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## List of the changes from the previous version

1. Following sections were added for the current version:  
bill-search

## Supported Services

### Registration and Authentication Process for the Industry Services

- The system will provide an ability to perform Industry Services for the Site Managers
- The system will use a combination of the API Id and API Key for User Authentication and Authorization
- An API Id/API Key pair will be generated by the RCRAInfo/e-Manifest Application

- Unique API Id/API Key pair will be associated with the CDX User Id. The same API Id/API Key pair will be used for all Facilities where the User has a Site Manager Role.
- An API Id/API Key pair does not expire. However, CDX passwords requires renewal every 90 days. The Site Manager that owns the API Id/API Key pair must properly maintain their CDX account.
- The User will be able to request API Key regeneration if lost or compromised.
- An API Id/API Key pair will be terminated if the User was deactivated or no longer has a Site Manager Role for any Facility

### User Registration process

1. Users will register in RCRAInfo/e-Manifest. RCRAInfo/e-Manifest is using CDX services to register users
2. CDX User Id will be stored in RCRAInfo/e-Manifest Application
3. In the System the Users will request the Role of Site Manager for each Site.
4. After an approval the Site Manager will be able to request an API Id/API Key pair.
5. An API Id/API Key pair is per user. A user will not need to have a separate API Id/API Key pair for each Facility they are registered for.
6. The User will be able to copy the API Id/API Key pair and will use it for the API Authentication. (API Key will be displayed to the User only at the time of the original generation)
7. RCRAInfo/e-Manifest UI provides an ability to re-generate API Id/API Key pair if it is lost or compromised.

### Services Requests and Responses

All services (except Authenticate) will accept a Security Token which will be passed in the header of the request. Service parameters will be passed as part of service request. See Service Invocation Examples for details. Services will return a Response in JSON format. If service successfully completed a request it will return the requested data. See Services Completed Return for JSON examples. If the service fails it will return specific error. Errors have error code, error message, error id and error date. See Services Error Response Examples.

### Services context URL

All Services are separated into RCRAInfo Services and Emanifest Services by context URL. RCRAInfo Services and Emanifest Services have locations for Data Services and Lookup Services.

<Production server url> : <https://rcrainfo.epa.gov/rcrainfoprod>

<PreProduction/Test server url>: <https://rcrainfopreprod.epa.gov/rcrainfo>

RCRAInfo Data Services are located under following URL:

- Production: <Production server url>/rest/api/v1/
- PreProduction/Test: < PreProduction/Test server url>/rest/api/v1/

RCRAInfo Data Services:

- auth
- site-details
- site-exists

- site-search

RCRAInfo Lookup Services are located under following URL:

- Production: <Production server url>/rest/api/v1/lookup
- PreProduction/Test: <PreProduction/ Test server url>/rest/api/v1/lookup

RCRAInfo Lookup Services:

- density-uom
- form-codes
- source-codes
- federal-waste-codes
- state-waste-codes
- management-method-codes
- ports-of-entries

Emanifest Data Services are located under following URL:

- Production: <Production server url>/rest/api/v1/emanifest
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest

Emanifest Data Services:

- manifest
- manifest-tracking-numbers
- site-ids
- search
- manifest-correction-details
- manifest-correction-version
- mtn-exist
- bill
- bill-history

Emanifest Lookup Services are located under following URL:

- Production: <Production server url>/rest/api/v1/emanifest/lookup
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup

Emanifest Lookup Services:

- printed-tracking-number-suffixes
- proper-shipping-names
- id-numbers
- id-numbers-by-shipping-name
- proper-shipping-names-by-id-number
- hazard-classes
- hazard-class-by-shipping-name-id-number
- packing-groups
- packing-groups-by-shipping-name-id-number
- emergency-numbers
- emergency-numbers-by-id-number

- container-types
- quantity-uom
- load-types

Emanifest UI Link service is located under following URL:

- Production: <Production server url>/rest/api/v1/emanifest/
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/

Emanifest ui link service:

- links

## RCRAInfo Data Services

### auth

#### *Description*

Authenticates the user and returns the Security Token. The Security token is used on all subsequent calls and is submitted in the HTTP header using the Authorization in the Key with a value of Bearer

#### *Parameters*

- API Id: API Id is the User Service Id
- API Key: API Key is the User Service “password”

#### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/auth/6f7a9848-35a5-4874-928f-12fc3def1a33/PYdg4vhKTouCcQFSZCGM
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/auth/6f7a9848-35a5-4874-928f-12fc3def1a33/PYdg4vhKTouCcQFSZCGM

#### *Sequence of steps*

1. System will check if one of the credentials is empty or incorrect. If so, following error will be generated:
  - E\_SecurityApiInvalidCredentials: Invalid API Id/Key Specified
2. System will check if API Id was disabled by the Administrator. If so following error will be generated:
  - E\_SecurityApiInvalidStatus: API Id Status Invalid
3. If the System detects 3 unsuccessful attempts for authentication then following error will be generated:
  - E\_SecurityApiIdLocked: API Id is locked.

If API id was locked the User shall request API Id/API key re-generation
4. The System will generate JSON Web Security Token and token expiration Date. (The System utilizes Security Token (JWT) standard to generate a token. All subsequent calls to the system must contain Security Token in the header.) Security Token contains User Profile and User Role Information in encrypted format. Security Token expiration time is 20 minutes.
5. If successful the system will return JSON containing following information:

- token
  - expiration
6. If failed Authentication the System will return JSON containing:
- error: which will have following fields:
    - code : Error code which designated for automated processing
    - message: “Human readable” Error message corresponding to the error code
    - error id: Unique error id for auditing and tracking purpose
    - date: Error Date/Time for auditing and tracking purpose

### Response JSON Schema

“auth.json”

### Completed Response Example

```
"token":  
"eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiI2ZjdhOTg0OC0zNWE1LTQ4NmZlOTI4Zi0xMmZjM2RlZjFhMzMiLCJhcGlUb2t1bkNsYWVtIjoie1xulCBclmFwaUlKXCIGoiBcljZmN2E5ODQ4LTMTYTUuNDg3NC05MjhmlTEyZmMzMZGVmMWEmM1wiLFxuICBclnByb2ZpbGVcliA6IHtcbiAgICBclnVzZXJJZFwiIDogXCEQVZJRERVTkRVQVwiLFxuICAgIFwic3RhdHVzXCIGoiBclkJfdGl2ZWwiLFxuICAgIFwibGFzdExvZ2luRGFOZVwiIDogXClyMDE3LTA2LTliYDlyOjU2OjA5LjAwMCswMDAwXCIsXG4glCAgXCJzZWN1cmloUfncmVlbWVudERhdGVcliA6IG51bGwsXG4glCAgXCJwYXNZd29yZFIjc2V0RGFOZVwiIDogbnVsbCxcbiAgICBclnBhc3N3b3JkU3RhdHVzXCIGoiBclkJfdGl2ZWwiLFxuICAgIFwiY29udGFjdFwiIDoge1xulCAgICAgXCJOaXRsvZVwiIDogXCJhc2RmYXNKZlwiLFxuICAgICAgXCJmaXJzdE5hbWVcliA6IFwiRGF2aWRclixcbiAgICAgIFwibWlkZGxlSW5pdGlhbFwiIDogXCJKXCIsXG4glCAgICBclmxhc3ROYW1IXClgiOiBclKR1bmR1YVwiLFxuICAgICAgXCJwaG9uZVwiIDogXCIZMDEtMzUxLTk5MjJlcixcbiAgICAgIFwicGhvbmVFeHRlbnNpb25clia6IFwiNzk1OThclixcbiAgICAgIFwib3JnYW5pemF0aW9uXCIGoiB7XG4glCAgICAgIFwiaWRclia6IDEyLFxuICAgICAgICBclnRleHRclia6IFwiQ0dJCIsXG4glCAgICAgIFwiY2R4T3JnYW5pemF0aW9uSWRclia6IDE3MDk2LFxuICAgICAgICBclm9yZ2FuaXphdGlvbIR5cGVcliA6IFwiQ0RYXCJcbiAgICAgICAgICAgIH0sXG4glCAgICBclmNvbRyYWN0b3Jclia6IGZhbnHNILFxuICAgICAgXCJhZGRyZXNZMVwiIDogXClixMzI5IEUgU1QgU0VclixcbiAgICAgIFwiYWRkcmVzc2Jclia6IG51bGwsXG4glCAgICBclmNpdHlclia6IFwiRkFJUkZBWFFwiLFxuICAgICAgXCJzdGF0ZVwiIDoge1xulCAgICAgICBclnJlZ2lvblwiIDogXCiwM1wiLFxuICAgICAgICBclmRlZmF1bHRUaGlyZENoYXJhY3RlclwiIDogXCJSXCIsXG4glCAgICAgIFwiaWRclia6IDE1LFxuICAgICAgICBclmNvZGVcliA6IFwiVkFclixcbiAgICAgICAgXCJkZXNjcmlwdGlvbllwiIDogXCJWSVJHSU5JQVwiLFxuICAgICAgICBclm5hbWVcliA6IFwiVklSR0IOSUFclixcbiAgICAgICAgXCJhY3RpdmVcliA6IHRydWUsXG4glCAgICAgIFwidXNhZ2VcliA6IFwiMVwiLFxuICAgICAgICBclnVzZXJJZFwiIDogbnVsbCxcbiAgICAgICAgICAgICAgXCJsYXNOQ2hhbmdlXCIGoiBcljlwMTctMDItMTNclixcbiAgICAgICAgXCJoZWxwTm90ZXNclia6IFwiIlFwiLFxuICAgICAgICAgICBclmFjdGl2aXR5TG9jYXRpb25clia6IFwiSFFcllxulCAgICAgIFw5cXcbiAgICAgIFwiemlwXCIGoiBcljlYMDMzXCIsXG4glCAgICBclmxlZ2FjeVVzZXJJZFwiIDogbnVsbcXcbiAgICAgIFwiZW1haWxclia6IFwiZGF2aWRASHVuZHVhLmNvbVwiLFxuICAgICAgXCJ1c2VyT3JnYW5pemF0aW9uSWRclia6IDU1MDY2LFxuICAgICAgXCJ1c2VyUm9sZUIkXCIGoiAxMTk4MDQsXG4glCAgICBclmlkXCIGoiAyLFxuICAgICAgXCJjcmlldGVkRGFOZVwiIDogXClyMDE3LTA2LTE5VDlyOjM4OjUxLjAwMCswMDAwXCIsXG4glCAgICBclnVwZGF0ZWREYXRlXCIGoiBcljlwMTctMDYtMjJUMjJlNTY6MDkuMDAwKzAwMDBcllxulCAgIH0sXG4glCAgXCJwcmlmaWxvLmVwZGF0ZWREYXRlXCIGoiBcljlwMTctMDYtMTIUMjJlMzg6NTEuMDAwKzAwMDBclixcbiAgICBclnVwZGF0ZWREYXRlXCIGoiBudWxsXG4glH0sXG4glFwicGVybWlzc2lvbnNclia6IFsgXSxcbiAgXCJzaXRlUGVybwVlzc2lvbnN
```

```
cliA6lFsgeyB9LCB7IH0gXVxufSlsImV4cCI6MTQ5ODI1OTc0NX0.xw_PGyN6for1GHwf6zqp0OJS10h  
wK8jEgRyRI0JpFUducwDKj5paWRTEsCky_06pryEve3Yw2w1bbBzqGdSnnw ",  
"expiration": "2017-06-23T23:15:45.095+0000"  
}
```

### Errors and Error Response Examples

code	Message
E_SecurityApilInvalidCredentials	Invalid API Id/Key Specified
E_SecurityApilInvalidStatus	API Id Status Invalid
E_SecurityApilLocked	API Id is Locked
E_SystemError	Message describing system error

#### Error Response Example

```
{  
  "code": " E_SecurityApilInvalidCredentials",  
  "message": "Invalid API Id/Key Specified",  
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date": "2017-06-23T23:15:45.095+0000"  
}
```

### site-details

#### Description

Returns Site Information by the Site Id. The following site information will be included:

- Site Id
- Mailing Address
- Site Address
- Contact First Name
- Contact Middle Initial
- Contact Last Name
- Contact phone number
- Contact email
- If at least one user at the site can electronically sign a manifest
- Site type: one of the following values will be returned
  - "Tsdf"
  - "Generator"
  - "Transporter"
  - "Broker"
- If the site is registered for the multiple types (activities) see details for the return in the Sequence of Steps section.

#### Service Type

RCRAInfo Data Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- Site Id: Site id

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/site-details/CAT080025711
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/site-details/CAT080025711

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the user has the Site Manager permission for any Site using Role information contained in Security Token
  - 2.2. If the user does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system will process the request
  - 3.1. The system will check if Site with provided Site Id is valid and registered in RCRAInfo.
    - 3.1.1. If the provided Site Id is invalid the processing will be stopped and system will generate the following error:
      - E\_InvalidSiteId: Provided Site Id has invalid formatSite Id shall be compliant with the following format:
      - Two Letter Activity Location Code + Single alphanumeric Character + Up to 9 alphanumeric characters
    - 3.1.2. If the provided Site Id is not registered in RCRAInfo the processing will be stopped and system will generate the following error:
      - E\_SiteIdNotFound: Site with provided Site Id is not Found
4. The System returns the response
  - 4.1. If site was found the system returns generated JSON containing the following information:
    - site type: "Generator"/"Tsd"/"Transporter" site type:  
"Generator"/"Tsd"/"Transporter"/"Broker".



For the cases where the site is registered for multiple types (e.g. Tsdf and Broker) the following applies:

- If the site is registered as a Broker and as a Generator then "Broker" will be returned.
- If the site is registered as a Broker and as a Tsdf then "Tsdf" will be returned.
- If the site is registered as a Broker and as a Transporter then "Transporter" will be returned.
- If the site is registered as a Generator and as a Tsdf then "Tsdf" will be returned.
- If the site is registered as a Generator and as a Transporter then "Transporter" will be returned.
- e-Sign status: If the site has at least one active Certifier user
- site information: containing site name, location address, mailing address, contact first name, middle initial, last name, phone number, phone extension, email

4.2. If any errors were encountered during processing the system returns JSON containing:

- error: containing code, message, error Id, date

### *Response JSON Schema*

"site.json"

### *Completed Response Example*

```
{
  "epaSiteId": "CA999999996",
  "name": "Site name",
  "mailingAddress": {
    "streetNumber": "1234",
    "address1": "street name",
    "city": "JBER",
    "state": {
      "code": "CA"
    },
    "country": {
      "code": "US"
    },
    "zip": "99506-3221"
  },
  "siteAddress": {
    "streetNumber": "1234",
    "address1": "street name",
    "city": "JBER",
    "state": {
      "code": "CA"
    },
    "country": {
      "code": "US"
    },
    "zip": "99506-3221"
  },
  "contact": {
    "firstName": "john",
    "middleInitial": "A",
    "lastName": "HUGHES",
    "phone": {
```

```

    "number": "907-552-3745"
  },
  "email": "JOHN.@MMM.COM"
},
"canEsign": true,
"siteType": "Tsdf",
"federalGeneratorStatus": "LQG"
}

```

## Errors

Type	code	description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_InvalidSiteId	Provided Site Id has Invalid format
Validation	E_SiteIdNotFound	Site with Provided Site id is Not Found
System	E_SystemError	Message describing system error

## Token Validation Error Response Example

```

{
  "code": "E_SecurityApiTokenExpired",
  "message": "Security Token is Expired"
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}

```

## Validation Error Response Example

```

{
  "code": "E_InvalidSiteId",
  "message": "Provided Site Id was not found"
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}

```

## site-exists

### Description

The service returns provided EPA Site Id and result == true if the site with provided EPA Site Id is registered in the e-Manifest system. The service returns provided EPA Site Id and return == false if site with provided EPA Site Id is not registered in the e-Manifest system or provided EPA Site Id is invalid. It is recommended to invoke the service before invoking search manifest services

### Service Type

RCRAInfo Data Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- EPA Site Id

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/site-exist/AL000111222
- PreProduction/ Test: <PreProduction/Test server url>/rest/api/v1/site-exist/AL000111222

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
3. The system will process the request
  - 3.1. If the site with provided EPA Site Id is registered in the e-Manifest system, the service will generate JSON containing:
    - EPA Site Id
    - Result : true
  - 3.2. If the site with provided EPA Site Id is not registered in the e-Manifest system or provided EPA Site Id is invalid, the service will generate JSON containing:
    - EPA Site Id
    - Result : false
  - 3.3. The service returns generated JSON
4. If authentication, authorization or system errors were encountered during processing the system will return:
  - error: containing error code, error message, error id and error date

### *Response JSON Schema*

site-exist-return.json

## Response Examples

Example for the case when the site with provided site id is registered

```
{
  "epaSiteId": "AL123456789",
  "result": true
}
```

Example for the case when the site with provided site id is not registered

```
{
  "epaSiteId": "SQLGEN",
  "result": false
}
```

## Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

## site-search

### Description

Returns the list of all Sites for the provided parameters

- epaSiteId: valid activity location at least 2 characters
- name: site name (any number of characters not exceeding 80 characters)
- streetNumber : optional parameter (any number of characters not exceeding 12 characters)
- address1: optional parameter (any number of characters not exceeding 50 characters)
- city: (any number of characters not exceeding 25 characters)
- state: valid state code
- zip: valid zip code
- siteType: optional parameter (Generator, Transporter, TSDF, Broker).
- pageNumber: optional parameter, the system will return sites for the requested page. If pageNumber is not provided or invalid the system will return sites for the 1<sup>st</sup> page.
- The service will perform exact search if provided site id contains exactly 12 characters. Any additional parameters will be ignored
- If at least one of the following parameters is valid, the service will perform non-exact search by individual parameters or any combination of them (any optional parameters can be added).

Response will contain warnings for any invalid parameters.

- epaSiteId: if less than 12 characters are provided
- name

- streetNumber : if streetNumber is provided and address1 is not provided the service will not use streetNumber for the search, the service will return an error
- address1: if address1 is provided and neither valid city nor valid zip are provided the service will not use address1 for the search, the service will return an error
- city
- state
- zip

### **Service Type**

RCRAInfo Data Services.

### **Parameters**

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request
- service parameters will be passed as JSON compliant to the JSON schema defined in “site-search.json”

### **Examples**

#### **Valid JSON Example- Site ID 12 characters – exact search**

```
{
  "epaSiteId": "AK8570028649"
}
```

#### **Valid JSON Example- Site ID, siteType and pageNumber**

```
{
  "epaSiteId": "AK857",
  "siteType": "Tsdf",
  "pageNumber": 2
}
```

#### **Valid JSON Example- State Code and Name, defaulted to the 1<sup>st</sup> page**

```
{
  "name": "US DOD USAF",
  "state": "AK"
}
```

#### **Valid JSON Example- Zip and Name, defaulted to the 1<sup>st</sup> page**

```
{
  "name": "US DOD USAF",
  "zip": "99506"
}
```

#### **Valid JSON Example- Site id, Zip and Name, defaulted to the 1<sup>st</sup> page**

```
{
  "epaSiteId": "AK857",
  "name": "US DOD USAF",
  "zip": "99506"
}
```

#### *Invalid JSON Example- Site ID*

```
{  
  "epaSiteId": "lko"  
}
```

#### *Invalid JSON Example- State Code*

```
{  
  "state": "pw"  
}
```

#### *Invalid JSON Example- Zip*

```
{  
  "zip": "99lpo06"  
}
```

#### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/site-search
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/site-search

#### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If the Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If the Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. The system will check if the user has the Site Manager permission for any site
  - 2.2. If the user does not have permissions the system will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system will process the request
  - 3.1. The service checks if required parameters were provided
  - 3.2. If none of following required parameters are provided:
    - epaSiteId
    - name
    - streetNumber
    - address1
    - city
    - state

- zip  
the processing will be stopped and system will generate the following error:
  - E\_SearchParameterRequired: Missing required search parameters: epaSiteId, name, streetNumber , address1, city, state, zip
- 3.3. If all following required parameters are invalid:
- epaSiteId
  - state
  - zip
- and none of the following parameters are provided :
- name
  - city
  - streetNumber
  - address1
- the processing will be stopped and system will generate the following error:
- E\_InvalidSiteIdStateZip : Provided Site ID, State, Zip have invalid format
- 3.4. If the provided Site ID is invalid and none of required search parameters are provided : name, streetNumber, address1, city, state, zip the processing will be stopped and system will generate the following error:
- E\_InvalidSiteId: Provided Site ID has invalid format
- 3.5. If the provided State Code is invalid and none of required search parameters are provided : name, streetNumber , address1, city, site id, zip, the processing will be stopped and system will generate the following error:
- E\_InvalidStateCode : Provided State Code is invalid
- 3.6. If the provided Zip is invalid and none of required search parameters are provided : name, streetNumber , address1, city, site id, state the processing will be stopped and system will generate the following error:
- E\_InvalidZip : Provided Zip is invalid
- 3.7. If the provided State Code is invalid and provided Site id is invalid and none of required search parameters are provided : name, address1, city, zip, the processing will be stopped and system will generate the following error:
- E\_InvalidStateCodeSiteId : Provided State Code and Site Id are invalid
- 3.8. If the provided State Code is invalid and provided Zip is invalid and none of required search parameters are provided : name, streetNumber, address1, city, site id, the processing will be stopped and system will generate the following error:
- E\_InvalidStateCodeZip : Provided State Code and Zip are invalid
- 3.9. If the provided Zip is invalid and provided Site id is invalid and none of required search parameters are provided : name, streetNumber , address1, city, State the processing will be stopped and system will generate the following error:
- E\_InvalidZipSiteId : Provided Zip and Site Id are invalid
- 3.10. if streetNumber is provided and address1 is not provided and none of other parameters are provided , the service will return an error:

- E\_Address1NotProvided: Street number is not used for the search because address1 is not provided
- 3.11. if address1 is provided and neither valid city nor valid zip are provided , the service will return an error :
- E\_CityZipNotProvided : Address1 is not used for the search because neither City nor Zip are provided
4. The System returns the response
- 4.1. If sites were found the system returns:
- JSON containing a list of sites, provided search parameters and any encountered validation warnings
- 4.2. If no sites were found the system returns JSON containing following information:
- empty list, and any encountered validation warnings
- 4.3. If any authentication, authorization, validation, or system error was encountered the system returns JSON containing:
- error: containing error code, error message, error id, error date

### *Response JSON Schema*

"site-search-return.json"

### *Completed Response Example*

```
{
  "totalNumberOfSites": 1,
  "totalNumberOfPages": 1,
  "currentPageNumber": 1,
  "searchedParameters": [
    {
      "field ": "name",
      "value ": "test"
    },
    {
      "field ": "epaSiteId",
      "value ": "AK0"
    }
  ],
  "warnings": [
    {
      "message": "Provided Zip is invalid",
      "field ": "zip",
      "value ": "a"
    }
  ],
  "sites": [
    {
      "epaSiteId": "AK000000321",
      "name": "TEST facility ",

```



```
"mailingAddress": {
  "streetNumber": "15885",
  "address1": "SPRAUGE RD",
  "city": "STRONGSVILLE",
  "state": {
    "code": "OH",
    "name": "OHIO"
  },
  "country": {
    "code": "US",
    "name": "UNITED STATES"
  },
  "zip": "44136"
},
"siteAddress": {
  "streetNumber": "707",
  "address1": "GAMBELL ST",
  "address2": "SUITE 501",
  "city": "ANCHORAGE",
  "state": {
    "code": "AK",
    "name": "ALASKA"
  },
  "country": {
    "code": "US",
    "name": "UNITED STATES"
  },
  "zip": "99501-3754"
},
"contact": {
  "firstName": "RHO",
  "middleInitial": "J",
  "lastName": "CROSS",
  "phone": {
    "number": "440-297-8431"
  },
  "email": "RHO@PPG.COM"
},
"federalGeneratorStatus": "N",
"gisPrimary": false,
"canEsign": true,
"limitedEsign": true,
"hasRegisteredEmanifestUser": true,
"siteType": "Tsdf"
}
]
}
```

## Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_SearchParameterRequired	Missing required search parameters: epaSiteId, name, address1, city, state, zip
Validation	E_InvalidSiteId	Provided Site ID has invalid format
Validation	E_InvalidStateCode	Provided State Code is invalid
Validation	E_InvalidZip	Provided Zip is invalid
Validation	E_InvalidSiteIdStateZip	Provided Site ID, State, Zip have invalid format
Validation	E_InvalidStateCodeSiteId	Provided State Code and Site Id are invalid
Validation	E_InvalidStateCodeZip	Provided State Code and Zip are invalid
Validation	E_InvalidZipSiteId	Provided Zip and Site Id are invalid
Validation	E_Address1NotProvided:	Street number is not used for the search because address1 is not provided
Validation	E_CityZipNotProvided	Address1 is not used for the search because neither City nor Zip are provided
System	E_SystemError	Message describing system error

## Warningss

Message	Field
Provided Zip is invalid	zip
Provided Site id is invalid	Site id
Provided State is invalid	state
Provided pageNumber is larger than totalNumberOfPages	pageNumber
Provided pageNumber must be equal or greater than one	pageNumber
Provided address1 is not used for the search because neither valid city nor valid zip are provided	Addres1
Provided streetNumber is not used for the search because address1 is not provided	StreetNumber

## Error Response Example

```
{
```

```
"code": "E_InvalidStateCode ",
"message": "Provided State Code is invalid"
"errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
"date": "2017-06-23T23:15:45.095+0000"
}
```

## RCRAInfo Lookup Services

### density-uom

#### *Description*

Returns the list of Density UOM Codes and Descriptions

#### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

#### *Service Type*

RCRAInfo Lookup Service.

#### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/lookup/density-uom
- PreProduction/ Test: <PreProduction/ Test server url>rest/api/v1/lookup/density-uom

#### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Density UOM Codes and Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:

- error: containing code, message, error Id, date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

```
[
  {
    "code": "1",
    "description": "lbs/gal"
  },
  {
    "code": "2",
    "description": "sg"
  }
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

### Error Response Example

```
{
  "code": "E_IndustryPermissions",
  "message": "The user does not have Industry permissions for any Site",
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}
```

## form-codes

### Description

Returns the list of Form Codes and Form Code Descriptions

### Service Type

RCRAInfo Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/lookup/form-codes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/form-codes

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Form Codes and Form Code Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing code, message, error Id, date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

(Note: The example does not represent complete list of all Form Codes and Form Code Descriptions)

```
[
  {
    "code": "W101",
    "description": "VERY DILUTE AQUEOUS WASTE CONTAINING MORE THAN 99% WATER"
  },
  {
    "code": "W200",
    "description": "STILL BOTTOMS IN LIQUID FORM "
  },
  {
    "code": "W001",
```

```

        "description": "LAB PACKS FROM ANY SOURCE NOT CONTAINING
        ACUTE HAZARDOUS WASTE"
    },
    {
        "code": "W002",
        "description": "CONCENTRATED HALOGENATED (E.G.
        CHLORINATED) SOLVENT"
    }
]

```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

### Error Response Example

```

{
    "code": "E_IndustryPermissions",
    "message": "The user does not have Industry permissions for any Site",
    "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
    "date": "2017-06-23T23:15:45.095+0000"
}

```

## source-codes

### Description

Returns the list of Source Codes and Source Code Descriptions

### Service Type

RCRAInfo Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/lookup/source-codes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/source-codes

### Sequence of steps

1. The System will validate Security Token

- 1.1. If Security Token is invalid the system stops the submission and will generate the following error:
  - E\_SecurityApiTokenInvalid: Invalid Security Token
- 1.2. If Security Token expired the system stops the submission and will generate the following error:
  - E\_SecurityApiTokenExpired: Security Token is Expired
- 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
  - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Source Codes and Source Code Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing code, message, error Id, date

### ***Response JSON Schema***

"code-descriptions.json"

### ***Completed Response Example***

(Note: The example does not represent complete list of all Source Codes and Source Code Descriptions)

```
[
  {
    "code": "G01",
    "description": "DIP, FLUSH OR SPRAY RINSING"
  },
  {
    "code": "G02",
    "description": "STRIPPING AND ACID OR CAUSTIC CLEANING"
  },
  {
    "code": "G03",
    "description": "PLATING AND PHOSPHATING"
  },
  {
    "code": "G04",
    "description": "ETCHING"
  }
]
```

## Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

## Error Response Example

```
{  
  
  "code": "E_IndustryPermissions",  
  "message": "The user does not have Industry permissions for any Site",  
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date": "2017-06-23T23:15:45.095+0000"  
}
```

## federal-waste-codes

### Description

Returns the list of Federal Waste Codes and Federal Waste Code Descriptions

### Service Type

RCRAInfo Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/lookup/federal-waste-codes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/federal-waste-codes

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:



- E\_SecurityApiInvalidStatus: This API Id is no longer active
- 2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
- 3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Federal Waste Codes and Federal Waste Code Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing code, message, error Id, date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

(Note: The example does not represent complete list of all Federal Waste Codes and Federal Waste Code Descriptions)

```
[
  {
    "code": "D001",
    "description": "IGNITABLE WASTE"
  },
  {
    "code": "D002",
    "description": "CORROSIVE WASTE"
  },
  {
    "code": "D003",
    "description": "REACTIVE WASTE"
  },
  {
    "code": "D004",
    "description": "ARCENIC"
  }
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

### *Error Response Example*

```
{  
  
  "code": "E_IndustryPermissions",  
  "message": "The user does not have Industry permissions for any Site",  
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date" : "2017-06-23T23:15:45.095+0000"  
}
```

## **state-waste-codes**

### *Description*

Returns the list of State Waste Codes and State Waste Code Descriptions by State Code.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- State Code

### *Service Type*

RCRAInfo Lookup Service.

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/lookup/waste-codes/MI
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/waste-codes/MI

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active.
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system will process the request

- 3.1. The system will check if provided State Code is valid. If the provided State Code is invalid the system will stop the processing and generate the following error:
  - E\_InvalidStateCode: Provided State Code is invalid
- 3.2. If no state waste codes are defined for the provided State Code the system will stop the processing and generate the following error:
  - E\_StateCodesUndefined: State Waste Codes are Not Defined for this State
4. The System returns the response:
  - 4.1. If Request was completed the system will return JSON containing: the list of State Waste Codes and State Waste Code Descriptions
  - 4.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing code, message, error Id, date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

(Note: The example does not represent complete list of all State Waste Codes and State Waste Code Descriptions for the specified State Code)

```
[
  {
    "code": " PCB5",
    "description": "state defined - polychlorinated biphenyls article container "
  },
  {
    "code": "020L",
    "description": "Part 121,Liquid Industrial Waste of Michigan's Natural
    Resources and Environmental "
  },
  {
    "code": "040U",
    "description": " Clonitralid (Chemical Abstract Services Number 1420-04-8)"
  },
  {
    "code": "051U ",
    "description": "Diazinon (Chemical Abstract Services Number 333-41-5)"
  }
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_StateCodesUndefined	State Waste Codes are Not Defined

		for this State
Validation	E_InvalidStateCode	Provided State Code is invalid
System	E_SystemError	Message describing system error

### *Error Response Example*

```
{
  "code": "E_InvalidStateCode ",
  "message": "Provided State Code was not Found",
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}
```

## **management-method-codes**

### *Description*

Returns the list of Management Method Codes and Management Method Code Descriptions

### *Service Type*

RCRAInfo Lookup Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/lookup/management-method-codes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/management-method-codes

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 1.1. System will check if the User has the Site Manager permission for any Site
  - 1.2. If the User does not have permission the System will stop the processing and will generate the following error:

- E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
- 3.1. If the request was completed the system will return JSON containing the list of Management Method Codes and Management Method Code Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing code, message, error id and error date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

(Note: The example does not represent complete list of all Management Method Codes and Management Method Code Descriptions)

```
[
  {
    "code": "H061",
    "description": "FUEL BLENDING"
  },
  {
    "code": "H040",
    "description": "INCINERATION"
  },
  {
    "code": "H020",
    "description": "SOLVENTS RECOVERY"
  },
  {
    "code": "H132",
    "description": "LANDFILL OR SURFACE IMPOUNDMENT"
  }
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

### Error Response Example

```
{
  "code": " E_IndustryPermissions ",
  "message": " The user does not have Industry permissions for any Site ",
```

```

    "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
    "date" : "2017-06-23T23:15:45.095+0000"
}

```

## waste-minimization-codes

### Description

Returns the list of Waste Minimization Codes and Waste Minimization Code Descriptions

### Service Type

RCRAInfo Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/lookup/waste-minimization-codes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/waste-minimization-codes

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 1.3. System will check if the User has the Site Manager permission for any Site
  - 1.4. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If the Request was completed the system will return JSON containing the list of Waste Minimization Codes and Waste Minimization Code Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing code, message, error id and error date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

```
[
  {
    "code": "X",
    "description": "No waste minimization efforts were implemented"
  },
  {
    "code": "N",
    "description": "Efforts economically or technically impracticable"
  },
  {
    "code": "S",
    "description": "Began to ship waste off-site for recycling"
  },
  {
    "code": "R",
    "description": "Recycling on-site was implemented"
  },
  {
    "code": "Y",
    "description": "Waste minimization efforts were successful"
  },
  {
    "code": "A",
    "description": "Cont. initiative to reduce qty and/or toxicity"
  },
  {
    "code": "B",
    "description": "Cont. initiative to recycle waste on- or off-site"
  },
  {
    "code": "C",
    "description": "Impl. new initiative to reduce qty and/or toxicity"
  },
  {
    "code": "D",
    "description": "Impl. new initiative to recycle on- or off-site"
  },
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

### *Error Response Example*

```
{  
  
  "code": " E_IndustryPermissions ",  
  "message": " The user does not have Industry permissions for any Site ",  
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date": "2017-06-23T23:15:45.095+0000"  
}
```

## **ports-of-entry**

### *Description*

Returns the list of import Ports of Entry by City, State name, and State code

### *Service Type*

RCRAInfo Lookup Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/lookup/ports-of-entry
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/lookup/ports-of-entry

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 1.5. System will check if the User has the Site Manager permission for any Site
  - 1.6. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Port of Entry cities, State Codes, and State Names (Description)
  - 3.2. If any errors were encountered during processing the system returns JSON containing:



- error: containing code, message, error id and error date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

(Note: The example does not represent complete list of all Ports)

```
[
  {
    "cityPort": "ANCHORAGE",
    "state": {
      "code": "AK",
      "name": "ALASKA"
    }
  },
  {
    "cityPort": "PELICAN",
    "state": {
      "code": "AK",
      "name": "ALASKA"
    }
  }
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
System	E_SystemError	Message describing system error

### Error Response Example

```
{
  "code": " E_IndustryPermissions ",
  "message": " The user does not have Industry permissions for any Site ",
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}
```

## Emanifest Data Services

### manifest-tracking-numbers

#### Description

Returns the list of Manifest Tracking Numbers for all Manifests stored in the system for the provided Site Id. The service won't return Manifests which are in Draft status

#### Service Type

Emanifest Data Service.

#### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- Site Id: Site Id to pull Manifest Tracking Numbers for

#### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/manifest-tracking-numbers/CAT080025711
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/manifest-tracking-numbers/CAT080025711

#### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 1.1. System will check if the User has Site Manager (Industry) permissions for the provide Site Id
  - 1.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_SitePermissions: The user does not have permissions for
3. The system will process the request
  - 3.1. The system will check if provided Site Id has valid format. Valid Site Id format shall be compliant with following rules:
    - Two Letter Activity Location Code + Single alphanumeric Character + Up to 9 alphanumeric characters
  - 3.2. If provided Site Id is invalid the system will stop processing and generate the following error:

- E\_InvalidSiteId: Provided Site Id has invalid format
- 3.3. The System will check if Site with provided Site Id is registered in RCRAInfo
- 3.4. If Site with provided Site Id is not registered in RCRAInfo the system will stop processing and generate the following error:
  - E\_SiteIsNotFound: Site with Provided Site Id is not Found
- 4. The System returns the response
  - 4.1. If the System found manifests for the provided Site Id it returns JSON containing the list of Manifest Tracking Numbers
  - 4.2. If no manifests were found for the provided Site Id the system returns JSON containing:
    - empty list
  - 4.3. If any system errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id, and error date

### Response JSON Schema

"values.json"

### Return Examples

Completed Response Example

```
[
  "100001380ELC",
  "100001442ELC",
  "100001534ELC"
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_InvalidSiteId	Provided Site Id has invalid format
Validation	E_SiteIsNotFound	Site with Provided Site Id is not Found
System	E_SystemError	Message describing system error

### Error Return Examples

Authorization Error Return Example

```
{
  "code": "E_InvalidStateCode ",
  "message": "The user does not have Industry permissions for any Site",
  "errorId": "E_IndustryPermissions",
  "date": "2017-07-20T15:00:00Z"
}
```

```

    "message": "Provided State Code was not Found",
    "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
    "date": "2017-06-23T23:15:45.095+0000"
  }

```

#### *Validation Error Return Example*

```

{
  "code": "E_InvalidSiteId",
  "message": "Provided Site Id has invalid format",
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}

```

### **(GET) manifest**

#### *Description*

Returns the Manifest's latest version data associated with the provided Manifest Tracking Number. The service always returns Manifest data and optionally returns Manifest attachments. For the "Image" manifests submitted via mail the service will return the manifest version according to the following rules:

- If PPC status of the latest manifest version is either "PendingDataEntry" or "DataQaCompleted" this version will be returned by the service.
- If PPC status of the latest manifest version is either "Draft" or "DataEntryInProgress" or "PendingDataQc" or "PendingDataQa" the manifest version will not be returned.

For the "Image" manifests submitted by industry the service will return the latest version of the manifest which has either manifest status "ReadyForSignature", "Signed" or "Corrected" and PPC status "PendingDataEntry" or "DataQaCompleted"

If the Manifest contains an attachment(s) and the attachment option is specified the following documents will be returned:

1. PDF Document containing printed, scanned and manually signed Manifest form (Printed Document). Note that this document is not available for "FullElectronic" or "Hybrid" submission types.
2. HTML Document(s) containing human readable representation of the Manifest data signed electronically - Copy Of Record document (COR). Note that the system generates this Document(s) at the time when the users (Generator, Transporters, TSDF) are electronically signing the manifest. In order to identify what party the COR document was generated by the following naming convention is used:
  - COR document generated when Generator signed the manifest : <cor-g.html>
  - COR document generated when Generator signed the manifest for rejection (If shipment was returned back to the original Generator): <cor-g-reject.html>
  - COR document generated when Transporter(s) signed the manifest: <cor-t-{transporter order}.html>
  - COR document generated when TSDF) signed the manifest: <cor-tsdf.html>

3. PDF Document containing form 8700-22 representation of the Manifest Data.

Following document metadata JSON elements will be presented in Manifest JSON if the Manifest contains attachments:

- Printed Document metadata example:

```
"printedDocument": {  
  "name": "user provided document name.pdf",  
  "size": 500,  
  "mimeType": "APPLICATION_PDF"  
}
```

- COR Document (Human Readable Document) signed by TSDF metadata example:

```
"humanReadableDocument": {  
  "name": "cor-tsdf.html",  
  "size": 500,  
  "mimeType": "TEXT_HTML"  
}
```

- Form 2050 Document metadata example:

```
"formDocument": {  
  "name": "form-8700-22.pdf",  
  "size": 7000,  
  "mimeType": "APPLICATION_PDF"  
}
```

All documents will be zipped and zip file will be returned as a multipart binary content. See sample client implementation for details

### *Service Type*

Emanifest Data Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- Manifest Tracking Number

### *Service Invocation Example without Attachments*

- Production: <Production server url>/rest/api/v1/emanifest/manifest/100001380ELC
- PreProduction/ Test: <PreProduction/Test server url>/rest/api/v1/emanifest/manifest/100001380ELC

### *Service Invocation Example with Attachments*

- Production: <Production server url>/rest/api/v1/emanifest/manifest/100001380ELC/attachments
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/manifest/100001380ELC/attachments

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:

- E\_SecurityApiTokenInvalid: Invalid Security Token
- 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
  - E\_SecurityApiTokenExpired: Security Token is Expired
- 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
  - E\_SecurityApiInvalidStatus: This API Id is no longer active
- 2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
- 3. The system will process the request
  - 3.1. The system will check if the provided Manifest Tracking Number is valid and in the system.
    - 3.1.1. Manifest Tracking Number shall be compliant with following rules:
      - Nine numeric characters + valid three character Manifest Tracking Suffix.
    - 3.1.2. If provided Manifest Tracking Number does not have valid format the processing will be stopped and system will generate the following error:
      - E\_InvalidManifestTrackingNumber: Provided Manifest Tracking Number has invalid format
    - 3.1.3. If Manifest with provided Manifest Tracking Number is not in the system the processing will be stopped and system will generate the following error:
      - E\_ManifestTrackingNumberNotFound: Provided Manifest Tracking Number was not found
  - 3.2. The system will obtain the Manifest for the provided Manifest Tracking Number.
  - 3.3. The system will check if the user has Industry Permissions for the Generator Site ID or TSDF Site ID provided on the manifest.
  - 3.4. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_SitePermissions: The user does not have Industry Permissions for the Generator Site or TSDF Site
  - 3.5. The System generates JSON containing obtained Manifest
- 4. On success the system returns following response:
  - generated JSON containing obtained Manifest
  - if attachment indicator was specified and Manifest contains attachments all or some following documents will be zipped and returned as a multipart binary content:
    - Printed Document
    - COR document(s)
    - Form 2050
- 5. If any system errors were encountered during processing the system will return:
  - error: containing error code, error message, error id and error date

### *Response JSON Schema*

[emanifest.json](#)

### Completed Response Example

```
{
  "createdDate" : "2017-10-28T05:53:13.581+0000",
  "updatedDate" : "2017-10-28T05:57:33.552+0000",
  "manifestTrackingNumber" : "100000630CTN",
  "status" : "Corrected",
  "submissionType" : "DataImage5Copy",
  "originType" : "Service",
  "shippedDate" : "2017-10-28T04:00:00.000+0000",
  "receivedDate" : "2017-10-28T04:00:00.000+0000",
  "certifiedDate" : "2017-10-28T05:57:33.550+0000",
  "certifiedBy" : {
    "firstName" : "John",
    "lastName" : "Smith",
    "userId" : "jsmith@abc.com"
  },
  "generator": {
    "epaSiteId": "VAX999999999",
    "name": "GENERATOR SITE NAME",
    "registered":true,
    "mailingAddress": {
      "address1": "123 X STREET",
      "city": "BEDFORD",
      "state": {
        "code": "MA"
      },
      "country": {
        "code": "US"
      },
      "zip": "22222"
    },
    "siteAddress": {
      "address1": "123 Main Drive",
      "address2": "",
      "city": "PETERSBURG",
      "state": {
        "code": "VA"
      },
      "country": {
        "code": "US"
      },
      "zip": "23803"
    },
    "contact": {
      "firstName": "John",
      "middleInitial": "C",
      "lastName": "Smith",
      "phone": {
        "number": "703-208-5674",
        "extension": "3"
      }
    }
  }
}
```

```

    },
    "emergencyPhone": {
      "number": "703-208-5674",
      "extension": "123"
    },
    "paperSignatureInfo": {
      "printedName": "John C Smith",
      "signatureDate": "2017-06-16T17:41:44.782+0000"
    }
  },
  "transporters": [
    {
      "epaSiteId": "CAX000171454",
      "name": "transporter",
      "mailingAddress": {
        "address1": "123 a st",
        "city": "city",
        "state": {
          "code": "CA",
          "name": "California"
        },
        "country": {
          "code": "US",
          "name": "USA"
        },
        "zip": "00000"
      },
      "siteAddress": {
        "address1": "123 a st",
        "city": "city",
        "state": {
          "code": "CA",
          "name": "California"
        },
        "country": {
          "code": "US",
          "name": "USA"
        },
        "zip": "00000"
      },
      "registered": true,
      "contact": {
        "firstName": "a",
        "middleInitial": "a",
        "lastName": "a",
        "phone": {
          "number": "000-000-0000",
          "extension": "0"
        },
        "email": "-@-.-",
        "companyName": "a"
      }
    }
  ]
}

```



```

    },
    "emergencyPhone": {
      "number": "000-000-0000",
      "extension": "0"
    },
    "paperSignatureInfo": {
      "printedName": "a",
      "signatureDate": "a"
    },
    "order": 1
  }
],
"designatedFacility": {
  "epaSiteId": "CA5555555555",
  "name": "TSDF SITE NAME",
  "registered": true,
  "mailingAddress": {
    "address1": "123 Ave Y",
    "city": "WALL",
    "state": {
      "code": "CA"
    },
    "country": {
      "code": "US"
    },
    "zip": "93524"
  },
  "siteAddress": {
    "streetNumber": "",
    "address1": "456 N. Z BLVD",
    "city": "WALL",
    "state": {
      "code": "CA"
    },
    "country": {
      "code": "US"
    },
    "zip": "93524"
  },
  "contact": {
    "firstName": "John",
    "middleInitial": "C",
    "lastName": "Smith",
    "phone": {
      "number": "703-208-5674",
      "extension": "3"
    }
  },
  "emergencyPhone": {
    "number": "703-208-5674"
  }
},

```

```

        "electronicSignatureInfo": {
            "signer": {
                "firstName": "a",
                "lastName": "a",
                "userId": "a"
            },
            "signatureDate": "a",
            "humanReadableDocument": {
                "name": "cor-tsdf.html",
                "size": 500,
                "mimeType": "TEXT_HTML"
            }
        }
    },
    "wastes": [{
        "dotHazardous": true,
        "dotInformation": {
            "idNumber": {
                "code": "UN3164"
            },
            "printedDotInformation": "UN3164, Waste Articles, pressurized pneumatic or hydraulic
containing non-flammable gas, 2.2"
        },
        "quantity": {
            "containerNumber": 1,
            "containerType": {
                "code": "CM",
                "description": "Metal boxes, cartons, cases (including roll offs)"
            },
            "quantity": 1,
            "unitOfMeasurement": {
                "code": "K",
                "description": "Kilograms"
            }
        },
        "hazardousWaste": {
            "federalWasteCodes": [{
                "code": "D001",
                "description": "IGNITABLE WASTE"
            }],
            "tsdfStateWasteCodes": [],
            "generatorStateWasteCodes": []
        },
        "additionalInfo": {
            "comments": []
        },
        "lineNumber": 1,
        "br": false,
        "pcb": false,
        "pcbInfos": [],
        "discrepancyResidueInfo": {

```

```

    "wasteQuantity": false,
    "wasteType": false,
    "residue": false
  },
  "epaWaste": false,
  "managementMethod" : {
    "code" : "H020",
    "description" : "SOLVENTS RECOVERY"
  }
},
"additionalInfo" : {
  "comments" : [ ]
},
"rejection": false,
"import": false,
"printedDocument" : {
  "name" : "02-10-2017.pdf",
  "size" : 716174,
  "mimeType" : "APPLICATION_PDF"
},
"correctionInfo": {
  "epaSiteId": "VA7800020888",
  "versionNumber": 2,
  "active": true,
  "electronicSignatureInfo": {
    "signer": {
      "firstName": "adam",
      "lastName": "user",
      "userId": "auserid"
    }
  },
  "signatureDate": "2018-09-22T02:19:08.549+0000",
  "humanReadableDocument": {
    "name": "human-readable.html",
    "size": 158420,
    "mimeType": "TEXT_HTML"
  }
}
},
"ppcStatus": "PendingDataEntry"
}

```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_InvalidManifestTrackingNumber	Provided Manifest Tracking Number has invalid format

Validation	E_ManifestTrackingNumberNotFound	Provided Manifest Tracking Number was not found
System	E_SystemError	Message describing system error

#### *Validation Error Return Example*

```
{
  "code": "E_ManifestTrackingNumberNotFound ",
  "message": "Provided Manifest Tracking Number is Not Found"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}
```

### site-ids

#### *Description*

Returns the list of all Site Ids for the provided State Code and Site Type (Generator, Transporter, TSDF, Broker).

#### *Service Type*

Emanifest Data Service.

#### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request
- State Code
- Site Type:
  - "TsdF"
  - "Generator"
  - "Transporter"
  - "Broker"

#### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/site-ids/CA/Transporter
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/site-ids/CA/Transporter

#### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired

- 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
  - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the user has the Site Manager permission for any site
  - 2.2. If the user does not have permission the system will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system will process the request
  - 3.1. The system will check if provided Site Type is valid (Generator, Transporter, Tsdf, Broker). If the provided Site Type is invalid the processing will be stopped and system will generate the following error:
    - E\_InvalidSiteType: Provided Site Type is invalid
  - 3.2. The system will check if provided State Code is valid. If provided State Code is invalid the processing will be stopped and system will generate the following error:
    - E\_InvalidStateCode: Provided State Code is invalid
4. The System returns the response
  - 4.1. If site ids were found for the State Code and Site Type combination the system returns a list of site Ids
  - 4.2. If no sites were found the system returns JSON containing following information:
    - Empty list
  - 4.3. If any authentication, authorization, validation, or system error was encountered the system returns JSON containing:
    - error: containing error code, error message, error id, error date

### Response JSON Schema

"values.json"

### Completed Response Example

```
[
  "CAD009999999",
  "CAD009999995",
  "CAD009999998",
  "CAD009999997"
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_InvalidStateCode	Provided State Code is invalid
Validation	E_InvalidSiteType	Provided Site Type is invalid

System	E_SystemError	Message describing system error
--------	---------------	---------------------------------

#### Error Response Example

```
{
  "code": "E_InvalidStateCode ",
  "message": "Provided State Code is invalid"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}
```

## search

### Description

Returns the list of Manifest Tracking Numbers for all Manifests stored in the system which matches the provided search criteria. The service can be used by both States and Industry.

### Service Type

Emanifest Data Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

The following service parameters will be passed as JSON compliant to the JSON schema defined in “search-manifest.json”

- stateCode: Valid State Code. This is one of two Mandatory Parameters. Either stateCode or siteld shall be provided.
- siteld: TSDF, Generator, or Transporter Site Id. This is one of two Mandatory Parameters. Either stateCode or siteld shall be provided.
- siteType: The type of the site (Generator, Transporter, TSDF) which will be used for the search. If the site location address state code is equal to the provided stateCode then this search criteria is a match. One of the following values may be provided:
  - "Generator"
  - "Transporter"
  - "Tsdf"

If a parameter is not provided then the search will be performed for all Generators and Transporters and TSDFs. This is an optional Parameter.

- status: Manifest Status. Following values can be provided:
  - "Pending"
  - "Scheduled"
  - "InTransit"
  - "ReadyForSignature"
  - "Signed"
  - "SignedComplete"

- "Corrected"
- "UnderCorrection"

If the parameter is provided the manifests which are in the provided status will match the search criteria. If this parameter is not provided manifests which are in any of the above statuses will match the search criteria. This is an optional parameter

- **dateType:** type of the Date which will be used for the date range search. The following values can be provided:

- "ShippedDate"
- "ReceivedDate"
- "CertifiedDate"
- "UpdatedDate"

The service will perform a date range search when the date type, startDate and endDate parameters are provided. This is an optional parameter.

- **startDate:** Starting date/time of the date range search. YYYY-MM-DDThh:mm:ss.STZD date/time format shall be provided. This is an optional parameter.
- **endDate:** Ending date/time of the date range search. YYYY-MM-DDThh:mm:ss.STZD date/time format shall be provided. This is an optional parameter.

### *Request JSON Schema*

[search-manifest.json](#)

### *Service Parameters JSON examples*

1. The service will use the following example to search for all manifests where the Generator site address state code is equal to "MD" and have "Scheduled" status:

```
{
  "stateCode": "MD",
  "status": "Scheduled",
  "siteType": "Generator",
}
```

2. The service will use the following example to search for all manifests where either the Generator or Transporter(s) or TSDf site address state code is equal to "TX" and have been shipped in the Date range between March 6, 2018 9:57:33pm and March 15, 2018 9:14:44pm:

```
{
  "stateCode": "TX",
  "dateType": "CertifiedDate",
  "startDate": "2018-03-06T21:57:33",
  "endDate": "2018-03-15T21:14:44"
}
```

3. The service will use the following example to search for all manifests where siteld is provided and the manifest status is "Signed"

```
{
  "siteld": "MD000345",
  "status": "Signed"
}
```

}

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/search
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/search

#### Request Body

search-manifest JSON

### *Sequence of steps*

1. The System will validate the Security Token
  - 1.1. If the Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token has expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If the Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system will process the request
  - 3.1. If stateCode is not provided and siteId is not provided the service will stop processing and generates following error:
    - E\_SearchParameterRequiredStateCodeorSiteId: Missing required search parameter State Code or Site Id
  - 3.2. If an invalid stateCode is provided the service will stop processing and generates the following error:
    - E\_InvalidStateCode: Invalid State Code is Provided
  - 3.3. If provided Site Id is invalid the system will stop processing and generate the following error:
    - E\_InvalidSiteId: Provided Site Id has invalid format
4. E\_InvalidSiteId: Provided Site Id has invalid format
  - 4.1. If Site with provided Site Id is not registered in RCRAInfo the system will stop processing and generate the following error:
    - E\_SiteIsNotFound: Site with Provided Site Id is not Found
  - 4.2. If the provided status is invalid the system will stop processing and generates a schema error.
  - 4.3. If the provided dateType is invalid the system will stop processing and generates a schema error.



- 4.4. If the provided startDate is invalid the system will stop processing and generates a schema error.
- 4.5. If the provided endDate is invalid the system will stop processing and generates a schema error.
5. System returns the response
  - 5.1. If the System found manifests for the provided search criteria it returns JSON containing the list of obtained Manifest Tracking Numbers
  - 5.2. If no manifests were found for the provided State code the system returns JSON containing:
    6. empty list
    - 6.1. If any system errors were encountered during the processing the system returns JSON containing:
      7. error: containing error code, error message, error id, and error date

### Response JSON Schema

"values.json"

### Return Examples

Completed Response Example

```
[
  "100001380ELC",
  "100001442ELC",
  "100001534ELC"
]
```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Validation	E_SearchParameterRequiredStateCodeOrSiteId	Missing required search parameter State Code or Site Id
Validation	E_InvalidSiteId	Provided Site Id has invalid format
Validation	E_SiteIsNotFound	Site with Provided Site Id is not Found
Validation	E_InvalidStateCode	Invalid State Code is Provided
System	E_SystemError	Message describing system error

## Error Return Examples

### Validation Error Return Example

```
{  
  
  "code": "E_InvalidStateCode ",  
  "message": "Provided State Code is Invalid",  
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date" : "2017-06-23T23:15:45.095+0000"  
}
```

## manifest-correction-details

### Description

The service returns information about all manifest correction versions by manifest tracking number. The system will create new manifest versions for both the industry corrections and for the Paper Processing Center (PPC) data processing. PPC data processing will be performed on “Image” manifests which were submitted by Industry via Web or Services and on “Image” manifests which were submitted by mail.

Depending on the manifest status the service can return the following information about the manifest:

- If the manifest status is before “Signed” then no manifest versions associated with the manifest will be returned
- If the manifest status is “Signed” and neither “Corrected” nor “UnderCorrection” versions were created then the service will return information about the “Signed” version of the manifest.
- If the manifest status is “Corrected” then the service will return information about “Signed” version and all “Corrected” versions of the manifest.
- If the manifest status is “UnderCorrection” then the service will return information about the “Signed” version of the manifest, the “UnderCorrection” version and all “Corrected” versions of the manifest (if any “Corrected” versions were created).

Depending on the on manifest Paper Processing Center (PPC) status the service can return the following information about the manifest versions associated with the PPC processing:

- If ppc status is “Draft” or “DataEntryInProgress” or “PendingDataQc” or “PendingDataQa” then no manifest versions associated with PPC processing will be returned

If PPC status is either “PendingDataEntry” or “DataQaCompleted” then the service will return information about the manifest version(s) created for PPC processing.

### Service Type

Emanifest Data Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

- Manifest Tracking Number

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/manifest/get-manifest-correction-details /100001380ELC
- PreProduction/ Test: < PreProduction/ Test server url>/rest/api/v1/emanifest/manifest/get-manifest-correction-details/100001380ELC

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If the Web Security Token is invalid the system stops the processing and generates the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token expired the system stops the and processing generates the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the processing and generates the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 2.2. If the User does not have permission the System will stop the processing and generates the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
3. The system will process the request
  - 3.1. The system will check if the provided Manifest Tracking Number is valid and in the system.
    - 3.1.1. Manifest Tracking Number shall be compliant with following rules:
      - 3.1.1.1. Nine numeric characters + valid three character Manifest Tracking Suffix
      - 3.1.1.2. If the provided Manifest Tracking Number does not have valid format the processing will be stopped and system generates the following error:
        - E\_InvalidManifestTrackingNumber: Provided Manifest Tracking Number has invalid format
      - 3.1.1.3. If the provided Manifest Tracking Number does not have a valid suffix the processing will be stopped and system generates the following error:
        - E\_InvalidManifestTrackingNumberSuffix: Provided Manifest Tracking Number has invalid suffix
    - 3.1.2. If Manifest Tracking Number is not in the system the processing will stop and system generates the following error:
      - E\_ManifestTrackingNumberNotFound: Provided Manifest Tracking Number was not found
  - 3.2. The system will check if the user has Industry Permissions for the Designated Facility, Generator, Alternate TSDF or any of the Transporter Site Id(s) provided on the manifest. If the User does not have permission the system will stop the processing and generates the following error:

- E\_SitePermissions: The user does not have Industry Permissions for either the TSDf Site or Generator Site or Alternate TSDf site or any Transporter site

### 3.3. If the originType == Web or Service the following applies

3.3.1. If the manifest status is before "Signed" the system will stop the processing and return the following error:

- E\_NotInCorrectionEligibleStatus: Manifest does not contain Versions suitable for correction

3.3.2. If the manifest status is "Signed", "UnderCorrection" or "Corrected" and ppcStatus is "DataQaCompleted" then the system will generate JSON containing following entities and fields:

- "Signed" version will contain following entities and fields:
  - status: "Signed"
  - versionNumber: 1
  - active: if the version is the latest corrected version and there is no version "UnderCorrection" then active = true, otherwise active = false
  - electronicSignature: containing
    - signer: containing user information of the signer
      - firstName:
      - lastName:
      - userId:
    - signatureDate:
    - humanReadableDocument: containing
      - name: "human-readable.html",
      - Size:
      - mimeType: "TEXT\_HTML"
  - epaSiteId: epa site id associated with the user who signed the version
  - createdDate: version created date
  - updatedDate: version updated date
  - updatedBy: user id of the last user that updated the version
- "Corrected" versions will contain following entities and fields:
  - status: "Corrected"
  - versionNumber: contains version number starting at 2.
  - active: if the version is the latest corrected version and there is no version "UnderCorrection" then active = true, otherwise active = false
  - electronicSignature: containing
    - signer: containing user information of the signer
      - firstName:
      - lastName:
      - userId:
    - signatureDate:
    - humanReadableDocument: containing
      - name: "human-readable.html",
      - Size:

- mimeType: "TEXT\_HTML"
- o epaSiteId: epa site id associated with the user who signed the version
- o createDate: version created date
- o updatedAt: version updated date
- o updatedBy: user id of the last user that updated the version
- "UnderCorrection" version will contain the following entities and fields:
  - o status: "UnderCorrection"
  - o createDate: version created date
  - o updatedAt: version updated date
  - o updatedBy: user id of the last user that updated the version
- "PendingPpcDataEntry" version will contain the following entities and fields:
  - o status: "PendingPpcDataEntry"
  - o versionNumber: contains version number
  - o createDate: version created date
  - o updatedAt: version updated date
  - o updatedBy: user id of the last user that updated the version
- "PpcDataEntryCompleted" version will contain the following entities and fields:
  - o status: "PpcDataEntryCompleted"
  - o versionNumber: contains version number
  - o createDate: version created date
  - o updatedAt: version updated date
  - o updatedBy: user id of the last user that updated the version

3.4. If the originType == Mail following applies

- 3.4.1. If ppcStatus == Draft or "DataEntryInProgress", "PendingDataQc", "PendingDataQa", the system will stop the processing and return the following error:
    - E\_NotInCorrectionEligibleStatus: Manifest does not contain Versions suitable for correction
  - 3.4.2. If the manifest status either "Signed" or "UnderCorrection" or "Corrected" and ppcStatus is either "PendingDataEntry" or "DataQaCompleted" the system will perform steps identical to the steps described in 3.3.2.
4. On success, the system returns JSON generated in sections 3.3 or 3.4
  5. If any system errors were encountered during processing, the system will return:
    - error: containing error code, error message, error id and error date

### *Response JSON Schema*

[emanifest-correction-details.json](#)

### *Completed Response Example*

```
{
  "manifestTrackingNumber": "111111111ELC",
  "emanifestVersions": [
    {
```

```

    "status": "UnderPpcDataEntry",
    "versionNuber": 3,
    "createdDate": "2018-19-25T17:53:54.944+0000",
    "updatedAt": "2018-20-25T17:53:54.944+0000",
    "updatedBy": "x"
  },
  {
    "status": "UnderCorrection",
    "epaSiteId": "OH000023465",
    "createdDate": "2018-09-25T17:53:54.944+0000",
    "updatedAt": "2018-10-25T17:53:54.944+0000",
    "updatedBy": "c"
  },
  {
    "status": "Corrected",
    "versionNumber": 2,
    "active": false,
    "electronicSignature": {
      "signer": {
        "firstName": "b",
        "lastName": "b",
        "userId": "b"
      },
      "signatureDate": "2018-09-25T17:53:54.944+0000",
      "humanReadableDocument": {
        "name": "human-readable.html",
        "size": 1231,
        "mimeType": "TEXT_HTML"
      }
    },
    "epaSiteId": "MD0000206060",
    "createdDate": "2018-09-25T17:53:54.944+0000",
    "updatedAt": "2018-09-25T17:53:54.944+0000",
    "updatedBy": "b"
  },
  {
    "status": "Signed",
    "versionNumber": 1,
    "active": false,
    "electronicSignature": {
      "signer": {
        "firstName": "a",

```

```

        "lastName": "a",
        "userId": "a"
    },
    "signatureDate": "2018-09-25T17:53:54.944+0000",
    "humanReadableDocument": {
        "name": "human-readable.html",
        "size": 1346671,
        "mimeType": "TEXT_HTML"
    }
},
"epaSiteId": "AK9690330742",
"createdDate": "2018-06-25T17:53:54.944+0000",
"updatedDate": "2018-08-25T17:53:54.944+0000",
"updatedBy": "a"
}
]
}

```

### Errors

Type	code	Description
N/A	E_SecurityApiTokenInvalid	Invalid Security Token
N/A	E_SecurityApiTokenExpired	Security Token is Expired
N/A	E_SecurityApiInvalidStatus	This API Id is no longer active
Authorization	E_IndustryPermissions	The user does not have Industry permissions for any Site
Authorization	E_SitePermissions	The user does not have Industry Permissions for either the TSDF Site or Generator Site or Alternate TSDF site or any Transporter site
Validation	E_InvalidManifestTrackingNumber	Provided Manifest Tracking Number has invalid format
Validation	E_InvalidManifestTrackingNumberSuffix	Provided Manifest Tracking Number has invalid suffix
Validation	E_ManifestTrackingNumberNotFound	Provided Manifest Tracking Number was not found
Validation	E_NotInCorrectionEligibleStatus	Manifest does not contain Versions suitable for correction
System	E_SystemError	Message describing system error

### *Validation Error Return Example*

```
{
  "code": "E_ManifestTrackingNumberNotFound ",
  "message": "Provided Manifest Tracking Number Was Not Found"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}
```

## **manifest-correction-version**

### *Description*

The Get Manifest Correction Version service returns the data associated with a specific Manifest correction version based on the provided input parameters. The service also will return the manifest version(s) created via the PPC processing. The following fields in the returned JSON specify correction details:

- Emanifest.status: The following values can be returned:
  - “Signed”: version signed by the TSDf
  - “Corrected”: version was corrected and electronically signed by either a TSDf or Generator or Transporter user
  - “UnderCorrection”: version is under correction and has not been electronically signed
- Emanifest.ppcStatus: The following values can be returned:
  - “PendingDataEntry”: this status will be returned for the Image manifests submitted by industry or mail manifests which have not been processed by the PPC
  - “DataQaCompleted”: this status will be returned for the Image manifests which have been processed by the PPC
- Emanifest.correctionInfo: contains the following correction information:
  - versionNumber: Contains Manifest version number. Manifest versions will be created only for the manifest which are in the “Corrected” or “Signed” statuses. If the version is in the “UnderCorrection” status the version number is not assigned.
  - electronicSignature: containing
    - signer: containing user information of the signer
      - firstName:
      - lastName:
      - userId:
    - signatureDate:
    - humanReadableDocument: containing
      - name: "human-readable.html",
      - Size:
      - mimeType: "TEXT\_HTML"
  - active: Indicates if the Manifest version is active or outdated for the industry.
  - ppcActive: Indicates if the Manifest version is active or outdated for the PPC
  - epaSiteId: epa site id associated with the user who signed the version.



The service optionally returns Manifest attachments. If the Manifest contains an attachment(s) and the attachment option is specified, the following documents will be returned:

PDF Document containing printed, scanned and manually signed Manifest form (Printed Document). Note that this document is not available for the “FullElectronic” or “Hybrid” submission types.

HTML Document(s) containing human readable representation of the Manifest data signed electronically - Copy Of Record document (COR). Note that the system generates this Document(s) at the time when the users (Generator, Transporters, TSDF) are electronically signing the manifest. In order to identify what party the COR document was generated by the following naming convention is used:

- COR document generated when Generator signed the manifest : <cor-g.html>
- COR document generated when Generator signed the manifest for rejection (If shipment was returned back to the original Generator): <cor-g-reject.html>
- COR document generated when Transporter(s) signed the manifest: <cor-t-{transporter order}.html>
- COR document generated when TSDF signed the manifest: <cor-tsdf.html>

PDF Document containing form 8700-22 representation of the Manifest Data.

The following document metadata JSON elements will be presented in Manifest JSON if the Manifest contains attachments:

- Printed Document metadata example:

```
"printedDocument": {  
  "name": "user provided document name.pdf",  
  "size": 500,  
  "mimeType": "APPLICATION_PDF"  
}
```

- COR Document (Human Readable Document) signed by TSDF metadata example:

```
"humanReadableDocument": {  
  "name": "cor-tsdf.html",  
  "size": 500,  
  "mimeType": "TEXT_HTML"  
}
```

- Form 2050 Document metadata example:

```
"formDocument": {  
  "name": "form-8700-22.pdf",  
  "size": 7000,  
  "mimeType": "APPLICATION_PDF"  
}
```

All documents will be zipped and zip file will be returned as a multipart binary content. See sample client implementation for details.

### *Service Type*

Emanifest Data Service

### *Request JSON Schema*

[emanifest-correction-version.json](#)

## Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.  
The following service parameters will be passed as JSON compliant to the JSON schema defined in “emanifest-correction-version.json”
- Manifest Tracking Number: Required parameter. If no other parameters are provided then the service will return the latest Manifest Version. It can be either “Signed” or latest “Corrected” or “UnderCorrection” version of the manifest.
- Status: The following values can be provided:
  - “Signed”: The “Signed” version of the manifest will be returned
  - “UnderCorrection”: The “UnderCorrection” version of the manifest will be returned
  - “Corrected”: The latest “Corrected” version of the manifest will be returned
- PPC Status: The following values can be provided:
  - “PendingDataEntry”: the latest manifest version which has not been processed by the PPC will be returned
  - “DataQaCompleted”: the latest manifest version which has been processed by PPC will be returned
- Version Number: Specified version of the manifest will be returned. If the provided status is “Under Correction” this parameter will be ignored.

## Service Invocation Example

### Service Invocation Example without Attachments

- Production: <Production server url>/rest/api/v1/emanifest/manifest/emanifest-correction-version
- PreProduction/ Test: < PreProduction/Test server url>/rest/api/v1/emanifest/manifest/emanifest-correction-version

### Service Invocation Example with Attachments

- Production: <Production server url>/rest/api/v1/emanifest /manifest/correction-version/attachments
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/manifest/correction-version/attachments

### Request Body:

emanifest-correction-version JSON

## Request JSON Schema

emanifest-correction-version.json

## Service Input Parameters Examples

1. If only the manifestTrackingNumber is provided then the latest manifest version will be returned. It can be either the “Signed” or latest “Corrected” or “UnderCorrection” version of the manifest.

{

- ```
"manifestTrackingNumber": "100008369ELC"
}
```
2. If the following parameters are provided then the “UnderCorrection” version will be returned.
 

```
{
    "manifestTrackingNumber": "100008369ELC",
    "status": "UnderCorrection"
}
```
  3. If the following parameters are provided then the latest (active) “Corrected” version will be returned.
 

```
{
    "manifestTrackingNumber": "100008369ELC",
    "status": "Corrected"
}
```
  4. If the following parameters are provided then the 2<sup>nd</sup> “Corrected” version will be returned
 

```
{
    "manifestTrackingNumber": "100008369ELC",
    "version": 2
}
```
  5. If the following parameters are provided then the latest manifest version which have not been processed by PPC will be returned:
 

```
{
    "manifestTrackingNumber": "100008369JJK",
    "ppcStatus": "PendingDataEntry"
}
```
  6. If the following parameters are provided then the latest manifest version which have been processed by PPC will be returned:
 

```
{
    "manifestTrackingNumber": "100008369JJK",
    "ppcStatus": "DataQaCompleted"
}
```

### ***Sequence of steps***

1. The System will validate Security Token
  - 1.1. If the Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If the Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.

- 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
- 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
  - E\_IndustryPermissions: The user does not have industry permissions for any Site
3. The system will process the request
  - 3.1. If the Manifest Tracking Number is not provided the system will stop processing and generate the following error.
    - E\_ParameterRequiredManifestTrackingNumber: Required manifest tracking number is missing
  - 3.2. The system will check if the provided Manifest Tracking Number is valid and in the system. The Manifest Tracking Number shall be compliant with following rules: Nine numeric characters + valid three character Manifest Tracking Suffix.
    - 3.2.1.1. If the provided Manifest Tracking Number does not have valid format the processing will be stopped and system will generate the following error:
      - E\_InvalidManifestTrackingNumber: Provided Manifest Tracking Number has invalid format
    - 3.2.1.2. If the provided Manifest Tracking Number does not have a valid suffix the processing will be stopped and system generates the following error:
      - E\_InvalidManifestTrackingNumberSuffix: Provided Manifest Tracking Number has invalid suffix
    - 3.2.2. If Manifest Tracking Number is not in the system the processing will stop and system will generate the following error:
      - E\_ManifestTrackingNumberNotFound: Provided Manifest Tracking Number was not found
  - 3.3. The system will check if the user has Industry Permissions for the Generator Site or TSDF Site or Alternate TSDF site or any Transporter site contained in the manifest.
  - 3.4. If the User does not have permission, the system will stop the processing and will generate the following error:
    - E\_SitePermissions: The user does not have Industry Permissions for the Generator Site or TSDF Site or Alternate TSDF site or any Transporter site contained in the manifest
  - 3.5. If an invalid status is provided, the system will stop the processing and will generate the following error:
    - E\_Status: Invalid Status is Provided
  - 3.6. If the manifest is in earlier than "Signed" status, the system will stop the processing and will generate the following error:
    - E\_NotInCorrectionEligibleStatus: Manifest does not contain Versions suitable for correction
  - 3.7. If the provided status is "UnderCorrection" and the manifest does not have a version with the "UnderCorrection" status the system will stop the processing and will generate the following error:
    - E\_NoVersionForUnderCorrectionStatus: Manifest does not contain the Version in 'UnderCorrection' status
  - 3.8. If the provided status is "Corrected" and manifest does not have a version with the "Corrected" status, the system will stop the processing and will generate the following error:

- E\_NoVersionForCorrectedStatus: Manifest does not contain the Version in 'Corrected' status

3.9. If the provided ppcStatus is “PendingDataEntry” and manifest does not have a version with the “PendingDataEntry” ppcStatus, the system will stop the processing and will generate the following error:

- E\_NoVersionForPendindDataEntryPpcStatus: Manifest does not contain the Version in “PendingDataEntry” ppc status

3.10. If the provided ppcStatus is “DataQaCompleted” and manifest does not have a version with the “DataQaCompleted” ppcStatus, the system will stop the processing and will generate the following error:

- E\_NoVersionForDataQaCompletedPpcStatus: Manifest does not contain the Version in “DataQaCompleted” ppc status

4. On success the system returns following response:

- generated JSON containing obtained Manifest Version
- if using the endpoint that returns attachments and the Manifest Version contains attachments, all or some of the following documents will be zipped and returned as a multipart binary content:
  - Printed Document
  - COR document(s)
  - Form 2050

5. If any system errors were encountered during processing, the system will return:

- error: containing error code, error message, error id and error date

### *Response JSON Schema*

[emanfest.json](#)

### *Completed Response*

Response is identical to the response described for Get Manifest service section

### *Errors*

| Type          | code                       | Description                                                                                                                           |
|---------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                                                                                                |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                                                                                             |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                                                                                                       |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site                                                                              |
| Authorization | E_SitePermissions          | The user does not have Industry Permissions for either the TSDF Site or Generator Site or Alternate TSDF site or any Transporter site |

|            |                                           |                                                                        |
|------------|-------------------------------------------|------------------------------------------------------------------------|
|            |                                           | specified in provided JSON                                             |
| Validation | E_ParameterRequiredManifestTrackingNumber | Required manifest tracking number is missing                           |
| Validation | E_InvalidManifestTrackingNumber           | Provided Manifest Tracking Number has invalid format                   |
| Validation | E_InvalidManifestTrackingNumberSuffix     | Provided Manifest Tracking Number has invalid suffix                   |
| Validation | E_ManifestTrackingNumberNotFound          | Provided Manifest Tracking Number was not found                        |
| Validation | E_Status                                  | Invalid Status is Provided                                             |
| Validation | E_NotInCorrectionEligibleStatus           | Manifest does not contain Versions suitable for correction             |
| Validation | E_NoVersionForUnderCorrectionStatus       | Manifest does not contain the Version in "UnderCorrection" status      |
| Validation | E_NoVersionForCorrectedStatus             | Manifest does not contain the Version in "Corrected" status            |
| Validation | E_NoVersionForPendindDataEntryPpcStatus   | Manifest does not contain the Version in "PendindDataEntry" ppc status |
| Validation | E_NoVersionForDataQaCompletedPpcStatus    | Manifest does not contain the Version in "DataQaCompleted" ppc status  |
| System     | E_SystemError                             | Message describing system error                                        |

#### *Validation Error Return Example*

```
{
  "code": "E_ManifestTrackingNumberNotFound ",
  "message": "Provided Manifest Tracking Number is Not Found"
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}
```

## Emanifest Lookup Services

### printed-tracking-number-suffixes

#### Description

Returns the list of all Printed Manifest Tracking Number suffixes and the Owner Companies

#### Service Type

Emanifest Lookup Service.

#### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

#### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/printed-tracking-number-suffixes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/printed-tracking-number-suffixes

#### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing:
    - list of Printed Manifest Tracking Number Suffixes and Owner Companies
  - 3.4. If any errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id and error date

#### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

```
[
  {
    "code": "ELC",
    "description": "Electronic Manifest"
  },
  {
    "code": "CTN",
    "description": "Nutmeg Environmental"
  },
  {
    "code": "DAT",
    "description": "Databar Inc."
  },
  {
    "code": "FLE",
    "description": "The Flesh Company"
  },
  {
    "code": "GBF",
    "description": "Genoa Business Forms"
  },
  {
    "code": "GRR",
    "description": "Giant Resource Recovery"
  },
  {
    "code": "JJK",
    "description": "J.J. Keller & Associates, Inc."
  },
  {
    "code": "MWI",
    "description": "RR Donnelley"
  },
  {
    "code": "PSC",
    "description": "PSC, LLC "
  },
  {
    "code": "SKS",
    "description": "Safety-Kleen Systems, Inc."
  },
  {
    "code": "VES",
    "description": "Veolia ES Technical Solutions"
  },
  {
    "code": "WAS",
    "description": "Welsh & Associates"
  }
]
```



```

    },
    {
      "code": "SRC",
      "description": "Stericycle"
    }
  ]

```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### System Error Response Example

```

{
  "code": "E_SystemError",
  "message": "System Error Description"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}

```

## proper-shipping-names

### Description

Returns the list of all DOT Proper Shipping Names. Proper Shipping Name Comments and Technical Name Indicators

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/proper-shipping-names
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/proper-shipping-names

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:

- E\_SecurityApiTokenInvalid: Invalid Security Token
- 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
  - E\_SecurityApiTokenExpired: Security Token is Expired
- 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
  - E\_SecurityApiInvalidStatus: This API Id is no longer active
- 2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
- 3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Proper Shipping Names, Proper Shipping Name Comments and Technical Name Indicators
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id, error date

### *Response JSON Schema*

"proper-shipping-names.json"

### *Completed Response Example*

(Note: Example does not display all Proper Shipping Names which will be returned by the service)

```
[
  {
    "psn": "1,1,1-Trifluoroethane or Refrigerant gas, R 143a",
    "technicalNameIndicator": false
  },
  {
    "psn": "1,1-Difluoroethane or Refrigerant gas R 152a",
    "technicalNameIndicator": false
  },
  {
    "psn": "1,1-Difluoroethylene or Refrigerant gas R 1132a",
    "technicalNameIndicator": false
  },
  {
    "psn": "Carbamate pesticides, liquid, toxic, flammable",
    "psnComments": [
      "flash point not less than 23 degrees C"
    ],
    "technicalNameIndicator": true
  },
  {
    "psn": "Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid.",
    "psnComments": [
```

```

        "with more than 5 percent free sulfuric acid"
    ],
    "technicalNameIndicator": true
}
]

```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### Authorization Error Response Example

```

{
  "code": "E_IndustryPermissions",
  "message": "The user does not have Industry permissions for any Site"
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}

```

## id-numbers

### Description

Returns the list of all DOT Id Numbers

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/id-numbers
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/id-numbers

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token

- 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
  - E\_SecurityApiTokenExpired: Security Token is Expired
- 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
  - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Id Numbers
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id, error date

### *Response JSON Schema*

"values.json"

### *Completed Response Example*

(Note: Example does not display all ID Numbers which will be returned by the service)

```
[  
  "UN2035",  
  "UN1030",  
  "UN1959",  
  "UN2517",  
  "UN2044",  
  "UN1001",  
  "UN1950",  
  "UN1950",  
  "UN2419",  
  "UN1010",  
  "UN1011",  
  "UN1012",  
  "UN3505",  
  "UN3501",  
  "UN3504",  
  "UN1954",  
  "UN2601",  
  "UN1027",  
  "UN1957",  
  "UN3150"  
]
```

## Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

## Error Response Example

```
{  
  
  "code": "E_IndustryPermissions",  
  "message": "The user does not have Industry permissions for any Site"  
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date": "2017-06-23T23:15:45.095+0000"  
}
```

## id-numbers-by-shipping-name

### Description

Returns the list of Id Numbers by the Proper Shipping Name.

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- Proper Shipping Name

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/id-numbers-by-shipping-name/Phosphorus heptasulfide, free from yellow or white phosphorus
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/id-numbers-by-shipping-name/Phosphorus heptasulfide, free from yellow or white phosphorus

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired

- 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
  - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system process the request
  - 3.1. If the size of provided Proper Shipping Name exceeds 300 characters the system stops processing and generate the following error:
    - E\_InvalidProperShippingName: Invalid Proper Shipping Name
  - 3.2. If no Id Numbers were found the system stops processing and generates the following error:
    - E\_ProperShippingNameNotFound: Proper Shipping Name Not Found
4. The System returns the response:
  - 4.1. If Request was completed the system will return JSON containing:
    - list of Id Numbers
  - 4.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id, error date

### Response JSON Schema

"values.json"

### Completed Response Example

```
[  
  "UN1339",  
  "UN1340",  
  "UN1341"  
]
```

### Errors

| Type          | code                         | Description                                              |
|---------------|------------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid    | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired    | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus   | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions        | The user does not have Industry permissions for any Site |
| Validation    | E_InvalidProperShippingName  | Invalid Proper Shipping Name                             |
| Validation    | E_ProperShippingNameNotFound | Proper Shipping Name Not Found                           |
| System        | E_SystemError                | Message describing system error                          |

### Validation Error Response Example

```
{
```

```
"code": " E_InvalidProperShippingName ",
"message": "Invalid Proper Shipping Name"
"errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
"date" : "2017-06-23T23:15:45.095+0000"
}
```

## proper-shipping-names-by-id-number

### Description

Returns the list of the Proper Shipping Names by Id Number

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- Id Number

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/proper-shipping-names-by-id-number/NA1760
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/proper-shipping-names-by-id-number/NA1760

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system process the request
  - 3.1. The system will check if provided Id Number has valid format.
  - 3.2. Provided Id Number shall be compliant with the following format:
    - Length 6 characters

- First 2 characters either "UN" or "NA" + 4 numeric characters
- 3.3. If provided Id Number has invalid format the system stops processing and generates following error:
- E\_InvalidIdNumber: Invalid Id Number
- 3.4. If no Id Numbers were found the system stops processing and generates following error:
- IdNumberNotFound: Id Number Not Found
4. The system returns the response
- 4.1. If Request was completed the system will return JSON containing the list of Id Numbers
- 4.2. If any errors were encountered during processing the system returns JSON containing:
- error: containing error code, error message, error id, and error date

### Response JSON Schema

"values.json"

### Completed Response Example

```
[
  "Chemical kit",
  "Compounds, cleaning liquid",
  "Compounds, tree killing, liquid or Compounds, weed killing, liquid",
  "Ferrous chloride, solution"
]
```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| Validation    | E_InvalidIdNumber          | Invalid Id Number                                        |
| Validation    | E_IdNumberNotFound         | Id Number Not Found                                      |
| System        | E_SystemError              | Message describing system error                          |

### Validation Error Response Example

```
{
  "code": " E_InvalidIdNumber ",
  "message": "Invalid Id Number"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}
```

## hazard-classes

### Description

Returns the list of all Hazard Classes



### *Service Type*

Emanifest Lookup Service.

### *Parameters*

- Security Token: Security Token received in Authentication

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/lookup/hazard-classes
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/hazard-classes

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Hazard Classes
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - containing error code, error message, error id, and error date

### *Response JSON Schema*

"values.json"

### *Completed Response Example*

(Note: Example does not display all Hazard Classes which will be returned by the service)

```
[  
  "1.2H",  
  "1.2J",  
  "1.2K",  
  "1.2L",
```

```

"1.3C",
"1.3G",
"1.3H",
"1.3J",
"1.3K",
"1.3L",
"1.4B",
"1.4C",
"1.4D",
"1.4E",
"1.4F",
"1.4G",
"1.4S",
"1.5D",
"1.6N",
"combustible liquid"
]

```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### Error Response Example

```

{
  "code": "E_IndustryPermissions",
  "message": "The user does not have Industry permissions for any Site"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}

```

## hazard-class-by-shipping-name-id-number

### Description

Returns the list of Hazard Classes by the combination of Proper Shipping Name and Id Number.

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication
- Proper Shipping Name
- Id Number

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/lookup/hazard-class-by-shipping-name-id-number/Ammonia solution, relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia/UN3318
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/hazard-class-by-shipping-name-id-number/Ammonia solution, relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia/UN3318

### *Parameters Example*

```
{  
  "properShippingName": "Ammonia solution, relative density less than 0.880 at 15  
degrees C in water, with more than 50 percent ammonia ",  
  "idNumber": " UN3318 "  
}
```

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system process the request
  - 3.1. If the size of provided Proper Shipping Name exceeds 300 characters the system stops processing and generate the following error:
    - E\_InvalidProperShippingName: Invalid Proper Shipping Name
  - 3.2. The system will check if provided Id Number has valid format.
  - 3.3. Provided Id Number shall be compliant with the following format:
    - First 2 characters either "UN" or "NA"+ 4 numeric characters
  - 3.4. If provided Id Number has invalid format the system stops processing and generates following error:
    - E\_InvalidIdNumber: Invalid Id Number

3.5. If Proper Shipping Name was not found the system stops processing and generates following error:

- E\_ProperShippingNameNotFound: Proper Shipping Name Not Found

3.6. If Id Number was not found the system stops processing and generates following error:

- E\_IdNumberNotFound: Id Number Not Found

3.7. If combination of Proper Shipping Name and Id Number was not found the system stops processing and generates following error:

- E\_CombinationProperShippingNameIdNumberNotFound: combination of Proper Shipping Name and Id Number was not found

4. The System returns the response:

4.1. If Request was completed the system will return JSON containing the list of Hazard Classes

4.2. If any errors were encountered during processing the system returns JSON containing:

- containing error code, error message, error id, and error date

### Response JSON Schema

"values.json"

### Completed Response Example

```
[  
  "2.2",  
  "2.3"  
]
```

### Errors

| Type          | code                                            | Description                                                     |
|---------------|-------------------------------------------------|-----------------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid                       | Invalid Security Token                                          |
| N/A           | E_SecurityApiTokenExpired                       | Security Token is Expired                                       |
| N/A           | E_SecurityApiInvalidStatus                      | This API Id is no longer active                                 |
| Authorization | E_IndustryPermissions                           | The user does not have Industry permissions for any Site        |
| Validation    | E_InvalidProperShippingName                     | Invalid Proper Shipping Name                                    |
| Validation    | E_InvalidIdNumber                               | Invalid Id Number                                               |
| Validation    | E_ProperShippingNameNotFound                    | Proper Shipping Name Not Found                                  |
| Validation    | E_IdNumberNotFound                              | Id Number not Found                                             |
| Validation    | E_CombinationProperShippingNameIdNumberNotFound | Combination of Proper Shipping Name and Id Number was not found |
| System        | E_SystemError                                   | Message describing system error                                 |

### Error Response Example

```
{
```

```
"code": "E_CombinationProperShippingNameIdNumberNotFound",
"message": "Combination of Proper Shipping Name and Id Number was not found"
"errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
"date" : "2017-06-23T23:15:45.095+0000"
}
```

## packing-groups

### Description

Returns the list of all DOT Packing Groups

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/packing-groups
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/packing-groups

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Packing Groups
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - containing error code, error message, error id, and error date

## Response JSON Schema

"values.json"

## Completed Response Example

```
[  
  "I",  
  "II",  
  "III"  
]
```

## Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

## Error Response Example

```
{  
  
  "code": "E_IndustryPermissions",  
  "message": "The user does not have Industry permissions for any Site"  
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date" : "2017-06-23T23:15:45.095+0000"  
}
```

## packing-groups-by-shipping-name-id-number

### Description

Returns the list of Packing Groups by the combination of Proper Shipping Name and Id Number.

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication
- Proper Shipping Name
- Id Number

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/packing-groups-by-shipping-name-id-number/Ammonia solution, relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia/UN3318

- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/packing-groups-by-shipping-name-id-number/Ammonia solution, relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia/UN3318

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system process the request
  - 3.1. If the size of provided Proper Shipping Name exceeds 300 characters the system stops processing and generate the following error:
    - E\_InvalidProperShippingName: Invalid Proper Shipping Name
  - 3.2. The system will check if provided Id Number has valid format.
  - 3.3. Provided Id Number shall be compliant with the following format:
    - First 2 characters either "UN" or "NA"+ 4 numeric characters
  - 3.4. If provided Id Number has invalid format the system stops processing and generates following error:
    - E\_InvalidIdNumber: Invalid Id Number
  - 3.5. The system will obtain Packing Group for the provided Proper Shipping Name and Id Number
  - 3.6. If Proper Shipping Name was not found the system stops processing and generates following error:
    - E\_ProperShippingNameNotFound: Proper Shipping Name Not Found
  - 3.7. If Id Number was not found the system stops processing and generates following error:
    - E\_IdNumberNotFound: Id Number Not Found
  - 3.8. If combination of Proper Shipping Name and Id Number was not found the system stops processing and generates following error:
    - E\_CombinationProperShippingNameIdNumberNotFound: combination of Proper Shipping Name and Id Number was not found

- 3.9. The System will generate JSON containing obtained Packing Groups
4. The System returns the response:
- 4.1. If Request was completed the system will return JSON containing:
- list of Packing Groups
- 4.2. If any errors were encountered during processing the system returns JSON containing:
- containing error code, error message, error id, and error date

### *Response JSON Schema*

"values.json"

### *Completed Response Example*

```
[  
  "I",  
  "II"  
]
```

### *Errors*

| Type          | code                                             | Description                                                     |
|---------------|--------------------------------------------------|-----------------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid                        | Invalid Security Token                                          |
| N/A           | E_SecurityApiTokenExpired                        | Security Token is Expired                                       |
| N/A           | E_SecurityApiInvalidStatus                       | This API Id is no longer active                                 |
| Authorization | E_IndustryPermissions                            | The user does not have Industry permissions for any Site        |
| Validation    | E_InvalidProperShippingName                      | Invalid Proper Shipping Name                                    |
| Validation    | E_InvalidIdNumber                                | Invalid Id Number                                               |
| Validation    | E_ProperShippingNameNotFound                     | Proper Shipping Name Not Found                                  |
| Validation    | E_IdNumberNotFound                               | Id Number not Found                                             |
| Validation    | E_CombinationProperShippingNameIdNumberNotFound: | Combination of Proper Shipping Name and Id Number was not found |
| System        | E_SystemError                                    | Message describing system error                                 |

### *Error Response Example*

```
{  
  
  "code": "E_CombinationProperShippingNameIdNumberNotFound",  
  "message": "Combination of Proper Shipping Name and Id Number was not found"  
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date": "2017-06-23T23:15:45.095+0000"  
}
```



## emergency-numbers

### Description

Returns the list of all DOT Emergency Response Guidebook Numbers

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/emergency-numbers
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/emergency-numbers

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Emergency Response Guidebook Numbers
  - 4.5. If any errors were encountered during processing the system returns JSON containing:
    - containing error code, error message, error id, and error date

### Response JSON Schema

"values.json"

### Completed Response Example

(Note: Example does not display all Emergency Response Guidebook Numbers which will be returned by the service)

```
[  
  "112",  
  "113",  
  "114",  
  "115",  
  "116",  
  "117",  
  "118",  
  "119",  
  "120",  
  "121",  
  "122",  
  "123"  
]
```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### Error Response Example

```
{  
  "code": "E_IndustryPermissions",  
  "message": "The user does not have Industry permissions for any Site"  
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date": "2017-06-23T23:15:45.095+0000"  
}
```

## emergency-numbers-by-id-number

### Description

Returns DOT Emergency Response Guidebook Numbers by Id Number

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication

- Id Number

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/lookup/emergency-numbers-by-id-number/UN3166
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/emergency-numbers-by-id-number/UN3166

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system process the request
  - 3.1. The system will check if provided Id Number has valid format.
  - 3.2. Provided Id Number shall be compliant with the following format:
    - First 2 characters either "UN" or "NA"+ 4 numeric characters
  - 3.3. If provided Id Number has invalid format the system stops processing and generates following error:
    - E\_InvalidIdNumber: Invalid Id Number
  - 3.4. If Id Number was not found the system stops processing and generates following error:
    - E\_IdNumberNotFound: Id Number Not Found
4. The System returns the response:
  - 4.1. If Request was completed the system will return JSON containing the list of Emergency Response Guidebook Numbers
  - 4.2. If any errors were encountered during processing the system returns JSON containing:
    - containing error code, error message, error id, and error date

### *Response JSON Schema*

"values.json"

### Completed Response Example

```
[  
  "112",  
  "113"  
]
```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| Validation    | E_InvalidIdNumber          | Invalid Id Number                                        |
| Validation    | E_IdNumberNotFound         | Id Number not Found                                      |
| System        | E_SystemError              | Message describing system error                          |

### Error Response Example

```
{  
  
  "code": "E_IndustryPermissions",  
  "message": "The user does not have Industry permissions for any Site"  
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",  
  "date" : "2017-06-23T23:15:45.095+0000"  
}
```

## container-types

### Description

Returns the list of all Container Types and Container Type Descriptions.

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/container-types
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/container-types

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:

- E\_SecurityApiTokenInvalid: Invalid Security Token
- 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
  2. The system will perform User Authorization.
    - 2.1. System will check if the User has the Site Manager permission for any Site
    - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
      - E\_IndustryPermissions: The user does not have Industry permissions for any Site
  3. The System returns the response:
    - 3.1. If Request was completed the system will return JSON containing the list of Container Types and Container Type Descriptions
    - 3.2. If any errors were encountered during processing the system returns JSON containing:
      - error: containing error code, error message, error id and error date

### *Response JSON Schema*

"code-descriptions.json"

### *Completed Response Example*

```
[
  {
    "code": "BA",
    "description": "Burlap, cloth, paper, or plastic bags"
  },
  {
    "code": "DT",
    "description": "Dump truck"
  },
  {
    "code": "CF",
    "description": "Fiber or plastic boxes, cartons, cases"
  },
  {
    "code": "DW",
    "description": "Wooden drums, barrels, kegs"
  },
  {
    "code": "CM",
    "description": "Metal boxes, cartons, cases (including roll offs) "
  },
  {
    "code": "HG",
    "description": "Hopper or gondola cars"
  },
]
```

```

{
  "code": "CW",
  "description": "Wooden boxes, cartons, cases"
},
{
  "code": "TC",
  "description": "Tank cars"
},
{
  "code": "CY",
  "description": "Cylinders"
},
{
  "code": "TP",
  "description": "Portable tanks"
},
{
  "code": "DF",
  "description": "Fiberboard or plastic drums, barrels, kegs"
},
{
  "code": "TT",
  "description": "Cargo tanks (tank trucks)"
},
{
  "code": "DM",
  "description": "Metal drums, barrels, kegs"
}
]

```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### Error Response Example

```

{
  "code": "E_IndustryPermissions",
  "message": "The user does not have Industry permissions for any Site"
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}

```

## quantity-uom

### Description

Returns the list of Quantity UOM Codes and Descriptions

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/quantity-uom
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/quantity-uom

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has the Site Manager permission for any Site
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of Quantity UOM Codes and Descriptions
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id, and error date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

```
[  
  {  
    "code": "P",
```

```

        "description": "Pounds"
    },
    {
        "code": "T",
        "description": "Tons (2000 Pounds) "
    },
    {
        "code": "K",
        "description": "Kilogram"
    },
    {
        "code": "M",
        "description": "Metric Tons (1000 Kilograms) "
    },
    {
        "code": "G",
        "description": "Gallons"
    },
    {
        "code": "L",
        "description": "Liters"
    },
    {
        "code": "Y",
        "description": "Cubic Yards "
    },
    {
        "code": "N",
        "description": "Cubic Meters"
    }
]

```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### Error Response Example

```

{
    "code": "E_IndustryPermissions",
    "message": "The user does not have Industry permissions for any Site"
    "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",

```



```
}  
  "date" : "2017-06-23T23:15:45.095+0000"
```

## load-types

### Description

Returns the list of PCB load types

### Service Type

Emanifest Lookup Service.

### Parameters

- Security Token: Security Token received in Authentication

### Service Invocation Example

- Production: <Production server url>/rest/api/v1/emanifest/lookup/load-types
- PreProduction/ Test: <PreProduction/ Test server url>/rest/api/v1/emanifest/lookup/load-types

### Sequence of steps

1. The System will validate Security Token
  - 1.1. If the Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If the Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager permissions for any Site
  - 2.2. If the User does not have the proper permissions the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have Industry permissions for any Site
3. The System returns the response:
  - 3.1. If Request was completed the system will return JSON containing the list of PCB Load Types (codes and descriptions)
  - 3.2. If any errors were encountered during processing the system returns JSON containing:
    - error: containing error code, error message, error id, and error date

### Response JSON Schema

"code-descriptions.json"

### Completed Response Example

```
[
  {
    "code": "ArticleInContainer",
    "description": "Article in Container"
  },
  {
    "code": "ArticleNotInContainer",
    "description": "Article Not in Container"
  },
  {
    "code": "BulkWaste",
    "description": "Bulk Waste"
  },
  {
    "code": "Container",
    "description": "Container"
  }
]
```

### Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

### Error Response Example

```
{
  "code": "E_IndustryPermissions",
  "message": "The user does not have Industry permissions for any Site"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}
```

## mtn-exist

### Description

The service returns result = true, provided manifest tracking number, manifest status, origin type and submission type if the manifest with provided manifest tracking number exists in the e-Manifest system. The service returns provided manifest tracking number and result = false if the manifest with provided manifest tracking number does not exist in the e-Manifest system or provided manifest tracking number is invalid. It is recommended to invoke the service before

invoking get manifest, update manifest, delete manifest, correct manifest, revoke manifest services

### *Service Type*

Emanifest Data Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- Manifest Tracking Number

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/mtn-exists/100001380ELC
- PreProduction/ Test: <PreProduction/Test server url>/rest/api/v1/emanifest/mtn-exists/100001380ELC

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If Web Security Token is invalid the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If Web Security Token expired the system stops the submission and will generate the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the submission and will generate the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 2.2. If the User does not have permission the System will stop the processing and will generate the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
3. The system will process the request
  - 3.1. If the manifest with provided manifest tracking number exists in the e-Manifest system, the service will generate JSON containing:
    - Manifest tracking number
    - result: true
    - Manifest status
    - Manifest submission type
    - Manifest origin type
  - 3.2. If the manifest with provided manifest tracking number does not exist in the e-Manifest system or provided manifest tracking number is invalid, the service will generate JSON containing:
    - Manifest tracking number

- result: false.

### 3.3. The service returns generated JSON

4. If authentication, authorization or system errors were encountered during processing the system will return:
  - error: containing error code, error message, error id and error date

## Response JSON Schema

mtn-exist-return.json

## Response Examples

Example for the case when manifest with provided manifest tracking number exists

```
{
  "manifestTrackingNumber": "123456789ELC",
  "result": true,
  "status": "Pending",
  "submissionType": "FullElectronic"
}
```

Example for the case when manifest with provided manifest tracking number does not exist

```
{
  "manifestTrackingNumber": "xxcvb4ELC",
  "result": false
}
```

## Errors

| Type          | code                       | Description                                              |
|---------------|----------------------------|----------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                   |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                          |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site |
| System        | E_SystemError              | Message describing system error                          |

## bill-history

### Description

The service returns billing summary information either by the provided billing account or by the combination of the billing account and date range. Following information will be returned about all bills for the provided billing account:

- billingAccount: EPA Site Id
- startMonthYear: Contains month number and year for the date range start, if provided in the request. If only startMonthYear provided the service return bill history from the start until current mm/yyyy. If invalid startMonthYear is provided bill history from inception to the endMonthYear is returned.

- **endMonthYear:** Contains month number and year for the date range end. If only endMonthYear provided the service return bill history from inception to the endMonthYear. If invalid endMonthYear is provided bill history from startMonthYear to the current date is returned.
- **billsInfo:** contains individual bills for the billing account. For each bill it contains following information
  - **billId:** unique bill id
  - **billStatus:** Following values can be returned: "Active", "Unpaid", "InProgress", "ReadyForPayment", "Paid", "SentToCollections", "Credit", "ZeroBalance". Industry will not see bills where billStatus = Active
  - **totalAmount:** if the billStatus is Credit then negative value will be returned. If the billStatus is ZeroBalance then 0 value will be returned
  - **paidBy:** Contains the bill payee user id
  - **paymentType:** Contains bill status, Following values can be returned: "Credit", "Ach", "OutOfBand"
  - **dueDate**
  - **createdDate**
  - **updatedAt**

Returned billIds shall be used to obtain detail bill information via bill service described in section bill

### *Service Type*

Emanifest Data Service.

### *Parameters*

- **Security Token:** Security Token received in Authentication. Will be passed in the Header of the request.

The following service parameters will be passed as JSON compliant to the JSON schema defined in "bill-history-request.json"

- **billingAccount:** Billing account of the facility (EPA Site Id). Required parameter. If date range parameters are not provided the service return bill history from inception to the current date
- **startMonthYear:** Contains month number and year for the date range start. Format 'mm/yyyy'. If only startMonthYear provided the service return bill history from the start until current mm/yyyy. If invalid startMonthYear is provided bill history from inception to the endMonthYear is returned.
- **endMonthYear:** Contains month number and year for the date range end. Format 'mm/yyyy'. If only endMonthYear provided the service return bill history from inception to the endMonthYear. If invalid endMonthYear is provided bill history from startMonthYear to the current date is returned.

### *Service Invocation Example*

- **Production:** <Production server url>/rest/api/v1/emanifest/manifest/get-bill-history
- **PreProduction/ Test:** < PreProduction/ Test server url>/rest/api/v1/emanifest/manifest/get-bill-history

### *Sequence of steps*

6. The System will validate Security Token
  - 6.1. If the Web Security Token is invalid the system stops the processing and generates the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 6.2. If the Web Security Token expired the system stops the and processing generates the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 6.3. If Account was Inactivated after the token was issued the system stops the processing and generates the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
7. The system will perform User Authorization.
  - 7.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 7.2. If the User does not have permission the System will stop the processing and generates the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
8. The system will process the request
  - 8.1. If the provided billingAccount is invalid the processing will be stopped and system will generate the following error:
    - E\_InvalidBillingAccount: Provided Billing Account has invalid format
  - 8.2. If the User does not have permission to the site with provided billing account the system will stop the processing and generates the following error:
    - E\_BillingAccountPermissions: The user does not have Industry Permissions to the site with provided billing account
  - 8.3. If the provided billingAccount is not registered the processing will be stopped and system will generate the following error:
    - E\_NoBillingAccount: Billing account doesn't exist
  - 8.4. If the provided billingAccount is not active the processing will be stopped and system will generate the following error:
    - E\_BillingAccountNotActive : Billing Account is not active
9. If the provided Billing Account is valid the service will generate bill history depending on date range parameters according to the following:
  - 4.1 If date range parameters are not provided or invalid date range parameters are provided the service generate bill history from inception to the current date. If invalid dates are provided the service will specify the invalid dates in the generated JSON response as follows:
    - invalid date, returning bill history since inception date (07/2018)
    - invalid date, returning bill history to [current MM/current YYYY]
  - 4.2 If valid startMonthYear provided and endMonthYear is not provided or valid startMonthYear provided and endMonthYear is invalid the service generate bill history from the start until current mm/yyyy. If invalid endMonthYear is provided the service will specify the invalid endMonthYear in the generated JSON response (identical to 4.1)

4.1 If invalid startMonthYear is provided and valid endMonthYear is provided or startMonthYear is not provided and valid endMonthYear is provided the service generate bill history from inception to the endMonthYear. If invalid startMonthYear is provided the service will specify the invalid startMonthYear in the generated JSON response (identical to 4.1).

10. The service will generate JSON containing:

- billingAccount: EPA Site Id
- billId: unique bill id
- If invalid dates are provided the service will specify the invalid dates
- billStatus: Following values can be returned: "Active", "Unpaid", "InProgress", "ReadyForPayment", "Paid", "SentToCollections", "Credit", "ZeroBalance". Industry will not see bills where billStatus = Active
- totalAmount: if the billStatus is Credit then negative value will be returned. If the billStatus is ZeroBalance then 0 value will be returned
- paidBy: Contains the bill payee user id, for invoices that were mark as paid by the EPA, this element is not returned
- paymentType: Contains bill status, Following values can be returned: "Credit", "Ach", for invoices that were mark as paid by the EPA, this element is not returned.
- dueDate
- createdDate: The date the first manifest for this invoice was signed and placed on the invoice
- updatedDate

11. On success, the system returns JSON generated in section 4

12. If any system errors were encountered during processing, the system will return:

- error: containing error code, error message, error id and error date

### *Response JSON Schema*

bill-history.json

### *Completed Response Example*

```
{
  "billingAccount": "AK000000009",
  "billsInfo": [
    {
      "billStatus": "Unpaid",
      "billId": 122524,
      "totalAmount": 1005.10,
      "dueDate": "03/31/2019",
      "createdDate": "2019-03-10T22:35:08.405+0000",
      "updatedDate": "2019-03-10T22:38:32.751+0000",
    },
    {
      "billStatus": "Paid",
      "billId": 126875,
      "paymentType": "Ach"
    }
  ]
}
```

```

        "paidBy": "a@a.com",
        "totalAmount": 3456.45,
        "dueDate": "04/30/2019",
        "createdDate": "2019-04-10T22:35:08.405+0000",
        "updatedAt": "2019-04-10T22:38:32.751+0000",
    },
}
]
}

```

### *Response with invalid startMonthYear Example*

```

{
  "billingAccount": "AK0000000009",
  "startMonthYear": "21/2000: invalid date, bill history from inception to the endMonthYear is returned.",
  "endMonthYear": "04/2019",
  "billsInfo": [
    {
      "billStatus": "InProgress",
      "billId": 126875,
      "totalAmount": 1.1,
      "paymentType": "Ach",
      "paidBy": "a@s.com",
      "dueDate": "08/30/2018",
      "createdDate": "07/01/2018",
      "updatedAt": "07/30/2018"
    },
    {
      "billStatus": "ReadyForPayment",
      "billId": 129080,
      "totalAmount": 1.1,
      "paymentType": "Credit",
      "paidBy": "a@s.com",
      "dueDate": "05/30/2019",
      "createdDate": "04/01/2019",
      "updatedAt": "04/30/2019"
    }
  ]
}

```

### *Errors*

| Type | code                      | Description                     |
|------|---------------------------|---------------------------------|
| N/A  | E_SecurityApiTokenInvalid | Invalid Security Token          |
| N/A  | E_SecurityApiTokenExpired | Security Token is Expired       |
| N/A  | E_SecurityApiInvalidStat  | This API Id is no longer active |



|               |                             |                                                                                       |
|---------------|-----------------------------|---------------------------------------------------------------------------------------|
|               | us                          |                                                                                       |
| Authorization | E_IndustryPermissions       | The user does not have industry permissions for any Site                              |
| Authorization | E_BillingAccountPermissions | The user does not have Industry Permissions to the site with provided billing account |
| Validation    | E_InvalidBillingAccount     | Provided Billing Account has invalid format                                           |
| Validation    | E_NoBillingAccount          | Billing account doesn't exist                                                         |
| Validation    | E_BillingAccountNotActive   | Billing Account is not active                                                         |
| System        | E_SystemError               | Message describing system error                                                       |

#### *Validation Error Return Example*

```
{
  "code": " E_BillingAccountNotActive ",
  "message": "Billing Account is not active"
  "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date" : "2017-06-23T23:15:45.095+0000"
}
```

## **bill**

### *Description*

The service returns bill information either by the combination of the billing account and bill id or by the combination of the billing account and month and the year of the bill.

### *Service Type*

Emanifest Data Service.

### *Parameters*

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

The following service parameters will be passed as JSON compliant to the JSON schema defined in “bill-request.json”

- Billing account of the facility (EPA Site Id): required parameter  
And
- Bill Id: Bill Id  
Or
- Billing account of the facility (EPA Site Id) : required parameter  
And
- Month/year: month and year of the bill (cannot be earlier than 07/2018 and later than current month)

If billId and monthYear is provided the service validates provided billId. If the billId is valid the service returns data based on billId. If billId is not valid the service validates provided monthYear. If the monthYear is valid the service returns data based on monthYear.

### *Service Parameters JSON examples*

1. The service will use the following example to obtain bill information for the provided billing account and the provided bill id:

```
{
  "billingAccount": "AK000000009",
  "billId": "26875"
}
```

2. The service will use the following example to obtain bill information for the provided billing account (EPA Site Id) and month of the year:

```
{
  "billingAccount": "AK000000009",
  "monthYear": "01/2019"
}
```

3. The service will use the following example to obtain bill information for the provided billing account and the provided bill id (provided monthYear is ignored):

```
{
  "billingAccount": "AK000000009",
  "billId": "26875",
  "monthYear": "01/2019"
}
```

### *Service Invocation Example*

- Production: <Production server url>/rest/api/v1/emanifest/manifest/bill
- PreProduction/ Test: < PreProduction/ Test server url>/rest/api/v1/emanifest/manifest/bill

### *Sequence of steps*

1. The System will validate Security Token
  - 1.1. If the Web Security Token is invalid the system stops the processing and generates the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token expired the system stops the processing and generates the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the processing and generates the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 2.2. If the User does not have permission the System will stop the processing and generates the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
3. The system will process the request

- 3.1. If Billing account of the facility (EPA Site Id) is not provided the schema validation exception will be returned:
  - “ Object has missing required properties ([\"billingAccount\"]): null”
- 3.2. If no additional parameters provided (either billId or monthYear) the processing will be stopped and system will generate the following error:
  - E\_NoAdditionalParametersProvided: No additional parameters are provided
- 3.3. If the provided billingAccount (EPA Site Id) is invalid the processing will be stopped and system will generate the following error:
  - E\_InvalidBillingAccount: Provided Billing Account has invalid format
- 3.4. If the provided billingAccount is not registered the processing will be stopped and system will generate the following error:
  - E\_NoBillingAccount: Billing account doesn't exist
- 3.5. If the provided billingAccount is not active the processing will be stopped and system will generate the following error:
  - E\_BillingAccountNotActive : Billing Account is not active
- 3.6. If the User does not have permission to the site with provided billing account the system will stop the processing and generates the following error:
  - E\_BillingAccountPermissions: The user does not have Industry Permissions to the site with provided billing account
- 3.7. If billingAccount was found and the billId is either erroneous or was not provided and the monthYear is either erroneous or was not provided the system will generate JSON containing the following information:
  - billingAccount: provided billing account
  - report: see details in the report table
- 3.8. If the billStatus is “Active” the processing will be stopped and system will generate the following error:
  - E\_BillStatusActive: Bill Status is Active. Cannot be viewed by the industry
4. The service will generate JSON containing:
  - billingAccount: EPA Site Id
  - billId: unique bill id
  - monthYear: Contains month number and year of the requested bill if provided.
  - report: Contains service report. Following reports are possible:
    - The service returning bill by monthYear . Valid monthYear is provided, bill id is not provided
    - The service returning bill by bill id. Valid bill id is provided, valid monthYear is provided
    - The service returning bill by monthYear. Invalid bill id is provided, valid monthYear is provided
    - The service returning bill by monthYear. provided bill id is not found, valid monthYear is provided
    - The service returning bill by bill id. Valid bill id is provided, invalid monthYear is provided

- The service returning bill by bill id. Valid bill id is provided, provided monthYear is out of date range
  - billStatus: Following values can be returned: "Active", "Unpaid", "InProgress", "ReadyForPayment", "Paid", "SentToCollections", "Credit", "ZeroBalance"
  - totalAmount: if the billStatus is Credit then negative value will be returned. If the billStatus is ZeroBalance then 0 value will be returned
  - currentAmount: The amount for manifests invoiced for the current billing period
  - previousAmount: The total for all manifests not paid or sent to collections for from billing periods before the current period
  - previousInterestAmount: The total of interest fees occurred on the previous amounts for all manifests not paid or sent to collections for from billing periods before the current period
  - previousPenaltyAmount: for invoices that are being sent to collections the penalty amount for that invoice
  - previousLateFeeAmount: Total of the flat fee, penalty, and interest charges for all manifests and invoices not paid or sent to collections for from billing periods before the current period
  - dueDate The date the invoice is due
  - paidBy: Contains the bill payee user id, for invoices that were mark as paid by the EPA, this element is not returned
  - paymentType: Contains bill status, Following values can be returned: "Credit", "Ach", for invoices that were mark as paid by the EPA, this element is not returned
  - createdDate: The date the first manifest for this invoice was signed and placed on the invoice
  - updatedDate
  - billItems containing following information:
    - manifestTrackingNumber
    - amount: Amount charged for each manifest
    - submissionType: "FullElectronic", "Hybrid", "DataImage5Copy", "Image"
    - originType: "Web", "Services", "Mail"
    - certifiedDate: Date the manifest was certified and placed on this invoice
    - generatorSiteId: The site ID of the generator on the manifest
  - late fees (when applicable) containing following information:
    - lateFeeBillId: Bill Id which Late Fee is calculated for
    - interestAmount: the total interest amount for this lateFeeBillId
    - penaltyAmount: the total penalty amount for this lateFeeBillId
    - lateFeeAmount: the total interest, penalty, and flat fee amounts for this lateFeeBillId
    - flatFeeAmount: the total flat fee amount for this lateFeeBillId
    - status: the status of the invoice, please note that invoices sent to collection will be marked as inactive
  - revisions (when applicable) containing following information:
    - amount: Amount of adjustment on the invoice
    - amountType: "Current", "LateFee"
    - adjustmentType: "Increase", "Decrease", "FullPayment"
    - publicComments:
    - createdDate
5. On success, the system returns JSON generated in section4

6. If any system errors were encountered during processing, the system will return:
- error: containing error code, error message, error id and error date

#### *report table*

| billId error           | monthYear error                       | report                                                                                 |
|------------------------|---------------------------------------|----------------------------------------------------------------------------------------|
| invalid billId         | invalid monthYear                     | Invalid billId is provided [billId], Invalid monthYear is provided [monthYear]         |
| not found billId       | invalid monthYear                     | not found billId, Invalid monthYear is provided [monthYear]                            |
| BillId is not provided | invalid monthYear                     | BillId is not provided, Invalid monthYear is provided [monthYear]                      |
| invalid billId         | monthYear not provided                | Invalid billId is provided [billId], monthYear not provided                            |
| not found billId       | monthYear not provided                | not found billId [billId], monthYear not provided                                      |
| BillId is not provided | monthYear not provided                | BillId is not provided, monthYear not provided                                         |
| invalid billId         | monthYear is out of time range        | Invalid billId is provided [billId], monthYear is out of date range [monthYear]        |
| not found billId       | monthYear is out of time range        | not found billId [billId], monthYear is out of date range [monthYear]                  |
| BillId is not provided | monthYear is out of time range        | BillId is not provided, monthYear is out of date range [monthYear]                     |
| invalid billId         | Bill for provided monthYear not found | Invalid billId is provided [billId], Bill for provided monthYear [monthYear] not found |
| not found billId       | Bill for provided monthYear not found | not found billId [billId], Bill for provided monthYear [monthYear] not found           |
| BillId is not provided | Bill for provided monthYear not found | BillId is not provided, Bill for provided monthYear [monthYear] not found              |

#### *Response JSON Schema*

bill.json

#### *Completed Response Examples*

(all amounts are for example only)

Paid Bill example with Valid bill id and out of date range monthYear

```

"billStatus": "Paid",
"paymentType": "Ach",
"billingAccount": "AK000000009",
"billId": 126875,
"monthYear": "12/2012",
"report": "The service returning bill by bill id . Valid bill id is provided , provided monthYear is out of date range ",
"totalAmount": 5,
"currentAmount": 5,

```

```

    "previousAmount": 0,
    "previousInterestAmount": 0,
    "previousPenaltyAmount": 0,
    "previousLateFeeAmount": 0,
    "dueDate": "04/30/2019",
    "paidBy": "a@s.com",
    "createdDate": "04/01/2019",
    "updatedAt": "04/30/2019",
    "billItems": [
      {
        "manifestTrackingNumber": "0000123458ELC",
        "amount": 5,
        "submissionType": "FullElectronic",
        "originType": "Web",
        "certifiedDate": "03/30/2019",
        "generatorSiteId": "MD00000003"
      }
    ]
  }
}

```

Paid Bill with the previous unpaid bill example (monthYear was not provided)

```

{
  "billStatus": "Paid",
  "paymentType": "Ach",
  "billingAccount": "AK000000009",
  "billId": 126875,
  "totalAmount": 10.50,
  "currentAmount": 5,
  "previousAmount": 5,
  "previousInterestAmount": 0.50,
  "previousPenaltyAmount": 0,
  "previousLateFeeAmount": 0.50,
  "paidBy": "a@s.com",
  "dueDate": "04/30/2019",
  "createdDate": "04/01/2019",
  "updatedAt": "04/30/2019",
  "billItems": [
    {
      "manifestTrackingNumber": "0000123458ELC",
      "amount": 5,
      "submissionType": "FullElectronic",
      "originType": "Web",
      "certifiedDate": "03/30/2019",
      "generatorSiteId": "MD00000003"
    }
  ],
  "lateFees": [

```

```

    {
      "lateFeeBillId": 123421,
      "interestAmount": 0.5,
      "penaltyAmount": 0,
      "lateFeeAmount": 0.5,
      "createdDate": "03/30/2019"
      "flatFeeAmount":1.1,
      "status":"Active",
    }
  ]
}

```

Paid Bill with Revision example(monthYear was not provided)

```

{
  "billStatus": "Paid",
  "paymentType": "Ach",
  "billingAccount": "AK000000009",
  "billId": 126875,
  "totalAmount": 5,
  "currentAmount": 5,
  "previousAmount": 0,
  "previousInterestAmount": 0,
  "previousPenaltyAmount": 0,
  "previousLateFeeAmount": 0,
  "dueDate": "04/30/2019",
  "createdDate": "04/01/2019",
  "updatedAt": "04/30/2019",
  "billItems": [
    {
      "manifestTrackingNumber": "0000123458ELC",
      "amount": 5,
      "submissionType": "FullElectronic",
      "originType": "Web",
      "certifiedDate": "03/30/2019",
      "generatorSiteId": "MD000000003"
    }
  ]
  "revisions": [
    {
      "amount": 7,
      "amountType": "Current",
      "adjustmentType": "Increase",
      "publicComments": "Amount was increased",
      "createdDate": "03/30/2019"
    }
  ]
}

```

```

    ]
}

```

Example for invalid billId and out of date range monthYear

```

{
  "billingAccount": "AK000000009",
  "report": "Invalid billId is provided [2z6875], out of date range monthYear is provided [12/2012]"
}

```

### Errors

| Type          | code                             | Description                                                                           |
|---------------|----------------------------------|---------------------------------------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid        | Invalid Security Token                                                                |
| N/A           | E_SecurityApiTokenExpired        | Security Token is Expired                                                             |
| N/A           | E_SecurityApiInvalidStatus       | This API Id is no longer active                                                       |
| Authorization | E_IndustryPermissions            | The user does not have Industry permissions for any Site                              |
| Validation    | E_NoAdditionalParametersProvided | No additional parameters are provided                                                 |
| Authorization | E_BillingAccountPermissions      | The user does not have Industry Permissions to the site with provided billing account |
| Validation    | E_InvalidBillingAccount          | Provided Billing Account has invalid format                                           |
| Validation    | E_BillingAccountNotRegistered    | Billing Account is not registered                                                     |
| Validation    | E_BillingAccountNotActive        | Billing Account is not active                                                         |
| Validation    | E_BillStatusActive               | Bill Status is Active. Cannot be viewed by the industry                               |
| System        | E_SystemError                    | Message describing system error                                                       |

Validation Error Return Example

```

{

```



```

"code": "E_BillingAccountNotRegistered",
"message": "Billing Account is not registered"
"errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
"date": "2017-06-23T23:15:45.095+0000"
}

```

## bill-search

### Description

The service searches bill information either by the single parameter or by combination of several parameters. The service uses database paging for performance. If any optional parameters are invalid the service returns JSON with warnings. It can be used by OCFO users and Industry users.

### Service Type

Industry Emanifest Service.

Regulator Emanifest Service

### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.

The following service parameters will be passed as JSON compliant to the JSON schema defined in "bill-search-request.json"

- billingAccount: optional parameter, billing account of the facility (EPA Site Id):
- billStatus: optional parameter, one of the following values shall be provided :
  - "Unpaid"
  - "InProgress"
  - "ReadyForPayment"
  - "Paid"
  - "SentToCollections"
  - "Credit"
  - "ZeroBalance"
- startDate: Required parameter, retrieves bills based on bill.updatedDate.
- endDate: Required parameter, retrieves bills based on bill.updatedDate.
- amountChanged: optional parameter, if provided value is true the service will check conditions for retrieving bills where totalAmount has been changed from the original calculated amount at the beginning of the month.
- pageNumber: optional parameter, the system will return bills for the requested page. If pageNumber is not provided or invalid the system will return bills for the 1<sup>st</sup> page.

### Service Parameters JSON examples

4. The service will use the following example to obtain bill information for the provided startDate and endDate and all billing accounts the user has access for:

```

{
  "startDate": "2021-10-01T00:00:00.000-0400",
  "endDate": "2021-12-01T00:00:00.000-0400"
}

```

- }
5. The service will use the following example to obtain bill information for the provided billing account, startDate and endDate:
 

```
{
    "billingAccount": "AK000000009",
    "startDate": "2021-10-01T00:00:00.000-0400",
    "endDate": "2021-12-01T00:00:00.000-0400"
  }
```
  6. The service will use the following example to obtain bill information for the billingAccount, startDate, endDate, amountChanged and pageNumber:
 

```
{
    "billingAccount": "AK000000009",
    "amountChanged": true,
    "startDate": "2021-10-01T00:00:00.000-0400",
    "endDate": "2021-12-01T00:00:00.000-0400",
    "pageNumber": 3
  }
```

### *Service Invocation End points*

#### Industry

- Production: <Production server url>/rest/api/v1/emanifest /billing/bill-search
- PreProduction/ Test: < PreProduction/ Test server url>/rest/api/v1/emanifest /billing/bill-search

#### Regulator

- Production: <Production server url >/rest/api/v1/state/emanifest/billing/bill-search
- PreProduction/ Test: < PreProduction/ Test server url>/rest/api/v1/state/emanifest/billing/bill-search

### *Sequence of steps*

7. The System will validate Security Token
  - 7.1. If the Web Security Token is invalid, the system stops the processing and generates the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 7.2. If the Web Security Token expired, the system stops the processing and generates the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 7.3. If Account was Inactivated after the token was issued, the system stops the processing and generates the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
  - 7.4. If security token is for a state account and the user does not have billing admin permission, the system stops the processing and generates the following error:
    - E\_BillingAdminPermissions: The user does not have billing administration permission
8. The system will perform User Authorization.

8.1. If the Industry User does not have industry permissions for any Site, the system will stop the processing and generates the following error:

- E\_IndustryPermissions: The industry user does not have industry permissions for any Site

8.2. The System will check if the Security token is for the Industry account or if the Security token is for a state account with Billing Admin permission (OCFO/Compass).

2.2.1 If the Security token is for a state account with Billing Admin permission (OCFO/Compass) the system will return data for **all** billingAccounts meeting specified search criteria.

2.2.2 If the Security token is for an industry the system will return data only for billingAccounts that the account has access to and that meet specified search criteria.

9. The system will process the request

9.1. If provided billingAccount is invalid, not registered, not active or not found, the service will do the following

9.1.1. The service will return an empty "bills" array.

9.1.2. If the provided billingAccount is invalid, the service will return the following warning:

```
{  
  "message": "Provided billingAccount is invalid",  
  "field": "billingAccount",  
  "value": "[value of billingAccount] "  
}
```

9.1.3. If provided billingAccount is not active, the service will return the following warning:

```
{  
  "message": "Provided billingAccount is not active ",  
  "field": "billingAccount",  
  "value": "[value of billingAccount] "  
}
```

9.1.4. If provided billingAccount is not found, the service will return the following warning:

```
{  
  "message": "Provided billingAccount is not found ",  
  "field": "billingAccount",  
  "value": "[value of billingAccount] "  
}
```

9.1.5. If the service was invoked by the Industry user, the service will list all valid billing accounts. The service will return following warning(s):

```
{  
  "message": " Valid billing account ",  
  "field": "billingAccount",  
  "value": "[value of billingAccount] "  
}
```

- 9.2. If startDate and endDate are provided, the system will check if startDate and endDate are valid, and will determine the time range for the bills to return.
- 9.2.1. The startDate is valid if startDate is later than emanifest start date and earlier than Current date and startDate is earlier than endDate.
  - 9.2.2. The startDate is invalid if startDate is later than Current date or startDate is earlier than emanifest start date.
  - 9.2.3. The endDate is valid if endDate is later than emanifest start date and earlier than Current date and endDate later than startDate.
  - 9.2.4. The endDate is invalid if endDate is later than Current date or endDate is earlier than emanifest start date.
  - 9.2.5. If the startDate is valid and endDate is invalid the service will return bills in the time range between startDate and Current date.
  - 9.2.6. If the endDate is valid and startDate is invalid the service will return bills in the time range between emanifest start date and endDate.
  - 9.2.7. If the endDate is invalid and startDate is invalid the service will return bills in the time range between emanifest start date and current Date.
- 9.3. If startDate is not provided, the system will stop the processing and generates the following error:
- E\_SearchParameterRequiredStartDate: Missing required search parameter startDate
- 9.4. If endDate is not provided, the system will stop the processing and generates the following error:
- E\_SearchParameterRequiredEndDate: Missing required search parameter endDate
- 9.5. If startDate and endDate are not provided, the system will stop the processing and generates the following error:
- E\_SearchParameterRequiredStartDateEndDate: Missing required search parameters startDate and endDate
- 9.6. If provided startDate is later than provided endDate, the system will stop the processing and generates the following error:
- E\_StartDateLaterThanEndDate: Provided StartDate is later than EndDate
- 9.7. If StartDate is earlier than emanifest start date, the system will return the following warning in the return JSON:
- E\_StartDateEarlierThanEmanifestStart: Provided StartDate is earlier than emanifest start
- 9.8. If EndDate is earlier than emanifest start date, the system will return the following warning in the return JSON:
- message "Provided EndDate is earlier than emanifest start date"
  - field: endDate
  - value: [value of endDate]
- 9.9. If EndDate is later than Current date, the system will return the following warning in the return JSON:

- message "Provided EndDate later than Current date
  - field: endDate
  - value: [value of endDate]
- 9.10. If StartDate is later than Current date system will return the following warning in the return JSON:
- message "Provided StartDate later than Current date
  - field: StartDate
  - value: [value of StartDate]
- 9.11. If the provided pageNumber is larger than totalNumberOfPages or less than one , the system will return the following warning in the return JSON
- "message": "Provided pageNumber must be equal or greater than one. pagenumber is set to 1"
  - field: pageNumber
  - value: [value of page number]
10. The service will generate JSON containing one or multiple Bills. If the provided value of amountChanged is true, Bill.totalAmountChanged is true and bill.updatedDate is in the time range specified by startDate and endDate, the service will include the bill in the returned JSON. The response will contain following information :
- totalNumberOfBills: Total Number Of Bills for provided search criteria
  - totalNumberOfPages: Total Number Of Pages for provided search criteria
  - currentPageNumber: Current Page Number for provided search criteria
  - searchedParameters: valid parameters used in search
    - field: parameter field name
    - value: parameter value
  - warnings: validation errors for optional parameters
    - message: validation message
    - field: parameter field name
    - value: parameter value
- Each bill will contain the following information:
- billingAccount: EPA Site Id
  - billId: bill id
  - billStatus: Following values can be returned: "Unpaid", "InProgress", "ReadyForPayment", "Paid", "SentToCollections", "Credit", "ZeroBalance"
  - totalAmount: if the billStatus is Credit then negative value will be returned. If the billStatus is ZeroBalance then 0 value will be returned
  - currentAmount: The amount for manifests invoiced for the current billing period
  - previousAmount: The total for all manifests not paid or sent to collections for from billing periods before the current period
  - previousInterestAmount: The total of interest fees occurred on the previous amounts for all manifests not paid or sent to collections for from billing periods before the current period
  - previousPenaltyAmount: for invoices that are Unpaid after four months, the penalty amount for that invoice

- **previousLateFeeAmount:** Total of the flat fee, penalty, and interest charges for all manifests and invoices not paid from billing periods before the current period
  - **dueDate** The date the invoice is due
  - **paidBy:** Contains the bill payee user id, for invoices that were mark as paid by the EPA, this element is not returned
  - **paymentType:** Contains payment type , Following values can be returned: "Credit", "Ach", for invoices that were mark as paid by the EPA, this element is not returned
  - **createdDate:** The date the invoice was created
  - **totalAmountChanged:** Indicates if totalAmount has been changed from the original calculated amount at the beginning of the month.
  - **updatedAt:** The date the invoice was last updated
  - **lateFees** (when applicable) containing following information:
    - **lateFeeBillId:** Bill Id which Late Fee is calculated for
    - **interestAmount:** the total interest amount for this lateFeeBillId
    - **penaltyAmount:** the total penalty amount for this lateFeeBillId
    - **lateFeeAmount:** the total interest, penalty, and flat fee amounts for this lateFeeBillId
    - **flatFeeAmount:** the total flat fee amount for this lateFeeBillId
    - **status:** the status of the invoice, please note that invoices sent to collection will be marked as inactive
  - **revisions:** (when applicable) containing following information:
    - **amount:** Amount of adjustment on the invoice
    - **amountType:** "Current", "LateFee"
    - **adjustmentType:** "Increase", "Decrease", "FullPayment"
    - **publicComments:**
    - **createdDate**
    - **RecalculationInfo:** (when applicable) containing following information:
      - **recalculationReason:** "OriginalSiteBill", "NewSiteBill", "SoftDelete"
11. On success, the system returns JSON generated in section 4
12. If any system errors were encountered during processing, the system will return:
- **error:** containing error code, error message, error id and error date

## ***Response JSON Schema***

bill-search-response.json

### ***Response example***

```
{
  "totalNumberOfBills": 4,
  "totalNumberOfPages": 1,
  "currentPageNumber": 1,
  "searchedParameters": [
    {
      "field": "startDate",
      "value": "Wed Sep 01 00:00:00 EDT 2021"
    },
  ],
}
```

```
"field": "endDate",
"value": "Fri Oct 01 00:00:00 EDT 2021"
},
{
  "field": "billingAccount",
  "value": "AK8570028649"
}
],
"bills": [
  {
    "billingAccount": "AK8570028649",
    "billId": 13379972,
    "billStatus": "Unpaid",
    "totalAmount": 69.05,
    "currentAmount": 0,
    "previousAmount": 54,
    "previousInterestAmount": 0.05,
    "previousPenaltyAmount": 0,
    "previousLateFeeAmount": 15.05,
    "dueDate": "2021-08-31",
    "createdDate": "2021-07-01T05:00:08.089+0000",
    "updatedAt": "2021-09-07T16:05:59.274+0000",
    "totalAmountChanged": true,
    "lateFees": [
      {
        "lateFeeBillId": 13040557,
        "interestAmount": 0.05,
        "penaltyAmount": 0,
        "lateFeeAmount": 15.05,
        "flatFeeAmount": 15,
        "status": "Active"
      }
    ]
  },
  {
    "billingAccount": "AK8570028649",
    "billId": 13040557,
    "billStatus": "Unpaid",
    "totalAmount": 54,
    "currentAmount": 54,
    "previousAmount": 0,
    "previousInterestAmount": 0,
    "previousPenaltyAmount": 0,
    "previousLateFeeAmount": 0,
    "dueDate": "2021-07-31",
    "createdDate": "2021-06-04T20:26:43.401+0000",
    "updatedAt": "2021-09-07T16:05:59.275+0000",
    "totalAmountChanged": false,
```

```
},
{
  "billingAccount": "AK8570028649",
  "billId": 13558420,
  "billStatus": "Paid",
  "totalAmount": 84.09,
  "currentAmount": 0,
  "previousAmount": 54,
  "previousInterestAmount": 0.09,
  "previousPenaltyAmount": 0,
  "previousLateFeeAmount": 30.09,
  "dueDate": "2021-09-30",
  "createdDate": "2021-08-01T05:00:03.192+0000",
  "updatedAt": "2021-09-07T16:05:59.276+0000",
  "totalAmountChanged": true,
  "lateFees": [
    {
      "lateFeeBillId": 13040557,
      "interestAmount": 0.09,
      "penaltyAmount": 0,
      "lateFeeAmount": 30.09,
      "flatFeeAmount": 30,
      "status": "Active"
    }
  ],
  "revisions": [
    {
      "amount": 84.09,
      "amountType": "Total",
      "adjustmentType": "FullPayment",
      "publicComments": "TEST",
      "createdDate": "2021-09-07T16:05:59.256+0000",
      "billId": 13558420
    }
  ]
},
{
  "billingAccount": "AK8570028649",
  "billId": 13851255,
  "billStatus": "ZeroBalance",
  "totalAmount": 0,
  "currentAmount": 0,
  "previousAmount": 0,
  "previousInterestAmount": 0,
  "previousPenaltyAmount": 0,
  "previousLateFeeAmount": 0,
  "dueDate": "2021-10-31",
  "createdDate": "2021-09-01T05:00:04.592+0000",
```



```

    "updatedAt": "2021-10-01T05:00:04.615+0000",
    "totalAmountChanged": false ,
  }
]
}

```

### Errors

| Type          | code                                      | Description                                                                           |
|---------------|-------------------------------------------|---------------------------------------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid                 | Invalid Security Token                                                                |
| N/A           | E_SecurityApiTokenExpired                 | Security Token is Expired                                                             |
| N/A           | E_SecurityApiInvalidStatus                | This API Id is no longer active                                                       |
| Authorization | E_IndustryPermissions                     | The user does not have Industry permissions for any Site                              |
| Authorization | E_BillingAccountPermissions               | The user does not have Industry Permissions to the site with provided billing account |
| Validation    | E_SearchParameterRequiredStartDate        | Missing required search parameter startDate                                           |
| Validation    | E_SearchParameterRequiredEndDate          | Missing required search parameter endDate                                             |
| Validation    | E_SearchParameterRequiredStartDate        | Missing required search parameter startDate                                           |
| Validation    | E_SearchParameterRequiredStartDateEndDate | Missing required search parameter startDate and endDate                               |
| System        | E_SystemError                             | Message describing system error                                                       |

### Validation Error Return Example

```

{
  "code": "E_SearchParameterRequiredStartDate ",
  "message": "Missing required search parameter startDate",
  "errorId": "9v7a9808-s35a5-4874-928f-12fc3def4b56",
  "date": "2017-06-23T23:15:45.095+0000"
}

```

## Emanifest UI link service

### links

#### Description

The service returns a link to a set of manifest pages such as:

- Link to View the manifest
- Link to Edit the manifest
- Link to Sign the manifest
- Link to display manifest Dashboard
- Link to Bulk Sign manifest(s)

The service accepts following parameters in JSON format as an input:

- page: specifies the type of the page the service shall return. This is required parameter. Following values can be provided:
  - o View
  - o Edit
  - o Sign
  - o Dashboard
  - o BulkSign
- epaSiteId: specifies the epa site id of either generator or transporter(s) or designated facility participating in the manifest. This is a required parameter
- manifestTrackingNumber: specifies the manifest tracking number. This parameter is required if the provided page values are either View, Edit, or Sign. This parameter shall not be provided if page values are Dashboard or BulkSign
- filter: specifies the manifest tracking number(s) for the manifest(s) which shall be displayed on manifest Dashboard or manifest(s) which will be on Bulk Sign. This parameter can be provided if page values are Dashboard or BulkSign. If filter is not provided the services will generate a link for the Dashboard page or Bulk sign page for all the manifest for the specified site id. This parameter shall not be provided if values are either View, Edit, or Sign.

#### Service Type

Link service

#### Parameters

- Security Token: Security Token received in Authentication. Will be passed in the Header of the request.
- UI link JSON as a body

#### JSON schema

ui-link.json

## Service Invocation Example

PreProduction/ Test: <Preproduction/Test server url>/rest/api/v1/links/emanifest

Production: <Production server url>/rest/api/v1/links/emanifest

## Sequence of steps

1. The System will validate Security Token
  - 1.1. If the Web Security Token is invalid the system stops the processing and generates the following error:
    - E\_SecurityApiTokenInvalid: Invalid Security Token
  - 1.2. If the Web Security Token expired the system stops the and processing generates the following error:
    - E\_SecurityApiTokenExpired: Security Token is Expired
  - 1.3. If Account was Inactivated after the token was issued the system stops the processing and generates the following error:
    - E\_SecurityApiInvalidStatus: This API Id is no longer active
2. The system will perform User Authorization.
  - 2.1. System will check if the User has Site Manager (Industry) permissions for any Site.
  - 2.2. If the User does not have permission the System will stop processing and generate the following error:
    - E\_IndustryPermissions: The user does not have industry permissions for any Site
3. The system will process the request
  - 3.1. If page is not provided then the service generates following error:

```
"errors": [
  {
    "message": "Object has missing required properties ([\"page\"])",
    "field": ""
  }
]
```
  - 3.2. If provided page is invalid then the service generates following error:

```
"errors": [
  {
    "message": "Instance value (\"provided value\") not found in enum (possible values: [\"Dashboard\\\", \"BulkSign\\\", \"View\\\", \"Edit\\\", \"Sign\"])",
    "field": ".page",
    "value": "provided value"
  }
]
```
  - 3.3. If epaSiteId is not provided then the service generates following error:

```
"errors": [
  {
    "message": "Object has missing required properties ([\"epaSiteId\"])",
```

```
    "field": ""
  }
]
```

3.4. If provided epaSiteId has invalid format then the service generates following error:

```
"errors": [
  {
    "message": "Regex \"^[A-Z][A-Z][A-Za-z0-9]{2,10}$\" does not match input string
    \"AK96903307420\"",
    "field": ".epaSiteId"
  }
]
```

3.5. If provided epaSiteId is not registered then the service generates following error:

```
"errors": [
  {
    "message": "Site with provided epa site id is not registered",
    "field": "epaSiteId"
  }
]
```

3.6. If provided page == "View" or "Sign" or "Edit" and manifestTrackingNumber is not provided then the service generates following error:

```
"errors": [
  {
    "message": "Value is not provided",
    "field": "manifestTrackingNumber"
  }
]
```

3.7. If provided page == "View" or "Sign" or "Edit" and the manifestTrackingNumber provided has an invalid format then the service generates following error:

```
"errors": [
  {
    "message": "Regex \"^[0-9]{9}[A-Z]{3}$\" does not match input string \"provided mtn\"",
    "field": ".manifestTrackingNumber"
  },
  {
    "message": "Invalid Field Format. 9 digits followed by 3 upper case letters is expected",
    "field": "manifestTrackingNumber"
  }
]
```

3.8. If provided page == "View" or "Sign" or "Edit" and the manifestTrackingNumber is not found then the service generates following error:

```
"errors": [
  {
```

```

    "message": "Provided Manifest Tracking Number is not found",
    "field": "manifestTrackingNumber"
  }
]

```

- 3.9. If provided page == “View” or “Sign” and manifest with provided epa site id and manifestTrackingNumber is not found then the service generates following error:

```

"errors": [
  {
    "message": "Provided site id is not participating in the manifest",
    "field": "manifestTrackingNumber"
  }
]

```

- 3.10. If provided page == “Sign” and manifest is in “Pending” status then the service generates following error:

```

"errors": [
  {
    "message": "Provided manifest is not ready to be signed",
    "field": "manifestTrackingNumber"
  }
]

```

- 3.11. If provided page == “Dashboard” or “BulkSign” and provided filter elements has invalid format then the service generates following error:

```

"errors": [
  {
    "message": "Regex \"^[0-9]{9}[A-Z]{3}$\" does not match input string  
\"100024600EBLC\"",
    "field": ".filter[i]"
  },
  {
    "message": "Invalid Field Format. 9 digits followed by 3 upper case letters is expected",
    "field": ".filter"
  }
]

```

4. On success, the service returns the URL for the manifest page
5. If any validation errors were found the service returns an error report
6. If any system errors were encountered during processing, the system will return an error report:

### Completed Response Example

["https://rcrainfodev.com/rcrainfo/action/industry/secured/e-manifest/links/AK9690330742/view/100024600ELC"](https://rcrainfodev.com/rcrainfo/action/industry/secured/e-manifest/links/AK9690330742/view/100024600ELC): URL for the page which provides View to the manifest for the epaSiteId = AK9690330742 with manifestTrackingNumber = 100024600ELC

### Errors

| Type          | code                       | Description                                                                                                                                                      |
|---------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N/A           | E_SecurityApiTokenInvalid  | Invalid Security Token                                                                                                                                           |
| N/A           | E_SecurityApiTokenExpired  | Security Token is Expired                                                                                                                                        |
| N/A           | E_SecurityApiInvalidStatus | This API Id is no longer active                                                                                                                                  |
| Authorization | E_IndustryPermissions      | The user does not have Industry permissions for any Site                                                                                                         |
| Authorization | E_SitePermissions          | The user does not have Industry Permissions for either the TSDF Site or Generator Site or Alternate TSDF site or any Transporter site specified in provided JSON |
| System        | E_SystemError              | Message describing system error                                                                                                                                  |

### Services Scenarios Examples

Prerequisite :

1. The User is registered as Site Manager for at least one Facility.
2. The User received API Id and API Key to conduct Industry Services. See section User Registration process for details

#### Obtaining Manifests via search service

1. Requester performs **auth** service to obtain Security Token. See details in section [auth](#).
2. If Authentication process was successful the service returns Security Token. This Security Token shall be stored for the duration of the session. It will be passed to all the services.
3. Requester performs **search** service to obtain the list of Manifest Tracking Numbers for Manifests stored in the system. See details in section [search](#)
4. If there are Manifests for the provided search parameters the **search** service returns the list of Manifest Tracking Numbers.
5. Requester performs **manifest** service to obtain Manifest. See details in section (GET) manifest

#### Obtaining Manifest via manifest-tracking- numbers service

1. Requester performs **auth** service to obtain Security Token. See details in section [auth](#).
2. If Authentication process was successful the service returns Security Token. This Security Token shall be stored for the duration of the session. It will be passed to all the services.
3. Requester performs **manifest-tracking-numbers** service to obtain the list of Manifest Tracking Numbers for Manifests stored in the system. See details in section [Error! Reference source not found.](#)
4. If there are Manifests for the provided Site Id the **manifest-tracking-numbers** service returns the list of Manifest Tracking Numbers.

5. Requester performs **manifest** service to obtain Manifest. See details in section (GET) manifest

#### Obtaining Site Ids via site-ids service

1. Requester performs **auth** services to obtain Security Token. See details in section auth.
2. If Authentication process was successful the service returns Security Token. This Security Token shall be stored for the duration of the session. It will be passed to all the services.
3. Requester performs **site-ids** service to obtain the list either of all Transporter IDs or all TSDF Ids or all Generator Ids for the provided State Code and Site Type. See details in section site-ids
4. **site-ids** service returns list of the either of all Transporter IDs or all TSDF Ids or all Generator Ids.

#### Obtaining Site Details via site-details service

1. Requester performs **auth** services to obtain Security Token. See details in section auth.
2. If Authentication process was successful the service returns Security Token. This Security Token shall be stored for the duration of the session. It will be passed to all the services.
3. Requester performs **site-details** service to obtain Site Details by Site Id. See details in section site-details
4. **site-details** service returns Site Details.