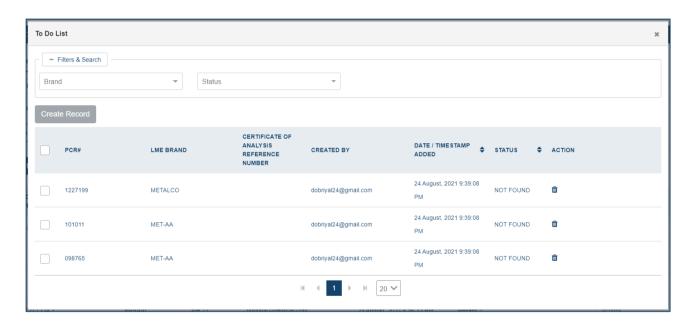
Click "To Do List" on the Create Record page within Records Management





Opening the To Do List from Create Record page

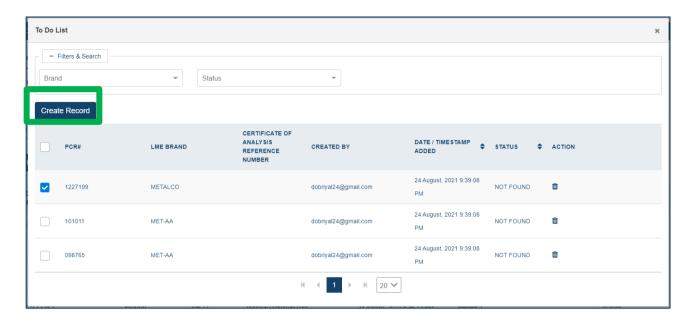
• A pop-up window will appear displaying added record details



Items listed in the To Do List

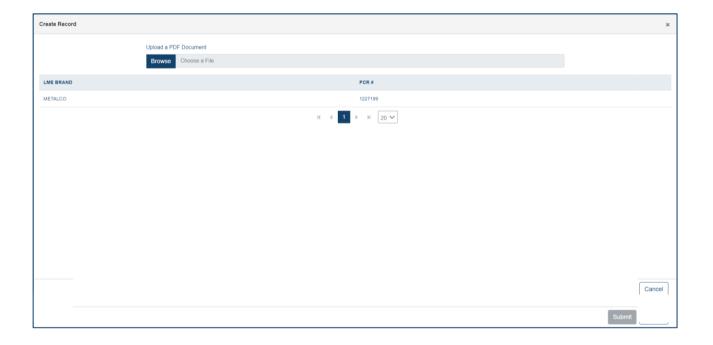
- Using the checkboxes on the left side, select the record(s) to create
- Note: When selecting multiple records, all records must have the same COA Reference Number
- Click "Create Record"





Selecting items in the To Do List to take through to the Create Record workflow

• Users will be redirected to the upload window to Browse for a COA to be uploaded



Browsing for the PDF version of a COA to upload

 Users can then follow the instructions outlined in sections 7.1.1 Redacting sensitive information and Using the OCR review screen for more information

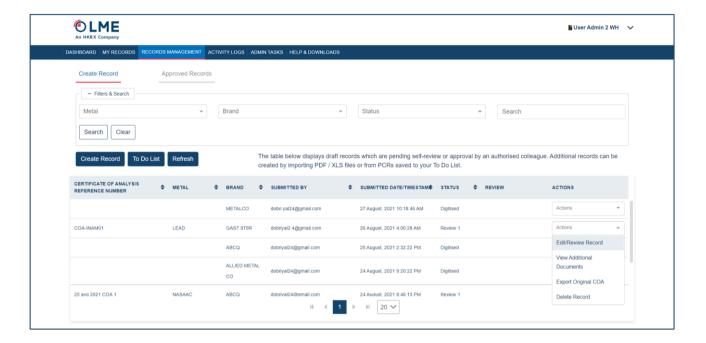


7.6 Reviewing and approving records

Once a record has been initially created through one of the Create Record workflows the COA will appear in the Create Record task list with a status of Review 1. The final step in creating a record is to review and approve the meta-data captured against each PCR or Assign it to another user to undertake this step.

To review and approve a COA document and associated PCRs/records:

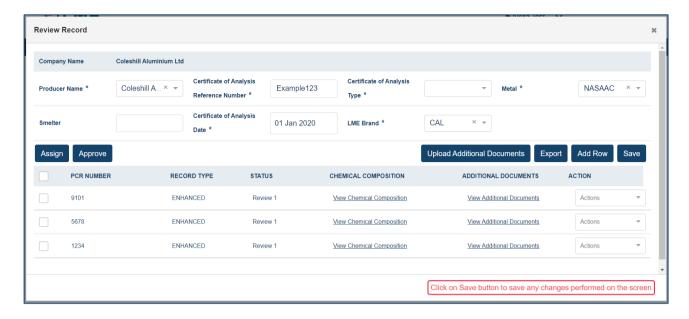
Select "Edit/Review Record" from the Actions dropdown to display the review pop-up window



Selecting records to review

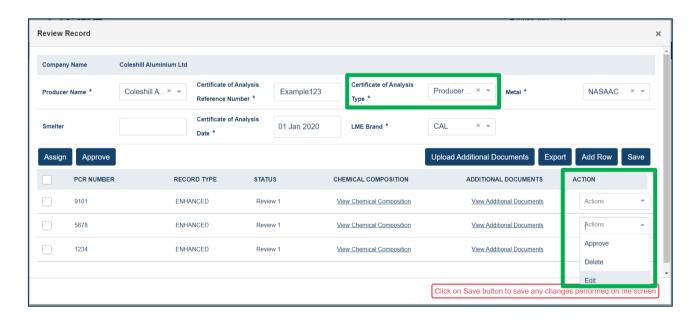
Review that all data extracted by the OCR system/initial user was input correctly





Reviewing records - sample Enhanced record

- Select a "Certification of Analysis Type" (is the COA uploaded from a Producer or from an Assayer?)
- "Approve", "delete", or "edit" a record by selecting the Actions dropdown for a particular PCR

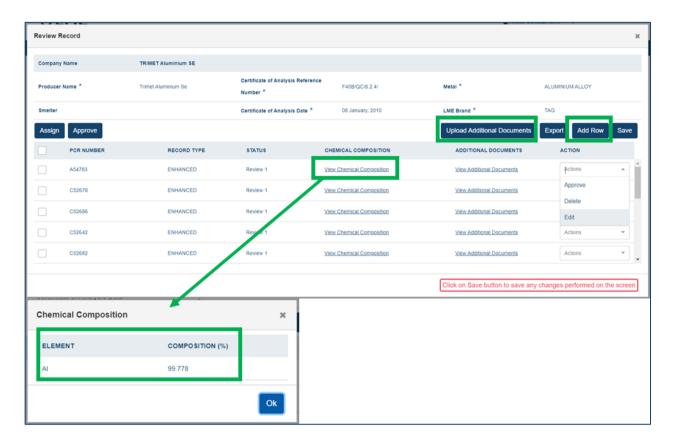


COA Type and Action available for each individual record in the "Actions" drop down list

- Additional PCR numbers can be added to the COA by clicking "Add Row" and entering all relevant information
- Additional documents can also be added to each PCR/record by clicking "Upload Additional Documents"

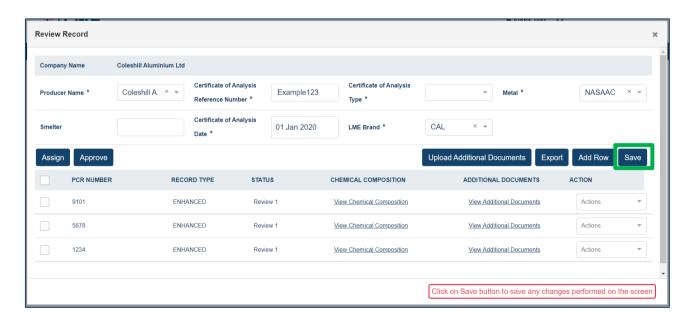


The chemical composition can be viewed by clicking "View Chemical Composition" in the record row



Viewing Chemical Composition from the Review records screen

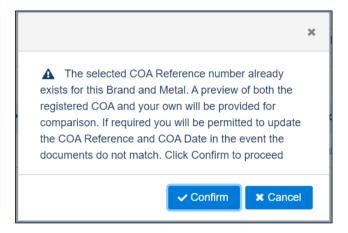
• Once editing, approving, or additional uploads have been completed, click "Save" and "Approve"



Once edited the view should be save by clicking "Save"

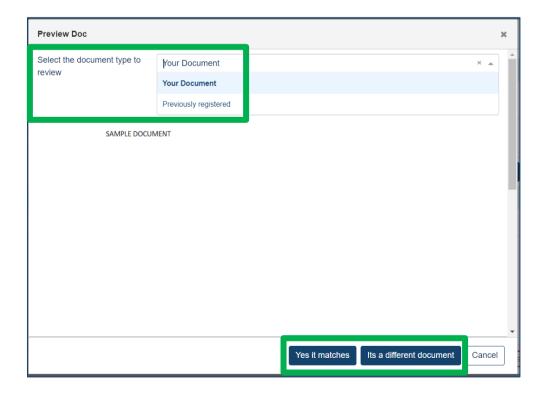


• If the COA reference number entered already exists within LMEpassport, the user will receive a popup notification when trying to "Approve" the associated records:



Notification of existing COA reference number

- Click "Confirm" to proceed to view the existing and new COA documents
- A Preview Doc pop-up window will appear displaying both the existing and new COA documents for comparison
- If the documents match, click "Yes it matches" to merge the new records with the existing COA
- If the documents do not match, click "It's a different document" to create the new records with the new COA document and an alternate COA reference number



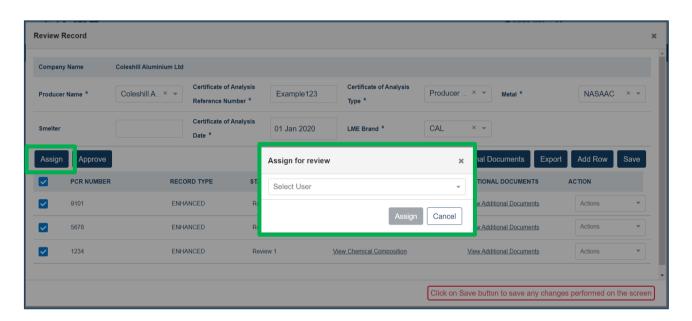
Notification of existing COA reference number



7.7 Assigning records

Users have the ability to assign records to another individual within their Entity for review and approval.

- Within the Review 1 window, select all PCRs
- Click "Assign"
- Select the user who should be responsible for the next review
- Click "Assign"



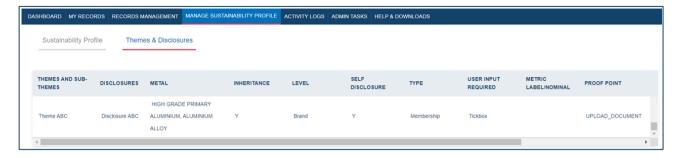
Assigning records for a Second Review by another user

Depending on the number of reviews required, the final record status will change to Approved at which time the records are moved from the Create Record sub-tab to the Approved Records sub-tab within Records Management.

7.8 Appending value-add certification and disclosures

The ability to append new value-add themes and disclosures to a record is available to Producers only. Producers can view the disclosures available to themon the Themes & Disclosures sub-tab within the Manage Sustainability Profile page.



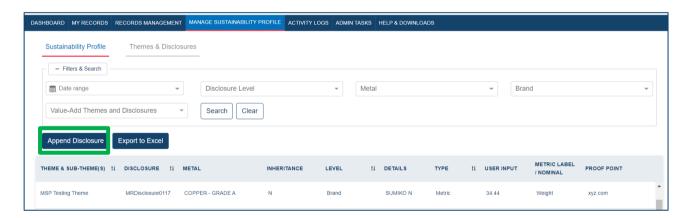


Viewing Available Themes and Disclosures

Producers can view which themes and disclosures are available and view the types of information that will be required to be input when appending to each disclosure.

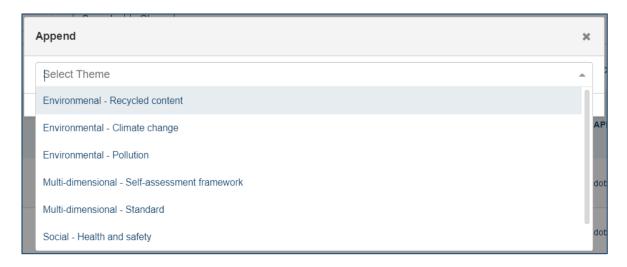
To append new value-add themes and disclosures at the entity, brand, or record level, begin by navigating to the Sustainability Profile sub-tab within the Manage Sustainability Profile page.

• Click the "Append Disclosure" button



Manage Sustainability Profile page

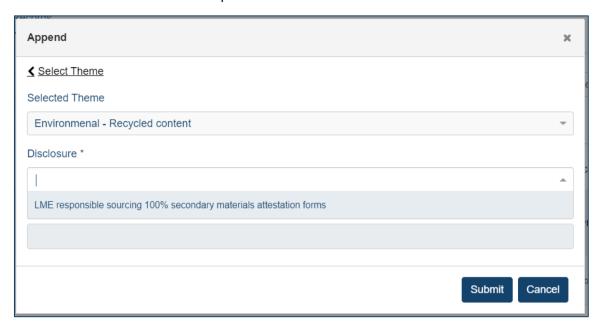
Select the Theme from the drop-down list



Selecting a Theme and Sub-Theme



Select the Disclosure from the drop-down list

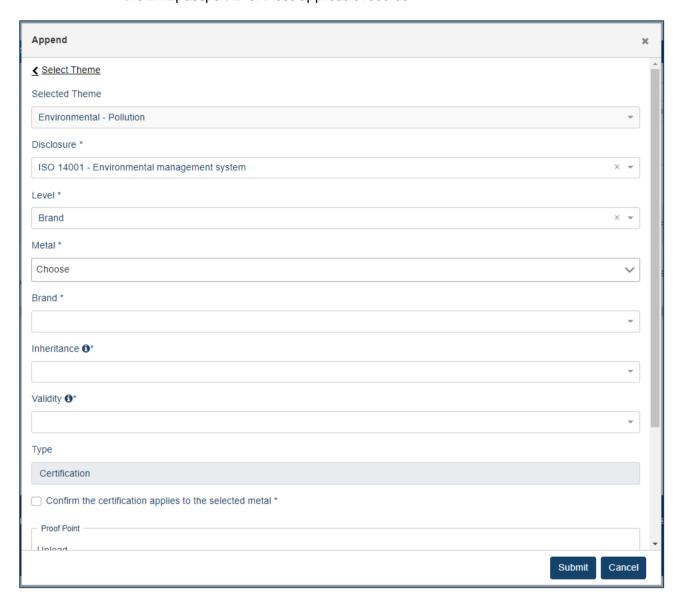


Selecting the specific Disclosure

- Select the Level from the drop-down list
 - Entity: The certification, membership, or metric being input applies to the entire corporation/entity
 - Brand: The certification, membership, or metric being input applies to a certain brand(s) produced by the entity
 - Record: The certification, membership, or metric being input applies to specific batches of metal and PCRs/records



 Where a disclosure applies to the record level, a pop-up will appear allowing users to select the LMEpassport ID of those applicable records

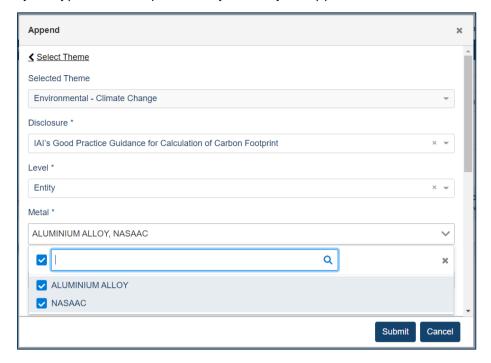


Selecting the Level, Metal, Brand, Inheritance, Validity

- Select the Metal from the drop-down list
 - o Users have the ability to type the name of a metal into the search box
 - Select multiple metals by checking the box next to each metal type or by selecting the top checkbox



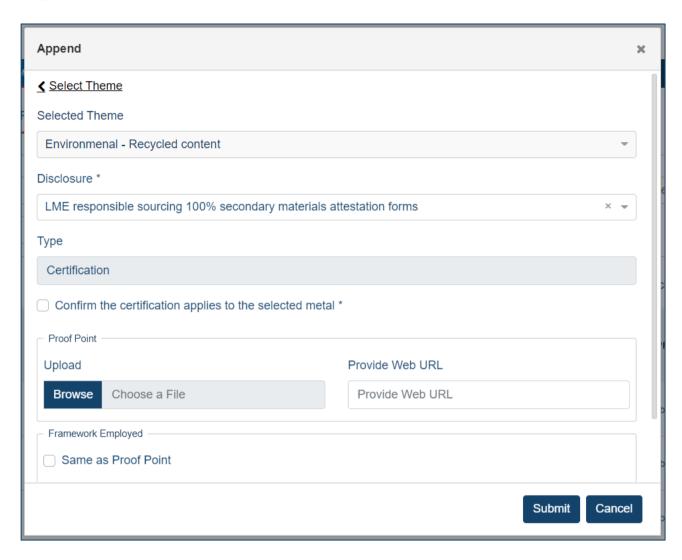
Only the types of metals produced by the entity will appear in the list



Selecting multiple metals

- Select the Brand from the drop-down list
 - Only the brand names produced by the entity will appear in the list
- Select your choice of Inheritance from the drop-down list
 - Yes: The disclosure not only applies to the level initially selected, but should trickle down to the record level.
 - No: The disclosure selected only applies to the level indicated
- Select the type of disclosure Validity from the drop-down list
 - What is the validity of the disclosure? Enter the date or date range spanning the valid lifetime of the dislosure.
 - Production on or before: The disclosure applies to all records where the date of production (or COA date when date of production is unavailable) is on or before XX/XX/XXXX.
 - Production on & after: The disclosure applies to all records where the date of production (or COA date when date of production is unavailable) is on and after XX/XX/XXXX.
 - Date range: The disclosure applies to all records where the date of production (or COA date when date of production is unavailable) is between XX/XX/XXX and XX/XX/XXX.
 - Perpetuity: The disclosure applies to all records regardless of date of production (or COA date when date of production is unavailable).
- Enter quantitative metrics (where required)
- Upload documentation as proof points
 - Note: The document should be in PDF format





Append window

- Click "Submit"
- The theme and disclosure has now been appended. LMEpassport Platform Admins can view the
 appended disclosures at all levels. Other stakeholder types using LMEpassport can only view record
 level disclosures (and those where "inheritance" has moved to the record level) from the My Records
 page.

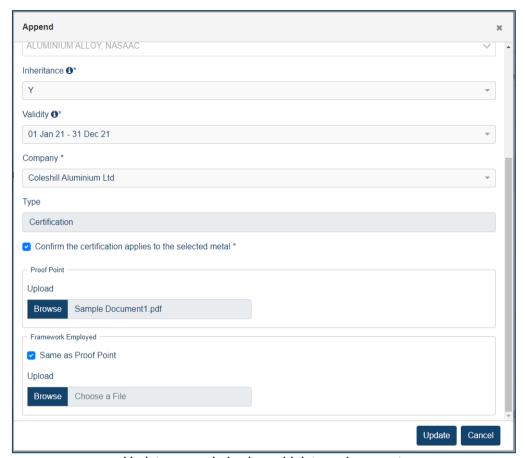
7.9 Editing or removing value-add certification and disclosures

Once value-add information has been appended to a record, it can be edited or deleted by using the "Actions" buttons on the right side of the Manage Sustainability Profile page



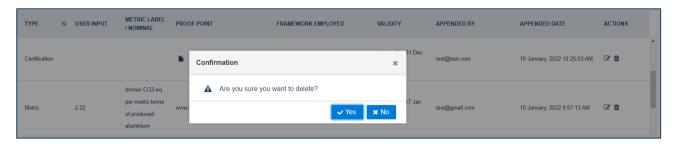


 Click the pencil icon to update the metric (if applicable), proof point, and/or framework employed documentation that was previously uploaded



Update appended value-add data or documents

• Click the bin icon to permanently delete a disclosure



Update appended value-add data or documents

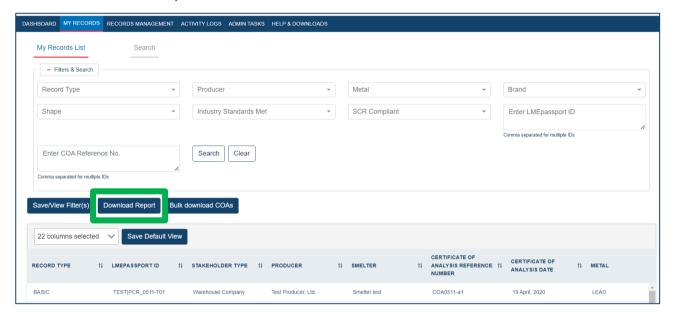


8 Exporting data from LMEpassport

8.1 Exporting from the My Records List to Excel

Users can download the My Records page using the "Download Report" button.

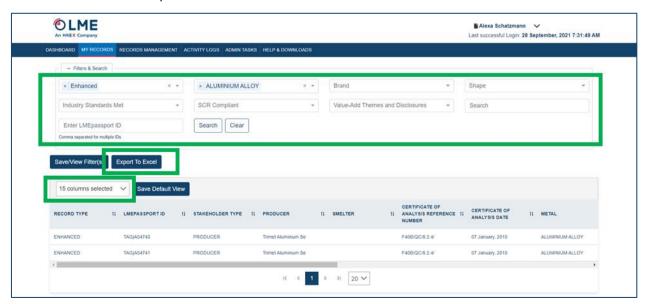
- To export all records users should clear all filters and make sure all columns are displayed in the table
- Click "Download Report"



Download Report

To export a sub-set of records and data:

- Use the Filters & Search section to narrow down the records displayed in the table
- Use the "22 columns selected" dropdown to hide any unneeded columns
- Click "Download Report"





Configuring My Records List to Export

• Only the columns and search results visible on the screen will be downloaded

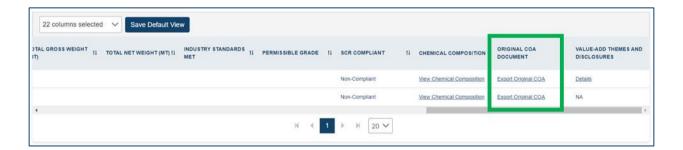
8.2 Exporting from the My Records List via API

For details on how to export data from LMEpassport please reach out to the LMEpassport Support Team at lmepassport.support@lme.com.

8.3 Downloading original COA files

The original COAs under pinning records in LMEpassport can be downloaded at a number of convenient points in the application.

 The original COA can be exported from the My Records List by scrolling to the right hand end of the table and clicking on the "Export Original COA" button. The COA can be saved to a local drive in PDF format



Exporting Original COAs from the My Records

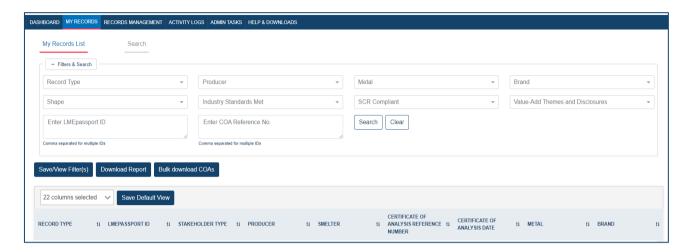
The original COA can be exported from the Approved Records page by scrolling to the right hand end
of the table and clicking on the "Export Original COA" button. The COA can be saved to a local drive in
PDF format

8.4 Bulk downloading COA files

Original COAs can be bulk downloaded from LME passport with a file outlining the COA reference number, metal, and brand associated with each document.

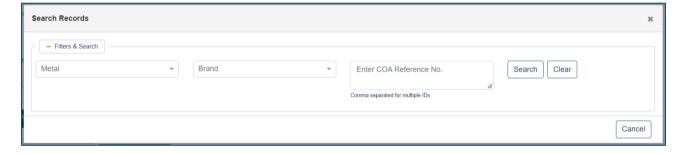


Below the Filters & Search section on the My Records List page, click "Bulk download COAs"



Bulk download COAs button

- In the Search Records pop-up, select the metal and brand of the COAs to be downloaded
- Enter the COA reference number of one or multiple COA documents
 - o If entering multiple COA reference numbers, separate each number with a comma



Search Records pop-up window

- The Search Records pop-up will display the number of found or not found COA documents
- Click "Download" to download the COAs or "Cancel" to exit



Search Records window found results



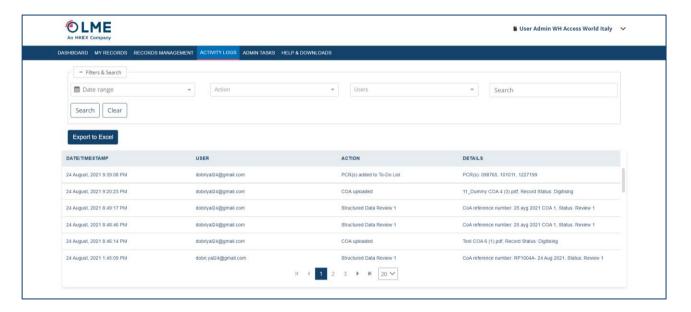
 Clicking "Download" will open a zipped file containg PDF copies of each original COA document and an Excel file outlining the COA reference number, metal, and brand associated with each document name

8.5 Exporting the Activity Logs to Excel

Users have the ability to download the Activity Log as a report via Excel.

To export all activity:

- Users should clear all filters
- Click "Export to Excel"



Exporting the Activity Logs to Excel

To export a sub-set of activity:

- Use the Filters & Search section to narrow down the activities displayed in the table
- Click "Export to Excel"
- Only the activities displayed will be downloaded



9 Smartphone app

9.1 Downloading the app

- From your mobile phone, users should navigate to the Play Store on Android devices or the App Store on Apple devices
- Search for LMEpassport, then click "Install / Get" to download the application



Downloading the app

9.2 Logging into the LMEpassport app

- Once installed, users should click on the icon on their phone's home screen to open the application
- When the application has opened, click "LOGIN" to proceed. Users should enter the same username (email address) and password used to access the LMEpassport website



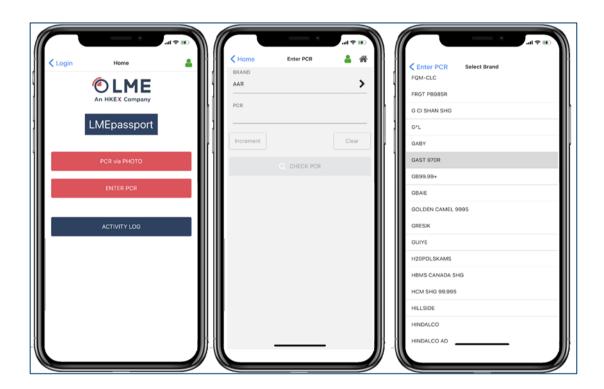


Logging into the app

9.3 Manually searching for PCRs

Once logged into the app, users will be able to view Home screen,

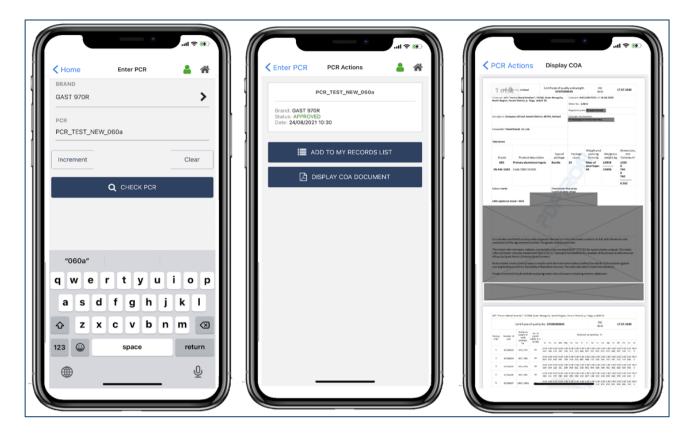
- Click "ENTER PCR" to search manually
- Click "BRAND" and select from the list



Manually searching for PCRs

- Enter the PCR number, and click "CHECK PCR"
- If the record is found to already exist within LMEpassport, users can add the record to their My Records List, and view the COA document





Previewing COAs in the app

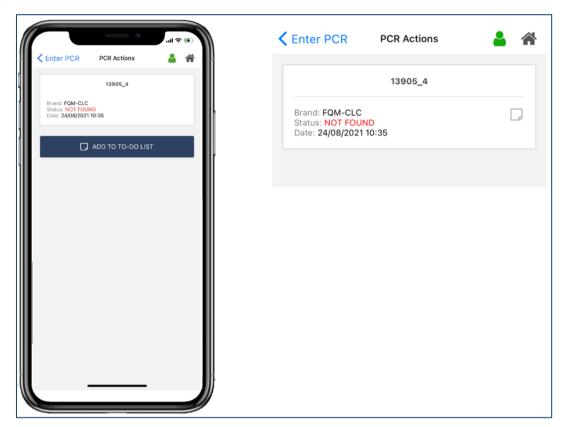
 If added to My Records List, the icon will indicate this has been actioned and the "ADD TO MY RECORDS LIST" button will disappear



Adding records to My Records List



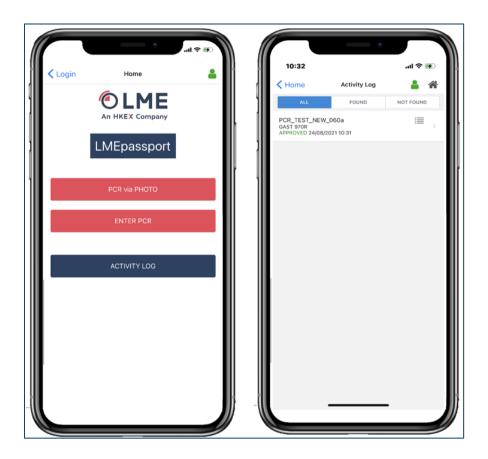
- If the brand + PCR combination is not found, users will receive a NOT FOUND message
- Users can then "ADD TO TO-DO LIST" to action the record at a later time within the website



Adding PCRs to To Do List

- Click the "HOME" button in the top right to return Home
- From here, click on the "ACTIVITY LOG" to view the updated log





Activity Log in the app

• If a PCR is not found and you added it to your Log, it will appear under the "NOT FOUND" tab



App activity log

9.4 Taking a photo of PCRs

• To scan a PCR, click "PCR VIA PHOTO" on the home screen





Scanning PCRs in the app

- The application will request access to your camera click "Allow / OK"
- Take a photo of the metal tag by clicking the "SCAN" button
 - The camera can be used in landscape mode too
- A screen will appear displaying all data extracted from the photo
 - Users may also switch to manual entry at this point as well
- From this list of extracted data, users can identify and select the "BRAND" from the options scanned and enter PCR numbers to complete
- Click "CHECK PCR" brand and PCRs have been selected/entered

9.5 Logging out of the LMEpassport app

Once all intended PCRs have been scanned or manually entered into the mobile phone app, users can log out of the app by navigating back to the Home screen, clicking on the user icon in the top-right corner, then clicking "LOG OUT".

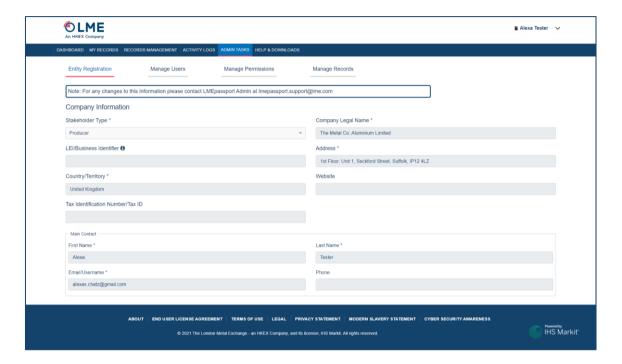


10 Administrative tasks

10.1 Updating company information

Once logged into LME passport, users can view their Entity registration details in the Admin Tasks page, within the Entity Registration sub-tab.

To request an update in the company or main contact details, reach out to lmepassport.support@lme.com.



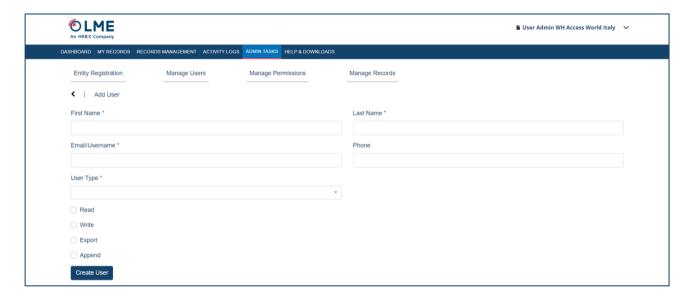
Company information

10.2 Creating a new user

User Admins can create new users by clicking "Create New User".

- Enter the following information about the user:
 - First Name
 - Last Name
 - Email/Username
 - o Phone number
 - User Type select from the dropdown (User Admin or Individual User)
 - Permissions select the permissions to be given to this user (may include: Write, Overwrite, Read, Append, Export)





Creating a new user

- Click "Create User" to add the user in the system
 - An email notification with instructions to login will be sent to the user's registered email address

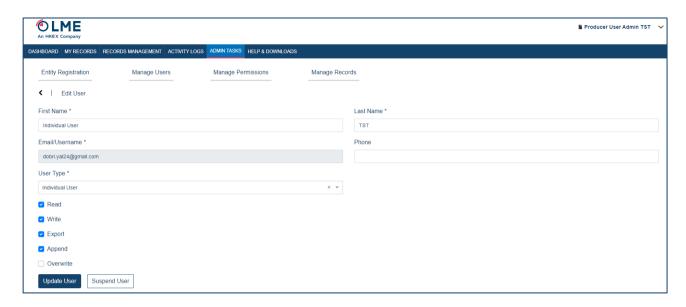
10.3 Editing, suspending and re-activating users

For existing users, User Admins can view their user type, user email address, approved date, updated date, and status. User Admins can also edit user information from this page.

If an existing user is "active", User Admins can:

- Edit the user's first and last name, phone number, and user type by clicking the icon in the View and Edit column then updating user details in the Edit User window and clicking "Update User"
- Add/remove permissions by clicking the icon in the View and Edit column then adjusting permissions in the Edit User window and clicking "Update User"
- Suspend the user by clicking the checkbox next to the user's name on the Manage Users page, then
 clicking "Actions" and "Suspend" or by clicking the icon in the View and Edit column then clicking
 "Suspend User" in the Edit User window

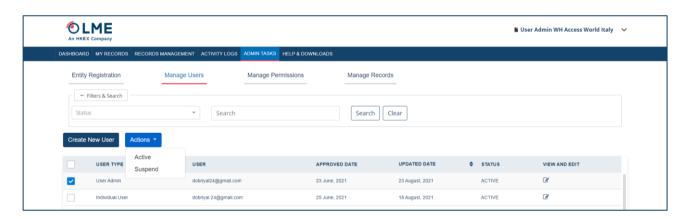




Editing a user in the Manage User page

If an existing user is "suspended", User Admins can:

Activate the user by clicking the checkbox next to the user's name on the Manage Users page, then
clicking "Actions" and "Active" or by clicking the icon in the View and Edit column then clicking "Activate
User" in the Edit User window

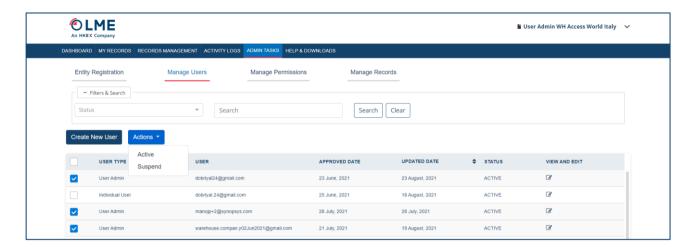


Taking actions on a selected user in the Manage Users page

If the User Admin would like to change the status of multiple users at once, this can be done by:

- Selecting the checkbox next to each user's name
 - Note that the status of all selected users should be the name (i.e. you cannot select two or more users with different statuses such as "active" and "suspended").
- Click "Actions"
- Select the status you would like to change all users to (Active or Suspended)





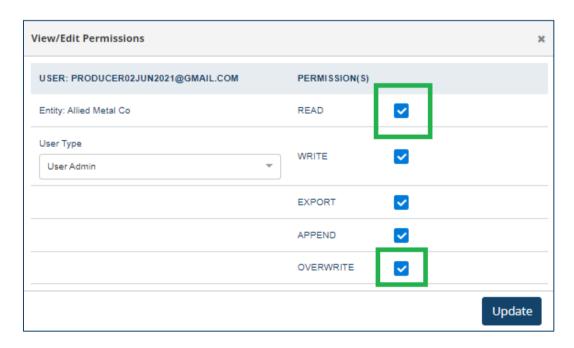
Taking actions on multiple selected users in the Manage Users page

10.4 Editing user permissions

Users Admins can view and edit user permissions on an individual level or they can edit multiple users at a time.

Add/remove permissions of a single user by:

- Click "Edit User Permissions" to display a pop-up window entitled "View/Edit Permissions"
- Add or remove permissions in the far right column in the window
- Click "Update" to confirm the permission changes for all selected users of that Entity



Updating permissions in the View/Edit Permissions pop up

Add/remove permissions of multiple users by:



- Selecting the checkbox next to each user's name
- Click "Edit User Permissions" to display a pop-up window stating "Apply Permission for [Entity Name]"
 with a list of all selected users appearing in tabular form along with their respective permissions
- Add or remove permissions in the far right column in the window
- Click "Update" to confirm the permission changes for all selected users of that Entity



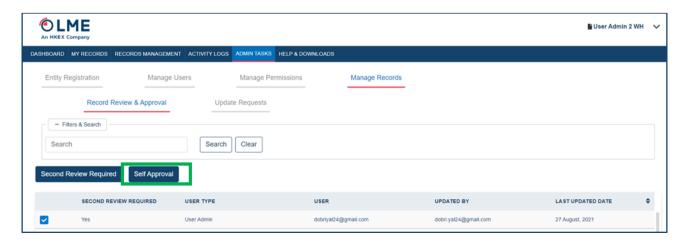
Revising permissions for multiple users

10.5 Editing record approval permissions

This page is used to configure the record review workflow (i.e., whether records created by a user associated with the Entity require second review or not). This decision is at the Entity's own discretion.

To allow self-approval after record review:

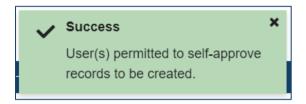
- Check the box next to the user(s) names allowed to self-approve
- Click "Self Approve"





Selecting Self Approve

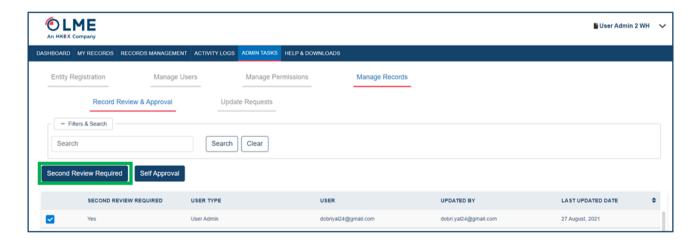
• A confirmation pop-up will appear



Notification of success

To require second review after a given user reviews record:

- Check the box next to the user(s) names allowed to self-approve
- Click "Second Review Required"



Selecting Second Review Required

A confirmation pop-up will appear



Notification of success

10.6 Updating record details

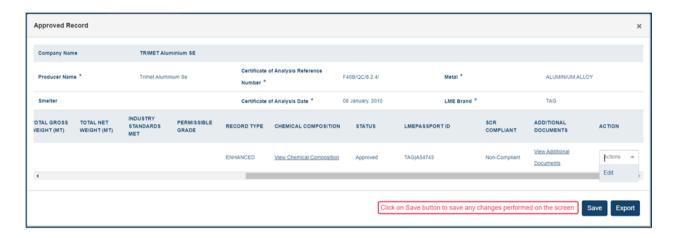
• Update a record by selecting the Actions dropdown for a particular COA then "Edit/Review Record"





Selecting a record to view and edit

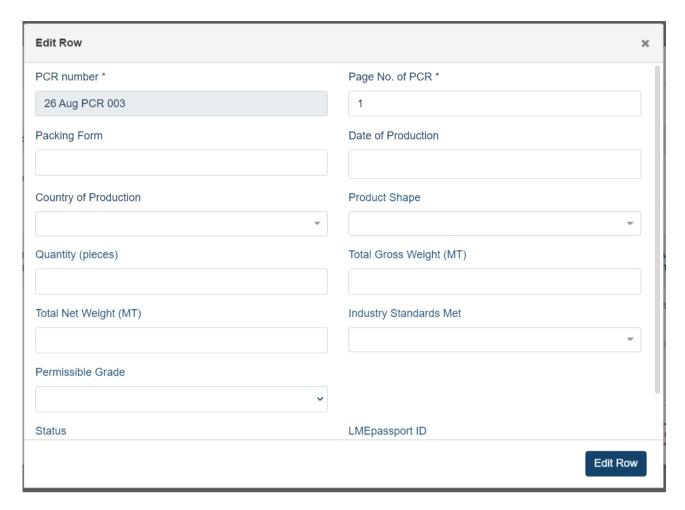
• Within the COA, select the record to be updated by clicking Actions on the far right, then "Edit"



Opening the Edit pop up

- A pop-up window will appear displaying all data fields
- Note: The fields displayed are dependent on the record type (Basic or Enhanced)

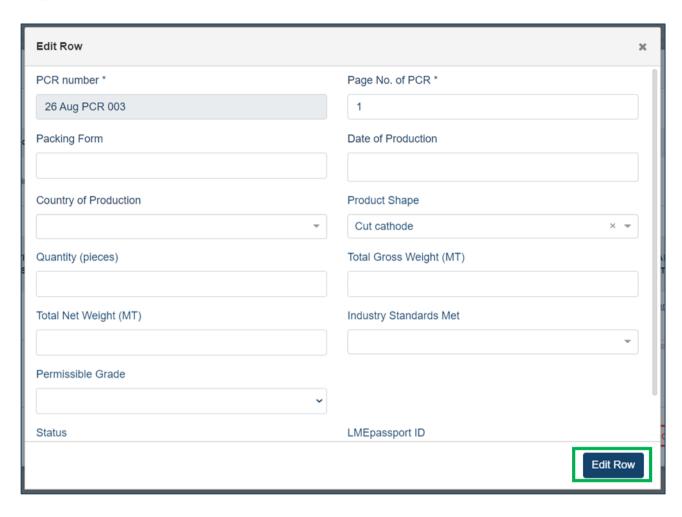




Edit window

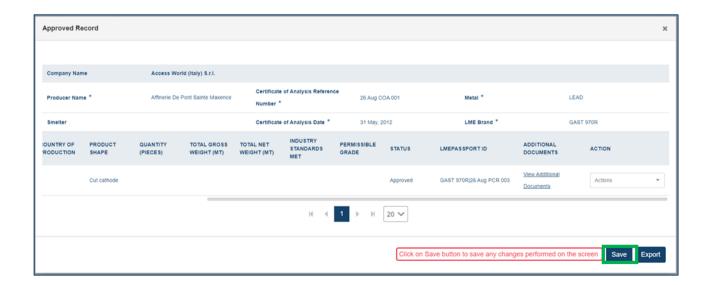
Add new data or amend existing data, then click "Edit Row"





Once updated click the Edit Row button

- Once the edit window closes, click "Save" on the main record details form
 - Note: If you are editing any of the chemical composition fields on an Enhanced Record, the "SCR Compliant" column will automatically update according to the new values input.



Once updated click the Save button



The record updates have now been saved



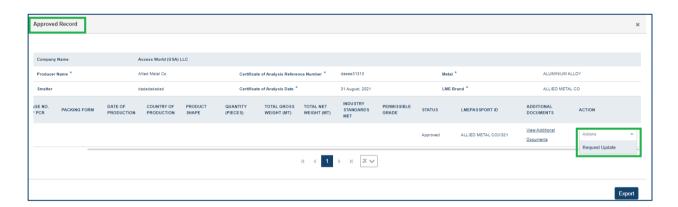
Confirmation of success

10.7 Responding to update requests

This tab is available to User Admins to view requests from Individual Users for changes/updates to previously approved records.

Individual Users, who cannot directly edit an approved record without the User Admin's approval, must raise a "request" to the User Admin in order to make changes. To request an update, Individual Users should:

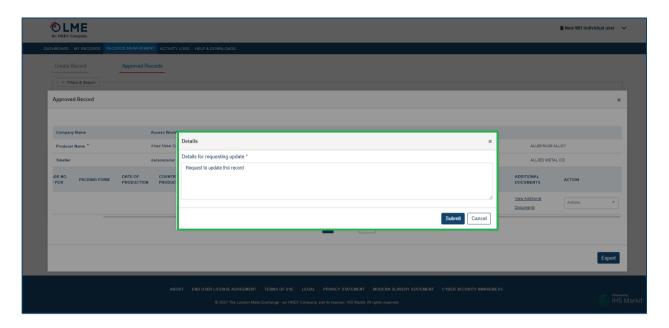
- Navigate to the Approved Records sub-tab within Records Management
- Find the record to update then click "Actions" and "Request Update"



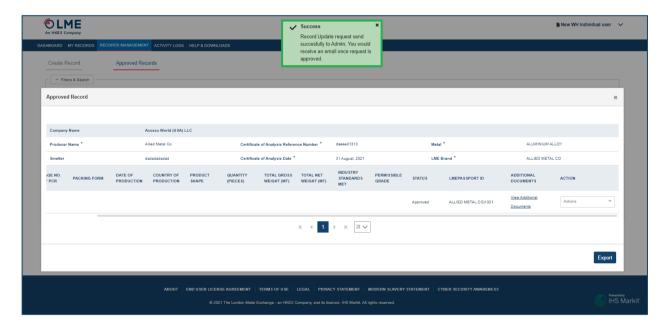
Requesting to update a record from the actions drop down

• Enter any relevant information the User Admin should know regarding why the record requires a change and "Submit"





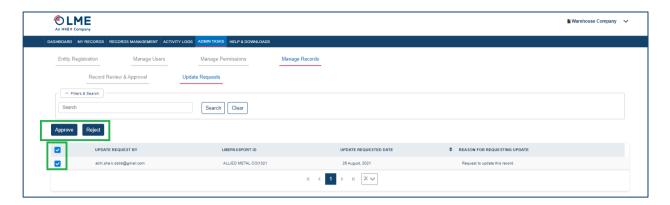
Providing details of why the record needs to be updated



Confirmation of record request sent to User Admin

- User Admins can view all update requests from the Update Requests page
- The User Admin can select the request then "Approve" or "Reject"

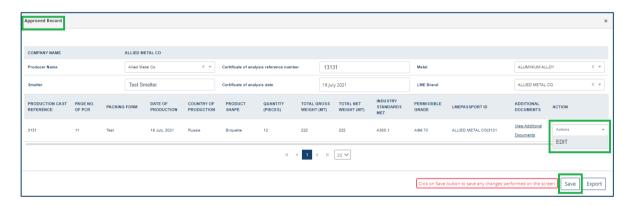




User Admin selects Accept or Approve

Either action will trigger an email notification to the Individual User alerting them of the decision.

If the User Admin approves the request, the Individual User can navigate back to the record and re-open the data to edit by clicking "Edit", amending any incorrect information or adding new data, then clicking "Save".



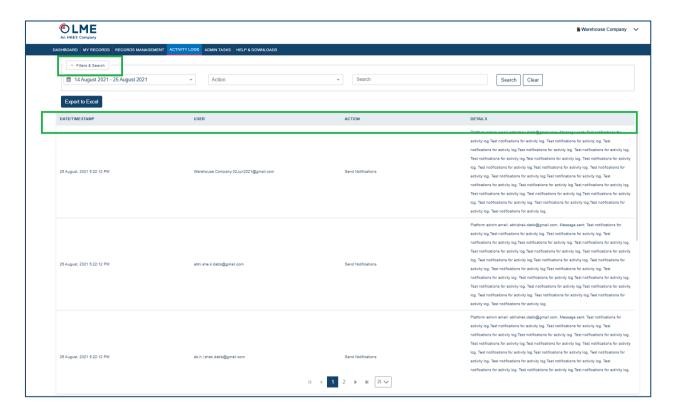
Editing and saving a record once a record update request has been approved

10.8 Reviewing the Activity Logs

LMEp assport provides users with the ability to view an Entity-wide activity log detailing all actions taken by users associated with their company.

Enter the start and end date of the period for which you would like to see the activity log results.





Filters & Search box in the Activity Logs

Users can search for specific actions by using the Action and Users filters or the general search bar.



Filters & Search box in detail

To download the activity log, see the section entitled Exporting the Activity Logs to Excel.



11 Contact us and further information

11.1 Email us

For any technical or support related questions, please reach out to the LMEpassport Support Team at: lmepassport.support@lme.com.

For any broader or general questions on LMEpassport, please reach out to the project team at: lmepassport@lme.com.

11.2 LMEpassport homepage on the LME website

A dedicated webpage to LMEpassport can be found on the LME website at the following address: www.lme.com/lmepassport.

11.3 Sustainability

More information on the LME's Sustainability agenda can be found on the LME website at the following address: www.lme.com/sustainability.



12 Appendix 1: Basic Record data fields

Field	Nominal	Required / Elective
LME Brand	[Validated Text]	Required
Metal	[Validated Text]	Required
Producer Name	[Validated Text]	Required
Document Title	[Text]	Required
Certificate of Analysis Date	[Date] DD-MM-YY	Required
Certificate of Analysis Reference Number	[Text]	Required
PCR Number	[Alpha-Numeric]	Required
Page No. of PCR	[Number]	Required
Smelter	[Text]	Elective
Date of Production	[Date] DD-MM-YY	Elective
Country of Production	[Text]	Elective
Packing Form	[Text]	Elective
Product Shape	[Value]	Elective
Industry Standards Met	[Text]	Elective
Permissible Grade	[Alpha-Numeric]	Elective
Quantity (Pieces)	[Number]	Elective
Total Gross Weight	[Number]	Elective
Total Net Weight	[Number]	Elective
Weight Unit	[Tonnes] [Kilograms] [Pounds]	Elective



13 Appendix 2: Enhanced Record data fields

Field	Nominal	Required / Elective
LME Brand	[Validated Text]	Required
Metal	[Validated Text]	Required
Producer Name	[Validated Text]	Required
Document Title	[Text]	Required
Certificate of Analysis Date	[Date] DD-MM-YY	Required
Certificate of Analysis Reference Number	[Text]	Required
Country of Production	[Text]	Elective
Date of Production	[Date] DD-MM-YY	Elective
Smelter	[Text]	Elective
PCR Number	[Alpha-Numeric]	Required
Ag	[Percentage, %]	Required – subject to SCR ₁
Al	[Percentage, %]	Required – subject to SCR ₁
As	[Percentage, %]	Required – subject to SCR ₁
В	[Percentage, %]	Required – subject to SCR ₁
Bi	[Percentage, %]	Required – subject to SCR ₁
C	[Percentage, %]	Required – subject to SCR ₁
Ca	[Percentage, %]	Required – subject to SCR ₁
Cd	[Percentage, %]	Required – subject to SCR ₁
Co	[Percentage, %]	Required – subject to SCR ₁
Cr	[Percentage, %]	Required – subject to SCR ₁
Cu	[Percentage, %]	Required – subject to SCR ₁
Fe	[Percentage, %]	Required – subject to SCR ₁
Ga	[Percentage, %]	Required – subject to SCR ₁
Li	[Percentage, %]	Required – subject to SCR ₁
Mg	[Percentage, %]	Required – subject to SCR ₁
Mn	[Percentage, %]	Required – subject to SCR ₁
Na	[Percentage, %]	Required – subject to SCR ₁
Ni	[Percentage, %]	Required – subject to SCR ₁
P	[Percentage, %]	Required – subject to SCR ₁
Pb	[Percentage, %]	Required – subject to SCR ₁
S	[Percentage, %]	Required – subject to SCR ₁
Sb	[Percentage, %]	Required – subject to SCR ₁
Se	[Percentage, %]	Required – subject to SCR ₁
Si	[Percentage, %]	Required – subject to SCR ₁
Sn	[Percentage, %]	Required – subject to SCR ₁



Те	[Percentage, %]	Required – subject to SCR ₁
Ti	[Percentage, %]	Required – subject to SCR ₁
V	[Percentage, %]	Required – subject to SCR ₁
Zn	[Percentage, %]	Required – subject to SCR ₁
Ag+As+Bi+Fe+Pb+S+Sb+Se+Te	[Percentage, %]	Required – subject to SCR ₁
As+Cd+Cr+Mn+P+Sb	[Percentage, %]	Required – subject to SCR ₁
Bi+Se+Te	[Percentage, %]	Required – subject to SCR ₁
Se+Te	[Percentage, %]	Required – subject to SCR ₁
Co+Fe+Ni	[Percentage, %]	Required – subject to SCR ₁
Co+Fe+Ni+Si+Sn+Zn	[Percentage, %]	Required – subject to SCR ₁
Ag+As+Bi+Fe+Pb+Ni+S+Sb+Se+Sn+Te	[Percentage, %]	Required – subject to SCR ₁
Fe+Mn+Cr	[Percentage, %]	Required – subject to SCR ₁
Pb+Cd+Fe+Sn+Cu+Al	[Percentage, %]	Required – subject to SCR ₁
Others Each	[Percentage, %]	Required – subject to SCR ₁
Others Total	[Percentage, %]	Required – subject to SCR ₁
Total All Impurities	[Percentage, %]	Required – subject to SCR ₁
Packing Form	[Text]	Elective
Product Shape	[Validated Text]	Elective
Industry Standards Met	[Text]	Elective
Permissible Grade	[Alpha-Numeric]	Elective
Total Gross Weight	[Number]	Elective
Total Net Weight	[Number]	Elective
Weight Unit	[Validated Text]	Elective

^{1 –} Please refer to the relevant Special Contract Rules section within the LME Rulebook.



14 Appendix 3: Supported Industry Standards and Permitted Grades in LMEpassport

Metal	Industry Standard	Permitted Grade
High Grade Primary Aluminium	P1020A	Not applicable
High Grade Primary Aluminium	GB/T 1196-2008	Al99.70
High Grade Primary Aluminium	Al99.70 in GB/T 1196-2008	Not applicable
Aluminium Alloy	A380.1	Not applicable
Aluminium Alloy	LME 226	Not applicable
Aluminium Alloy	AD12.1	Not applicable
Copper - Grade A	BS EN 1978:1998	Not applicable
Copper - Grade A	GB/T 467-2010	Not applicable
Copper - Grade A	ASTM B115-10	Not applicable
Lead	BS EN 12659:1999	PB970R
Lead	BS EN 12659:1999	PB985R
Lead	BS EN 12659:1999	PB990R
Lead	GB/T 469/2013	99.970%
Lead	GB/T 469/2013	99.985%
Lead	GB/T 469/2013	99.990%
Lead	GB/T 469/2013	99.994%
Lead	ASTM B29-03	99.970%
Lead	ASTM B29-03	99.995%
Primary Nickel	ASTM B39-79 (2013)	Not applicable
Primary Nickel	GB/T 6516-2010	Ni9990
NASAAC	LME NA380.1	Not applicable
Tin	BS EN 610:1996	Not applicable
High Grade Zinc	BS EN 1179:2003	Not applicable
High Grade Zinc	ISO 752:2004	ZN-1 grade
High Grade Zinc	ASTM B6-12	Not applicable
High Grade Zinc	GB/T 470-2008	Zn99.995
Cobalt	Not applicable	Not applicable



15 Appendix 4: Data field definitions

Field	Description
Record Type	Basic or Enhanced
LMEpassport ID	A unique system generated ID associated to the record
Stakeholder Type	Producer, Warehouse Company, LME Member, Metal Owner
Producer	Producer name of the metal
Smelter	Smelter name of the metal
Certificate of Analysis Reference Number	Unique reference number for CoA
Certificate of Analysis Date	Date of the CoA document
Metal	Name of the metal associated with the record
Brand	Name of the metal brand associated with the record
Packing Form	Form in which metal is packed and stored
Date of Production	Date of production of metal as mentioned in CoA
Country of Production	Country of production of metal as mentioned in CoA
Product Shape	Shape of metal as mentioned in CoA
Quantity (Pieces)	Quantity of metal as mentioned in CoA
Total Gross Weight (MT)	Gross Weight of the metal in metric tons
Total Net Weight (MT)	Net weight of the metal in metric tons
Industry Standards Met	Name of the industry standards metal complies with.
Permissible Grade	Grade of the metal as mentioned in the CoA
SCR Compliant	Indication of the metal's compliance with the relevant LME Special Contract Rules
Chemical Composition	Composition of other metals (like Cd, Mn, Al, Cr, etc.) in the underlying metal.
Original CoA / Additional Documents	The original CoA document uploaded by the stakeholder.
Value Add Themes & Disclosures	Sustainability and provenance information associated to individual entities, brands, and units of metal in LMEpassport.



Company	The company that has approved the record. Other entities will see this field populated with Stakeholder Type only
Approved By	The email address of the user that has approved the record. Not visible to third parties
Approved Date	The date the record was approved in the system. Where a record is overwritten this is the overwrite date
Status	Processing status of a record in the create record workflow
Submitted By	Email address of the user who has submitted a COA to the system to be digitised
Review	The review status of a record during the create record workflow
Actions	A drop down list of actions associated with each item in a given table