June Release 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/Industry 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.
- API Id/API Key pair approach hides the User identity which provides higher level of security in comparison with CDX User Id and CDX/NAAS password approach
- API Id/API Key pair approach does not require external calls for an Authentication process. This will provide increased performance and uptime; decreased complexity and cost of the system in comparison with CDX User Id and CDX/NAAS password approach which requires external Web Services communication for every Industry Service call.
- 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 CDX. (In a later phase of RCRAInfo we will use CDX services to register users seamlessly in RCRAInfo.)
2. Users will use CDX RCRA Industry link to be handed off to RCRAInfo/Industry Application (System).
3. CDX User Id will be stored in RCRAInfo/Industry Application
4. In the System the Users will request the Role of Site Manager for each Site.
5. After an approval the Site Manager will be able to request an API Id/API Key pair.
6. 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.

7. 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)

Services Requests and Responses

All services (except Authenticate) will accept 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.
RCRAInfo Data Services are located under following URL:

- <server url>/rcra-handler/rest/api/v1/

Following RCRAInfo Data Services are implemented for June release:

- auth
- site-details

RCRAInfo Lookup Services are located under following URL:

- <server url>/rcra-handler/rest/api/v1/lookup

Following RCRAInfo Lookup Services are implemented for June release:

- density-uom
- form-codes
- source-codes
- federal-waste-codes
- state-waste-codes
- management-method-codes

Emanifest Data Services are located under following URL:

- <server url>/rcra-handler/rest/api/v1/emanifest

Following Emanifest Data Services are implemented for June release:

- manifest
- manifest-tracking-numbers
- site-ids

Emanifest Lookup Services are located under following URL:

- <server url>/rcra-handler/rest/api/v1/emanifest/lookup

Following Emanifest Lookup Services are implemented for June release:

- 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

Services

RCRAInfo Data Services

auth

Description
Authenticates the user and returns Security Token

Service Type
RCRAInfo Data Service

Parameters
- API Id: API Id is the User Service Id
- API Key: API Key is the User Service "password"

Service Invocation Example

<server url>/rcra-handler/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. The System will generate JSON Web Security Token and token expiration Date. (The System will utilize 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.
4. If successful the system will return JSON containing following information:
   - token

- expiration date
5. 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.eyJzdWIiOiI2ZjdhOTg0OC0zNWE1LTQ4NzQtOTI4Zi0xMmZjM2RlZjFhMz
    MiLCJhcGlUb2tlbkNsYWltIjoie1xuICBcImFwaUlkXCIgOiBcIjZmN2E5ODQ4LTM1YTUtNDg3NC05Mj
    hmLTEyZmMzZGVmMWEzM1wiLFxuICBcInByb2ZpbGVcIiA6IHtcbiAgICBcInVzZXJJJZFwiIDogXCJEQ
    VZJRERVTkRVQVwiLFxuICAgIFwic3RhdHVzXCIgOiBcIkFjdGl2ZVwiLFxuICAgIFwibGFzdExvZ2luRGF0
    ZVwiIDogXCIyMDE3LTA2LTIyVDIyOjU2OjA5LjAwMCswMDAwXCIsXG4gICAgXCJzZWN1cml0eUFnc
    mVlbWVudERhdGVcIiA6IG51bGwsXG4gICAgXCJwYXNzd29yZFJlc2V0RGF0ZVwiIDogbnVsbCxcbiA
    gICBcInBhc3N3b3JkU3RhdHVzXCIgOiBcIkFjdGl2ZVwiLFxuICAgIFwiY29udGFjdFwiIDoge1xuICAgIC
    AgXCJ0aXRsZVwiIDogXCJhc2RmYXNkZlwiLFxuICAgICAgXCJmaXJzdE5hbWVcIiA6IFwiRGF2aWRcIix
    cbiAgICAgIFwibWlkZGxlSW5pdGlhbFwiIDogXCJKXCIsXG4gICAgIBcImxhc3ROYW1lXCIgOiBcIkR1b
    mR1YVwiLFxuICAgICAgXCJwaG9uZVwiIDogXCIzMDEtMzUxLTk5MjJcIixcbiAgICAgIFwicGhvbmVFe
    HRlbnNpb25cIiA6IFwiNzk1OThcIixcbiAgICAgIFwib3JnYW5pemF0aW9uXCIgOiB7XG4gICAgICAgIF
    wiaWRcIiA6IDEyLFxuICAgICAgICBcInRleHRcIiA6IFwiQ0dJXCIsXG4gICAgICAgIFwiY2R4T3JnYW5pze
    mF0aW9uSWRcIiA6IDE3MDk2LFxuICAgICAgICBcIm9yZ2FuaXphdGlvblR5cGVcIiA6IFwiQ0RYXCJcb
    iAgICAgIH0sXG4gICAgICBcImNvbnRyYWN0b3JcIiA6IGZhbHNlLFxuICAgICAgXCJhZGRyZXNzMVwiI
    DogXCIxMzI5IEUgU1QgU0VcIixcbiAgICAgIFwiYWRkcmVzczJcIiA6IG51bGwsXG4gICAgICBcImNpdH
    lcIiA6IFwiRkJUkZBWFwiLFxuICAgICAgXCJzdGF0ZVwiIDoge1xuICAgICAgICBcInJlZ2lvbliIiA6IFwilw
    M1wiLFxuICAgICAgICBcImRlZmF1bHRUaGlyZENoYXJhY3RlclwiIDogXCJSXCIsXG4gICAgICAgIFwia
    WRcIiA6IDE1LFxuICAgICAgICBcImNvZGVcIiA6IFwiVkFcIixcbiAgICAgICAgXCJkZXNjcmlwdGlvbliiID
    ogXCJWSVJHSU5JQVwiLFxuICAgICAgICBcIm5hbWVcIiA6IFwiVklSR0lOSUFcIixcbiAgICAgICAgXCJhY
    3RpdmVcIiA6IHRydWUsXG4gICAgIFwidXNhZ2VcIiA6IFwiMVwiLFxuICAgICAgICBcInVzZXJJJZFw
    iIDogbnVsbCxcbiAgICAgICAgXCJsYXN0Q2hhbmdlIVwiIDoiBcIjIwMTctMDItMTNcIixcbiAgICAgXC
    JoZWxwTm90ZXNcIiA6IFwiFwiLFxuICAgICAgICBcImFjdGl2ZVTG9jYXRpb25cIiA6IFwiSFFcIlxuICA
    gICAgfSxcbiAgIFwiemlwXCIgOiBcIjIyMDMzXCIsXG4gICAgICBcImxlZ2FjeVVzZXJJJZFwiIDogbnVs
    bCxcbiAgICAgIFwiZW1haWxcIiA6IFwiZGF2aWRAZHVuZHVhLmNvdVwiLFxuICAgICAgXCJ1c2VyT3J
    nYW5pemF0aW9uSWRcIiA6IDU1MDY2LFxuICAgICAgXCJ1c2VyUm9sZUlkXCIgOiAxMTk4MDQsXG
    4gICAgICBcImlkXCIgOiAyLFxuICAgICAgXCJjcmVhdGVkRGF0ZVwiIDogXCIyMDE3LTA2LTE5VDIyOj
    M4OjUxLjAwMCswMDAwXCIsXG4gICAgICBcInVwZGF0ZWREYXRlXCIgOiBcIjIwMTctMDYtMjJUMjl
    6NTY6MDkuMDAwKzAwMDBcIlxuICAgIH0sXG4gICAgXCJwcm9maWxlVHlwZVwiIDogXCJDRFhclix
    cbiAgICBcInNwb25zb3JcIiA6IG51bGwsXG4gICAgXCJpZFwiIDogMixcbiAgICBcImNyZWF0ZWREYXR
    lXCIgOiBcIjIwMTctMDYtMTlUMjI6Mzg6NTEuMDAwKzAwMDBcIixcbiAgICBcInVwZGF0ZWREYXRlX
    CIgOiBudWxsXG4gIH0sXG4gIFwicGVybWlzc2lvbnNcIiA6IFsgXSxcbiAgXCJzdXRlUGVybWlzc2lvbnN

cIiA6IFsgeyB9LCB7IH0gXVxufSIsImV4cCI6MTQ5ODI1OTc0NX0.xw_PGyN6for1GHwf6zqp0OJS10h
wK8jEgRyRI0JpFUducwDKj5paWRTEsCky_06pryEve3Yw2w1bbBzqGdSnnw ",
"expirationDate": "2017-06-23T23:15:45.095+0000"
}

Errors and Error Response Examples

code	message
E_SecurityApiInvalidCredentials	Invalid API Id/Key Specified
E_SecurityApiInvalidStatus	API Id Status Invalid
E_SystemError	Message describing system error

Error Response Example
{
    "code": " E_SecurityApiInvalidCredentials",
    "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. 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

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

<server url>/rcra-handler/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 following error:
      - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 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 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 inRCRAInfo.
      3.1.1. If provided Site Id is invalid the processing will be stopped and system will generate following error:
         - E_InvalidSiteId: Provided Site Id is not Valid
         Site 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 provided Site Id is not registered in RCRAInfo the processing will be stopped and system will generate following error:
         - E_SiteIdNotFound: Site with provided Site Id is not Found
   3.2. The system will obtain Site Information for the provided Site Id
   3.3. The System generates JSON containing obtained Site Information
4. The System returns the response
   4.1. If site was found the system returns generated JSON containing following information:
   - site type: "Generator"/"Tsdf"/"Transporter"
   - 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

```json
{
  "siteType": "Tsdf",
  "epaSiteId": "CA99999996",
  "name": "CA GENERATOR NAME",
  "mailingAddress": {
          "address1": "123 D ROAD",
          "city": "EDWARDS",
          "state": {
                  "code": "CA"
          },
          "country": {
                  "code": "US"
          },
          "zip": "93524"
  },
  "siteAddress": {
          "address1": "456 N BLVD",
          "city": "EDWARDS",
          "state": {
                  "code": "CA"
          },
          "country": {
                  "code": "US"
          },
          "zip": "93524"
  },
  "contact": {
          "firstName": "John",
          "middleInitial": "C",
          "lastName": "Smith",
          "phone": {
                  "number": "703-208-5674",
                  "extension": "3"
          }
          "email": "JSmith@abc.com"
  }
}
```

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"
}
```

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

<server url>/rcra-handler/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 following error:
        - E_SecurityApiTokenInvalid: Invalid Security Token
    1.2. If Security Token expired the system stops the submission and will generate 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 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 permission for any Site

2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Density UOM Codes and Descriptions

   3.2. The System will generate JSON containing obtained Density UOM Codes and Descriptions

4. The System returns response:

   4.1. If Request was completed the system will return JSON containing:

   - request status: "Completed"

   - list of Density UOM Codes and 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

```
[
        {
                "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
<server url>/rcra-handler/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 following error:
    - E_SecurityApiTokenInvalid: Invalid Security Token
    1.2. If Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Form Codes and Form Code Descriptions
    3.2. The System will generate JSON containing obtained Form Codes and Form Code Descriptions
4. The System returns response:
    4.1. If Request was completed the system will return JSON containing:
    - list of Form Codes and Form 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 Form Codes and Form Code Descriptions)

```json
[
        {
                "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

```json
{

    "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
<server url>/rcra-handler/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Source Codes and Source Code Descriptions
   3.2. The System will generate JSON containing obtained Source Codes and Source Code Descriptions
4. The System returns response:
   4.1. If Request was completed the system will return JSON containing:
   - list of Source Codes and Source 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 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

RCRAInfo Lookup Service.

Parameters

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

Service Invocation Example

<server url>/rcra-handler/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Source Codes and Source Code Descriptions
   3.2. The System will generate JSON containing obtained Federal Waste Codes and Federal Waste Code Descriptions
4. The System returns response:
   4.1. If Request was completed the system will return JSON containing:
   - list of Federal Waste Codes and Federal 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 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

<server url>/rcra-handler/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 following error:
-   E_SecurityApiTokenInvalid: Invalid Security Token
1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
2.2. If the User does not have permission the System will stop the processing and will generate 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 State Code is valid. If provided State Code is invalid the system will stop the processing and generate following error:
- E_InvalidStateCode: Provided State Code was not found
3.2. The system will obtain Source Codes and Source Code Descriptions
3.3. The System will generate JSON containing State Waste Codes and State Waste Code Descriptions
4. The System returns response:
4.1. If Request was completed the system will return JSON containing:
-     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
Vaidation	E_InvalidStateCode	Provided State Code was not Found
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

<server url>/rcra-handler/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   1.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Management Method Codes and Management Method Code Descriptions
   3.2. The System will generate JSON containing obtained Management Method Codes and Management Method Code Descriptions
4. The System returns response:
   4.1. If Request was completed the system will return JSON containing:
   - list of Management Method Codes and Management Method Code Descriptions
   4.2. 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_InvalidStateCode ",
    "message": "Provided State Code was not Found",
    "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: TSDF or Generator Site Id

Service Invocation Example

<server url>/rcra-handler/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 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 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 following error:
   - E_SiteIsNotFound: Site with Provided Site Id is not Found
   3.5. The system will obtain Manifest Tracking Numbers for Manifests where Manifest TSDF Site Id matches provided Site Id and for Manifests where Manifest Generator Site Id matches provided Site Id
   3.6. The System generates JSON containing obtained Manifest Tracking Numbers
4. System returns the response
   4.1. If the System found manifests for the provided Site Id it returns JSON containing:
   - values : list of obtained 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": "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"
  }
```

manifest

Description
Returns the Manifest by provided Manifest Tracking Number

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
<server url>/rcra-handler/rest/api/v1/emanifest/manifest/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 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 Manifest Tracking Number is valid and Manifest with provided Tracking Number is in the system.
      3.1.1.   Manifest Tracking Number shall be compliant with following rules:

Nine numeric characters + valid three character Manifest Tracking Suffix. See the list of valid Manifest Tracking Suffixes in section: Response JSON Schema
"code-descriptions.json"

   -

3.1.2. If provided Manifest Tracking Number does not have valid format the processing will be stopped and system will generate 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 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 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. The system returns the response

4.1. If the system obtains the Manifest for the provided Manifest Tracking Number it returns generated JSON containing:

- emanifest: containing obtained Manifest

4.2. 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-full.json"

Completed Response Example

```
{
    "emanifest": {"createdDate": "2017-04-12T23:20:50.52Z",
    "updatedDate": "2017-05-25T16:05:01.52Z",
    "manifestTrackingNumber": "100001380ELC",
    "status": "Pending",
    "submissionType": "Data",
    "signatureStatus": false,
    "originType": "Web",
    "validationStatus": true,
    "receivedDate": "2017-05-27T10:15:01.52Z",
    "certifiedDate": "2017-05-28T11:02:01.52Z",
    "generator": {
            "epaSiteId": "VAX999999999",
            "name": "GENERATOR SITE NAME",
            "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"
        },
},
"transporters": [
        {
                "epaSiteId": "CTR000000001",
                "name": "TRANSPORTER NAME",
                "contact": {
                        "firstName": "John",
                        "middleInitial": "C",
                        "lastName": "Smith",
                        "phone": {
                                "number": "703-208-5674",
                                "extension": "3"
                        }
                },

        }
],
"designatedFacility": {
        "epaSiteId": "CA5555555555",
        "name": "TSDF SITE NAME",
        "mailingAddress": {
                "address1": "123 Ave Y",
                "city": "WALL",
```

```json
                    "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"
            },
    },
    "wastes": [
            {
                    "hazardous": true,
                    "dotInformation": {
                            "properShippingName": {
                                    "code": "Toxic by inhalation liquid, corrosive, n.o.s. with an
LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal
to 500 LC50"
                            },
                            "idNumber": {
                                    "code": "UN3389"
                            },
                            "packingGroup": {
                                    "code": "I"
                            },
                            "hazardClass": {
                                    "code": "6.1"
                            },
```

                              "printedDotInformation": "UN3389, Toxic by inhalation liquid,
corrosive, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor
concentration greater than or equal to 500 LC50, 6.1, I",
                              "emergencyPhone": {
                                      "number": "661-277-9252"
                              },
                              "emergencyGuideNumber": {
                                      "code": "154"
                              }
                      },
                      "consentNumber": "",
                      "quantity": {
                              "containerNumber": 5,
                              "containerType": {
                                      "code": "CY",
                                      "description": "Cylinders"
                              },
                              "quantity": 135.34,
                              "unitOfMeasurement": {
                                      "code": "L",
                                      "description": "Liters"
                              },
                              "br": {
                                      "density": 13.1,
                                      "densityUnitOfMeasurement": {
                                              "code": "1",
                                              "description": "lbs/gal"
                                      },
                                      "formCode": {
                                              "code": "W101",
                                              "description": "DILUTE AQUEOUS WST"
                                      },
                                      "sourceCode": {
                                              "code": "G08",
                                              "description": "REMOVAL SPENT LIQUID"
                                      }
                              }
                      },
                      "hazardousWaste": {
                              "federalWasteCodes": [
                                      {
                                              "code": "K069",
                                              "description": "EMISSION CONTROL
DUST/SLUDGE"
                                      }
                              ],
                              "tsdfStateWasteCodes": [
                                      {
                                              "code": "141",
                                              "description": "Off-specification, aged, or surplus
inorganics"

```json
                                }
                            ],
                            "managementMethod": {
                                "code": "H020",
                                "description": "SOLVENTS RECOVERY"
                            }
                        },
                        "additionalInfo": {
                            "comments": [
                                {
                                    "label": "text",
                                    "description": "text",
                                    "handlerId": "VAD988170486"
                                }
                            ],
                            "handlingInstructions": "handle with care"
                        },
                        "lineNumber": 1
                    }
                ],
                "additionalInfo": {
                    "comments": [
                        {
                            "label": "text",
                            "description": "text",
                            "handlerId": " VAD999999999"
                        }
                    ],
                    "handlingInstructions": "handle with care"
                }
            }
```

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 either of all Transporter IDs or all TSDF Ids or all Generator Ids for the provided State Code and Site Type.

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"

Service Invocation Example

<server url>/rcra-handler/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 following error:
        - E_SecurityApiTokenInvalid: Invalid Security Token
    1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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.

3.2. Provided Site Type shall contain one of the following values:
- "Generator"
- "Tsdf"
- "Transporter"

3.3. If provided Site Type is invalid the processing will be stopped and system will generate following error:
- E_SiteType: Provided Site Type is not valid

3.4. 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 following error:
- E_InvalidStateCode: Provided State Code was not found

3.5. Depending on Site Type the system will obtain either Transporter or TSDF or Generator Ids for the provided State Code

3.6. The System generate JSON containing obtained Site Ids

3.7. If no Site Ids were found the system generate empty list

4. The System returns the response

4.1. If site ids were found the system returns generated JSON containing following information:
- values: 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 was not found
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 was not foundd "
    "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
<server url>/rcra-handler/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 following error:
      - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Printed Manifest Tracking Number suffix and the Owner Company for each suffix

3.2. The System will generate JSON containing obtained Printed Manifest Tracking Number Suffixes information

4. The System returns response:

4.1. If Request was completed the system will return JSON containing:

-   list of Printed Manifest Tracking Number Suffixes and Owner Companies

4.4. 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

(Notes: Printed Manifest Tracking Number Suffixes represent current state and can change.

Manifest Tracking Numbers with "ELC" Suffix will be supported for June release)

```json
[
    {
        "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"
    },
```

```json
    {
        "code": "PBC",
        "description": "Progressive Business Compliance"
    },
    {
        "code": "PSC, LLC",
        "description": ""
    },
    {
        "code": "SKS",
        "description": "Safety-Kleen Systems, Inc."
    },
    {
        "code": "UIS",
        "description": "United Industrial Services"
    },
    {
        "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

```json
{
    "type": "System",
    "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

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
<server url>/rcra-handler/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 following error:
       - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Proper Shipping Names
   3.2. The System will generate JSON containing obtained Proper Shipping Names
4. The System returns response:
   4.1. If Request was completed the system will return JSON containing:
       - list of Proper Shipping Names
   4.5. 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 Proper Shipping Names which will be returned by the service)

```
[
    "1,1,1-Trifluoroethane or Refrigerant gas, R 143a",
    "1,1-Difluoroethane or Refrigerant gas R 152a",
    "1,1-Difluoroethylene or Refrigerant gas R 1132a",
    "1-Chloro-1,1-difluoroethane or Refrigerant gas R 142b",
    "2,2-Dimethylpropane",
    "Acetylene, dissolved",
    "Aerosols, flammable, (each not exceeding 1 L capacity)",
    "Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)",
    "Bromotrifluoroethylene",
    "Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing
    more than 40% butadienes",
    "Butane see also Petroleum gases, liquefied",
    "Butylene see also Petroleum gases, liquefied",
    "Chemical under pressure, flammable, corrosive, n.o.s",
    "Chemical under pressure, flammable, n.o.s",
    "Chemical under pressure, flammable, toxic, n.o.s"
]
```

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",
   "description": "The user does not have Industry permissions for any Site"
    "errorId" : "9v7a9808-s35a5-4874-928f-12fc3def4b56",
}
```

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

<server url>/rcra-handler/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token

   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site

   2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Id Numbers

   3.2. The System will generate JSON containing obtained Id Numbers

4. The System returns response:

   4.1. If Request was completed the system will return JSON containing:
   - list of Id Numbers

   4.6. 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

<server url>/rcra-handler/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 following error:
        - E_SecurityApiTokenInvalid: Invalid Security Token
    1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Id Numbers for the provided Proper Shipping Name
    3.2. System will check if the size of provided Proper Shipping Name does not exceed 300 characters.
    3.3. If the size of provided Proper Shipping Name exceeds 300 characters the system stops processing and generate following error:
        - E_InvalidProperShippingName: Invalid Proper Shipping Name
    3.4. The System generate JSON containing obtained Id Numbers
    3.5. If no Id Numbers were found the system stops processing and generates following error:
        - E_ProperShippingNameNotFound: "Proper Shipping Name Not Found"
4. The System returns 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

<server url>/rcra-handler/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 following error:
      - E_SecurityApiTokenInvalid: Invalid Security Token

1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site

2.2. If the User does not have permission the System will stop the processing and will generate 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. Provide 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. The system will obtain Proper Shipping Names for the provided Id Number

3.5. The System generates JSON containing obtained Id Numbers

3.6. If no Id Numbers were found the system stops processing and generates following error:
- E_ProperShippingNameNotFound: Proper Shipping Names not found for provided Id Number

4. The system returns response

4.2. If Request was completed the system will return JSON containing:
- list of Id Numbers

4.3. 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_ProperShipping NameNotFound	Proper Shipping Name not found for provided Id Number
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

<server url>/rcra-handler/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 following error:
      - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site

2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Hazard Classes
3.2. The System will generate JSON containing obtained Hazard Classes
4. The System returns response:
4.1. If Request was completed the system will return JSON containing:
- 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

(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

<server url>/rcra-handler/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 following error:
      - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate following error:
    - E_IndustryPermissions: The user does not have Industry permissions for any Site

3. The system process the request
    3.1. System will check if the size of provided Proper Shipping Name does not exceed 300 characters.
    3.2. If the size of provided Proper Shipping Name exceeds 300 characters the system stops processing and generate following error:
    - E_InvalidProperShippingName: Invalid Proper Shipping Name
    3.3. The system will check if provided Id Number has valid format.
    3.4. Provide Id Number shall be compliant with the following format:
    - First 2 characters either "UN" or "NA"+ 4 numeric characters
    3.5. If provided Id Number has invalid format the system stops processing and generates following error:
    - E_InvalidIdNumber: Invalid Id Number
    3.6. The system will obtain Hazard Classes for the provided Proper Shipping Name and Id Number
    3.7. If Proper Shipping Name was not found the system stops processing and generates following error:
    - E_ProperShippingNameNotFound: Proper Shipping Name Not Found
    3.8. If Id Number was not found the system stops processing and generates following error:
    - E_IdNumberNotFound: Id Number Not Found
    3.9. 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
    3.10. The System will generate JSON containing obtained Hazard Classes

4. The System returns response:
    4.1. If Request was completed the system will return JSON containing:
    - 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
<server url>/rcra-handler/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 following error:
        - E_SecurityApiTokenInvalid: Invalid Security Token
    1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Packing Groups
    3.2. The System will generate JSON containing obtained Packing Groups
4. The System returns 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",
"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

<server url>/rcra-handler/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 following error:
   - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   2.2. If the User does not have permission the System will stop the processing and will generate following error:
   - E_IndustryPermissions: The user does not have Industry permissions for any Site
3. The system process the request

3.1. System will check if the size of provided Proper Shipping Name does not exceed 300 characters.
3.2. If the size of provided Proper Shipping Name exceeds 300 characters the system stops processing and generate following error:
- E_InvalidProperShippingName: Invalid Proper Shipping Name
3.3. The system will check if provided Id Number has valid format.
3.4. Provide Id Number shall be compliant with the following format:
- First 2 characters either "UN" or "NA"+ 4 numeric characters
3.5. If provided Id Number has invalid format the system stops processing and generates following error:
- E_InvalidIdNumber: Invalid Id Number
3.6. The system will obtain Packing Group for the provided Proper Shipping Name and Id Number
3.7. If Proper Shipping Name was not found the system stops processing and generates following error:
- E_ProperShippingNameNotFound: Proper Shipping Name Not Found
3.8. If Id Number was not found the system stops processing and generates following error:
- E_IdNumberNotFound: Id Number Not Found
3.9. 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
3.10. The System will generate JSON containing obtained Packing Groups
4. The System returns 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
<server url>/rcra-handler/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 following error:
     - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Emergency Response Guidebook Numbers
    3.2. The System will generate JSON containing obtained Emergency Response Guidebook Numbers
4. The System returns response:
    4.1. If Request was completed the system will return JSON containing:
    - list of Emergency Response Guidebook Numbers
    4.7. 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
<server url>/rcra-handler/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 following error:
        - E_SecurityApiTokenInvalid: Invalid Security Token
    1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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. Provide 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. The system will obtain Emergency Response Guidebook Number for the provided Id Number
    3.5. If Id Number was not found the system stops processing and generates following error:
    - E_IdNumberNotFound: Id Number Not Found
    3.6. The System will generate JSON containing obtained Emergency Response Guidebook Numbers
4. The System returns response:
    4.1. If Request was completed the system will return JSON containing:
    - 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
<server url>/rcra-handler/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 following error:
      - E_SecurityApiTokenInvalid: Invalid Security Token
   1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
   2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Container Types and Container Type Descriptions
   3.2. The System will generate JSON containing obtained Container Types and Container Type Descriptions
4. The System returns response:
   4.1. If Request was completed the system will return JSON containing:
      - list of Container Types and Container Type Descriptions
   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

"code-descriptions.json"

Completed Response Example

```json
[
    {
        "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

<server url>/rcra-handler/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 following error:
        - E_SecurityApiTokenInvalid: Invalid Security Token

1.2. If Web Security Token expired the system stops the submission and will generate 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 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 permission for any Site
    2.2. If the User does not have permission the System will stop the processing and will generate 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 obtain Quantity UOM Codes and Descriptions
    3.2. The System will generate JSON containing obtained Quantity UOM Codes and Descriptions

4. The System returns response:
    4.1. If Request was completed the system will return JSON containing:
    - list of Quantity UOM Codes and Descriptions
    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
"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

Services Scenarios Examples

Prerequisite :

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

Obtaining Manifest for the Site

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 all Manifests stored in the system for the provided Site Id.
4. If there are Manifests for the provided Site Id the *manifest-tracking-numbers* service returns the list of Manifest Tracking Numbers.
5. If there is no Manifests for the provided Site Id the *manifest-tracking-numbers* service returns empty list.
6. Requester performs *manifest* service to obtain Manifest.

Obtaining Site Ids for the State

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.
4. *site-ids* service returns list of the either of all Transporter IDs or all TSDF Ids or all Generator Ids.

Obtaining Site Details

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.
4. *site-details* service returns Site Details.