



E-ENTERPRISE
for the environment

Modernizing the business of environmental protection

Implementing Real-Time Facility Data Management between Partners: Impacts to Facility Data and Pilot Lessons Learned

E-Enterprise Facility State Master Data Management Pilot

Version 1.0 May 2018

E-Enterprise Facility Team's State MDM Pilot Team

Table of Contents

Table of Contents	i
1. Introduction	1
2. State MDM Pilot Phase II Accomplishments.....	1
2.1 Terminology.....	1
2.2 Laying the Foundation	1
2.3 Goals of the Pilot	2
2.4 Minimum Viable Product	2
2.5 Shared Facility Services Design	3
2.6 Shared Facility Services Architecture.....	3
2.7 RIDEM Dataset.....	3
2.8 Security	3
2.9 Shared Facility Services Development	4
2.9.1 Submit to FRS	4
2.9.2 Submit to PLOVER.....	4
2.9.3 Query FRS	4
2.9.4 FRS Business Logic Changes.....	4
2.10 Short Term Wins	5
2.11 Level of Effort.....	5
3. Downstream Evaluation.....	6
4. Project Documentation	7
5. Post-MVP Issues	7
5.1 Policy/Governance Issues	7
5.2 Refinements to Pilot Shared Facility Services.....	8
5.3 Expanded Services	9
5.4 Preparing for Production Deployment	9
6. Lessons Learned	9
7. Suggested Next Steps.....	10
8. Acknowledgements	10
9. Summary Material	10
Appendix A – Terminology and data structures.....	11
A.1 Terminology and Data Structures in Master Data Management Systems.....	11
A.2 FRS Facility Records and Partner Data – Before the Pilot	11
Appendix B – State MDM Use Cases and Scenarios	13
Appendix C – FRS Facility records before and after pilot implementation	15
C.1 Pre-Pilot Approach to Populate FRS Facility Records.....	15
C.2 Updating FRS Facility Records through Pilot Services	15
Appendix D – Data Attributes exchanged in pilot facility services	16
Appendix E – Pilot ArchitectureS	21
Appendix F – Incorporating FRS Query in PLOVER Public Webpage Search	22

Appendix G – Downstream Evaluation Test Scenarios and Results.....	24
G.1 Downstream Evaluation Scenarios.....	24
G.2 Scenario 1: PLOVER Submits Duplicate Records to FRS	28
G.3 – Scenario 3: Process Different Program Update.....	29
G.4 – Scenario 4: FRS Edits FRS Facility Record.....	30
G.5 – Scenario 5: PLOVER Edits Applied to FRS Facility Record	34
G.6 – Scenario 6: PLOVER Changes and Related TRI Records	37
G.6.1 Impact to TRI Reporters	45
G.7 – Scenario 7: Edits to a TRI Program Record	47
G.8 – Scenario 8: PLOVER Edits to FRS Facility Record Linked to a CEDRI Program Record.....	53
G.8.1 Impact to CEDRI Reporters	59
G.9 – Scenario 9: PLOVER Submits Merge Records to FRS	62
G.10 – Scenario 10: PLOVER Submits multiple updates in a short period of time	64
Appendix H – State MDM Pilot Participants.....	65

1. INTRODUCTION

Facility data is at the core of federal and State, Local, and Tribal (SLT) environmental regulatory processes. Knowing a facility's name, ownership, location and characteristics are key to a comprehensive picture of past, current, future, and potential environmental impacts. Linked to other critical environmental data such as ambient air and water quality data, census figures, and other demographic information, facility data has the capacity to provide a comprehensive picture enabling co-regulators to better protect human health and the environment.

The purpose of the State Master Data Management (MDM) pilot conducted in Phase II of the E-Enterprise Facility's multi-year project to integrate facility information was to explore how facility data can be jointly managed by the Environmental Protection Agency (EPA) and a state with a mature MDM system and processes. Implementing a joint management framework provides the enterprise with comprehensive, up-to-date facility information. It allows the participating partners to incorporate additional facility information into their systems (including public-facing websites and services), improving transparency and data quality for all stakeholders. Outcomes of the pilot are not intended to be limited to partners with mature facility MDM systems. The intention is to develop facility services that can be used by partners regardless of their current MDM capabilities and regardless of the technical platform used by partners. All partners regardless of whether they manage facility information in an MDM system or not, will benefit from the shared facility services that were developed under this pilot.

EPA partnered with the Rhode Island Department of Environmental Management (RIDEM) to explore joint facility data management. RIDEM uses a state-developed customized system, Permits, Licenses & Other Vital Environmental Records (PLOVER) to manage facility data for their agency. They have a robust data governance framework in place to manage facility data. A crucial aspect of this pilot was the use of shared web services to enable this joint facility data management while acknowledging and minimizing disruption to a state's implemented MDM system and set of policies and practices.

Together, EPA and RIDEM implemented the State MDM Pilot. The pilot included requirements gathering, service development and documentation, and an evaluation of impacts to "downstream" users of FRS facility data. This document provides a summary of the work done in the State MDM pilot.

2. STATE MDM PILOT PHASE II ACCOMPLISHMENTS

Early efforts under the State MDM Pilot focused on requirements gathering and defining the goals of the pilot. Later, the team transitioned to development to build the pilot shared facility services. Development work was conducted by both EPA and RIDEM for their respective systems. Services built as part of the pilot were delivered within test environments.

2.1 Terminology

In order to understand the context for the accomplishments of Phase II, some readers may find an explanation of common terms and illustrations of how the data in FRS and PLOVER operated pre-pilot helpful. [Appendix A](#) includes some additional background information.

2.2 Laying the Foundation

From December 2016 to August 2017, the E-Enterprise Facility team and RIDEM had foundational discussions to provide insight into both PLOVER and EPA's Facility Registry Service (FRS). This allowed the group to explore details of each partner system. Discussions covered how each system manages, processes, and governs facility data, including detailed discussions on system architecture, technology, governance processes, and the business rules and system logic that dictates how facilities are added, edited, merged, and unmerged. The merging and unmerging of facilities is especially critical in

maintaining accurate information about facilities by avoiding duplicative facilities and erroneous linkages between program information and a higher-level or “master” facility records. The group developed use cases to explore step-by-step details for how joint facility management of data would work.

The group documented four main use cases (PLOVER Add New, PLOVER Edit, FRS Edit, and PLOVER Query FRS) and seven total scenarios in a flowchart format. Links to these documents are provided in [Appendix B](#). These use cases allowed the team to identify the number and types of joint facility services that were wanted in the pilot. The group coordinated with and referenced materials created by the Facility Team Business Rules and User Stories work streams to ensure consistency.

2.3 Goals of the Pilot

The group’s goal was to develop and implement shared facility services that would enable:

- A state user to perform MDM functions in their state MDM system and have those functions be reflected in FRS in real time.
 - For example, if a data steward edits a facility record in a state MDM system or merges two facility records into a single facility record in a state MDM system, the edit/merge should be immediately visible in FRS.
- An FRS data steward to edit an FRS facility record to be reflected in a state’s MDM system in real time.
 - For example, if a data steward makes an edit to an FRS facility record, or if two FRS facility records are merged, that edit or merge should be immediately sent to partners for incorporation into their facility MDM system.
- A real-time search of FRS facility records and seamless integration into a state website and state MDM system.
 - For example, if a member of the public is on a publically accessible Internet page with the ability to search a state MDM system, the search provides results from both the state MDM system and FRS. This enhanced public search provides members of the public with a more complete search result set.
 - For example, state staff are able to execute a search of FRS facility data from within their state MDM system. By incorporating an FRS search into a state’s facility MDM system, the state MDM data stewards will be able to leverage FRS facility data, decreasing data entry time and reducing the possibility of duplicate facility records.

Once the services were implemented, the group had a goal to evaluate the impacts of real-time shared facility data management on other “downstream” users of FRS facility data.

[Appendix C](#) includes diagrams and more detailed explanations to illustrate the anticipated relationship between an FRS facility record and PLOVER records after completion of the pilot.

The group recognized the need for service components to be configurable and developed in accordance with the E-Enterprise Shared Services Strategy. Ensuring adherence to E-Enterprise principles was a touchstone of the team’s evaluation criteria. The group recognized the need to utilize E-Enterprise assets where possible.

2.4 Minimum Viable Product

The group agreed that they would focus on a Minimum Viable Product (MVP) for the first iteration of development. An MVP is a product with enough features to meet minimum requirements and allows the product owner to provide feedback for future development. The group determined that shared facility services would be implemented in a non-production environment. This allowed the team to create scenarios and evaluate many types of edits and updates to facility records. By creating and testing

scenarios in a non-production environment, the group was able to evaluate the impacts of real-time facility data management by an external partner to other users of FRS facility data. The group implemented Agile methodology in short (two to three week) development sprints in order to design, develop, and document the shared facility services. Project work was managed by the EPA development team using Agile IQ Suite tools Jira and Confluence. These products include the ability to document requirements and link them to tickets that were part of the Agile development sprints.

2.5 Shared Facility Services Design

Early Agile sprints focused on services design and decisions around security and business logic. Using the flowcharts and previous discussions as a foundation, the group determined what business logic was needed in both systems in order to implement a bi-directional flow of facility data in real time. At this stage, the team made several decisions that would define how the services would be development and implemented.

A critical decision that defined future business logic was that RIDEM would act as the primary data steward for FRS facility data that was linked to data in their state MDM system. Any new facilities added or edited by RIDEM in their state MDM system would be reflected in FRS. This meant that edits by RIDEM would be treated as equivalent to edits by FRS data stewards. The team determined that changes made in FRS to records linked to the RIDEM's state MDM system would also be provided back to RIDEM for them to incorporate into their state MDM system. [Appendix D](#) includes a list of facility data attributes that are exchanged by the services and applied to the FRS facility record.

A second critical decision was that services would enable the exchange of data in real-time, rather than batching changes to data on a monthly, weekly, or even daily basis. Adding or editing a record in RIDEM's state MDM system would trigger a real-time service call to FRS to provide the updated information. Likewise, a change in FRS would trigger a real-time service call to update RIDEM's system.

The group determined that data would be exchanged using JavaScript Object Notation (JSON) files, although Extensible Markup Language (XML) files will also be available in future iterations. The group reviewed available data in both systems and identified the data fields that would be exchanged as part of the services and performed a gap analysis to identify fields that needed to be added or modified in order to exchange the desired data. The group also evaluated potential discrepancies in data type and field length in order to resolve those differences.

RIDEM examined the data in their state MDM system and determined which facility data would be part of the exchange. Like many state MDM systems, RIDEM's system contains state-only records and other records that do not fall under EPA's regulatory authority.

2.6 Shared Facility Services Architecture

As the team transitioned into more traditional development, the group established the necessary architecture and data that would be needed to implement the pilot services. See [Appendix E](#) for a diagram that represents the Pilot architecture.

2.7 RIDEM Dataset

RIDEM provided a dataset from their development environment via [FACID 3.0](#) and implemented into the FRS Pre-Production environment. Once the PLOVER dataset was fully incorporated into the FRS Pre-Production environment, FRS provided the dataset back to RIDEM along with the associated FRS facility IDs so that RIDEM could incorporate those IDs into their development environment.

2.8 Security

The group evaluated several options for security, and determined that they would use the Network Authentication and Authorization Service (NAAS) in use by the Central Data Exchange (CDX). NAAS

is a collection of services that manage access and permissions. It acts as a shared provider that allows restriction to the services to requests that have the appropriate credentials without the services themselves having to manage credentials. NAAS is commonly used for other applications within the Exchange Network. NAAS authentication was the most appropriate approach for the system-to-system exchange of facility data via web services. The group expects that options for security will evolve over time as E-Enterprise projects implement different solutions across multiple projects. Future implementations are expected to evaluate all options available to them when they are ready to implement.

Both the FRS and PLOVER services utilize NAAS authentication. In order to submit to FRS, RIDEM provided EPA with a Static IP list that will enable RIDEM to access the shared facility services. RIDEM also provided information that will enable FRS to submit updates to PLOVER.

2.9 Shared Facility Services Development

As part of Phase II of the State MDM Pilot, the team developed three facility web services. During the development phase, the team developed the shared services, implemented security and updated FRS and PLOVER with necessary changes in business logic.

FRS services were built in Java and PLOVER services are built in .Net. The use of shared services enables data exchange among partners with different architectures and technologies. This is a critical component to being able to implement shared services across the enterprise.

2.9.1 Submit to FRS

The FRS team built a submit service that will be called when changes are made within PLOVER. RIDEM developed the necessary functionality to generate a JSON file and submit the file to the Submit to FRS service. The FRS team updated FRS business logic to process the submit file from PLOVER, including applying facility updates to the FRS facility record. The service also enables PLOVER to identify facility records that should be merged or unmerged based on facility merging and unmerging performed in PLOVER by RIDEM data stewards. Once created and unit tested locally, services were deployed to a Pre-Production environment.

2.9.2 Submit to PLOVER

The RIDEM team built a submit service that FRS will call when changes are made to an FRS facility record that is related to a PLOVER record. The FRS team developed functionality to generate the JSON file to submit to this service, and RIDEM developed functionality to process the FRS edit within PLOVER. The service enables real-time transfer of facility information from FRS to PLOVER and includes the ability for FRS to specify two or more PLOVER records that could be merged or unmerged based on facility merging and unmerging performed in FRS by FRS data stewards. Once created and unit tested locally, services were deployed to a Pre-Production environment.

2.9.3 Query FRS

The FRS team developed a query service that PLOVER and ePLOVER can call to perform a real-time query of FRS. ePLOVER is RIDEM's publicly available search interface for PLOVER. RIDEM has developed the ability to call this query upon execution of a search on their ePLOVER website. Once created and unit tested locally, services were deployed to a Pre-Production environment. [Appendix F](#) contains screenshots illustrating how the FRS query is incorporated into the ePLOVER search. The query service does not change data and can be easily implemented to enhance public access to facility information.

2.9.4 FRS Business Logic Changes

EPA made business logic changes to FRS to enable an edit from RIDEM's State MDM system to update an FRS facility record. This included changes to the FRS logic in multiple places. The logic ensures that

only edits to records related to a RIDEM PLOVER record can occur. In other words, updates from PLOVER cannot update FRS facility records that are not in Rhode Island.

2.10 Short Term Wins

The State MDM Pilot effort has resulted in three schemas and a version of shared facility web services that can be leveraged for data exchange between EPA and SLT partners and within EPA between FRS and program-specific applications. The lessons learned through this pilot will inform future collaborations among partners. The Query FRS service, which does not involve updating data, can be implemented in production in the near-term. This will enable the Facility Team to realize the goal of providing more timely facility information to the public.

2.11 Level of Effort

The Facility Team Phase II State MDM Pilot took place between December 2016 and March 2018. The focus of the early phase (December 2016 through August 2017) was to lay the foundation for development and testing of the pilot services, which took place between December 2017 and March 2018. This pilot would not have been successful without the participation and collaboration among the State MDM Pilot team members. Participants included Rhode Island staff, EPA staff, contractor support staff, and the Facility Team co-chairs.

Rhode Island Department of Environmental Management pilot team members included the Agency Information Technology Director, a State Project Manager, Programmer and Lead Analyst, and Web Programmer. RIDEM team members participated in over 30 meetings during the scoping and planning phase of the pilot. Rhode Island staff provided an overview of their system and business processes, evaluated project review documents and content, and met offline as a sub-team in order to be prepared for large Pilot team meetings. During the development phase, the Agency IT Director provided guidance and input over the overall implementation of pilot services and the State Project Manager provided programmatic input and coordination for the RIDEM team members. The Programmer and Lead Analyst developed and unit tested the Submit to Partner Service and performed development and unit testing on the RIDEM MDM system to enable database triggers and logic changes to call the Submit to FRS service. The Programmer and Lead Analyst also tested the Submit to FRS service and obtained all screenshots necessary for full end-to-end testing and downstream evaluation with EPA and EPA's contract support team members. The RIDEM Web Programmer developed and tested UI changes to the RIDEM public website as a result of incorporating the Query FRS service. The Web Programmer also tested the Query FRS service necessary for end-to-end testing of that service.

EPA project participants included the FRS product owners within the Office of Environmental Information and contract support from CGI Federal. The EPA FRS product owners attended all meetings and provided thorough and thoughtful input to all stages of the project including work product and deliverable review, guidance on policy and technical issues and many other areas.

EPA contractor support staff from CGI Federal participated by facilitating pilot meetings, producing work products and deliverables, developing the FRS services, and executing the downstream evaluation and testing scenarios. During the early phase of the pilot, contractor support staff consisted of a project manager and functional business analyst with some participation from application development staff. Once development began in December 2017, CGI Federal allocated three developers, a lead developer who coordinated all development, testing, and deployment activities and two JAVA developers who focused on JAVA service development.

The Facility Team Co-Chairs who were not already represented on the Pilot team also participated in most of the early planning meetings, sprint review meetings, and reviewed work products and deliverables.

Table 1 summarizes the approximate allocation of State MDM Pilot team members during both the foundational phase of the pilot and active development and testing phase of the pilot.

State MDM Pilot Team Member Organization	Role	Approximate % Allocation December 2016 – August 2017	Approximate % Allocation December 2017 – March 2018
Rhode Island Department of Environmental Management	Agency IT Director	5%	1%
	State Project Manager	10%	10%
	Programmer and Lead Analyst	8%	65%
	Web Programmer	5%	20%
EPA, Office of Environmental Information	FRS Product Owner	15%	N/A
	FRS Product Owner and EPA Co-Chair	10%	25%
Facility Team Co-Chairs	State Co-Chair (Josh)	10%	5%
	EPA Co-Chair (Ron)	10%	10%
CGI Federal, EPA Contractors Supporting FRS	Project Manager	30%	50%
	Functional Business Analyst	25%	25%
	Lead FRS Developer	10%	75%
	FRS JAVA Developers	N/A	25%

Table 1. Approximate allocations for State MDM Pilot Team Members.

3. DOWNSTREAM EVALUATION

Implementing shared facility services in real-time and enabling edits to FRS facility records by a state partner is a paradigm shift for EPA. One goal of the pilot was to evaluate how changes to an FRS master facility record would affect future (or “downstream”) users of those FRS facility records. It was important for the group to fully evaluate the effects of the pilot services downstream.

The group developed nine downstream evaluation scenarios. Some included very specific data set-up/identification needs in order to evaluate specific impacts to changes in a facility record. [Appendix G](#) lists the downstream evaluation scenarios, including a description of the data set up and the before and after screenshots for most scenarios.

All evaluation scenarios produced the intended results (passed) and the Facility Team did not note any significant impacts to downstream users of FRS facility data because of PLOVER edits being applied to the FRS facility record.

Direct reporters who report via the Facility Widget can edit and report only on their associated FRS program record, such as a TRI or CEDRI record. Facility Widget users do not have the ability to directly edit an FRS facility record. Therefore, it has always been possible that the FRS facility record will not match the FRS program record. If the FRS facility record and the Facility Widget user's program facility record do not match (different facility name or address), the user is alerted by an informational icon and message on the Facility Widget user interface. The Facility Widget user has the option to edit their program facility record, but is not forced to do so.

[Appendix G](#) contains screenshots of the Facility Widget that represent what regulated entities may expect to see after pilot services are implemented in production. Because the services are not updating other program records (i.e., PLOVER editing a record does not change a Toxic Release Inventory (TRI) record linked to the same FRS facility record), there is no significant impact to direct data reporters that use the FRS Facility Widget.

4. PROJECT DOCUMENTATION

The group recognizes that future partners will want to implement the new shared facility services, but may not be able to dedicate time to a lengthy on-boarding process. The group collaboratively developed an Implementation Guide that will serve as a blueprint for future partners. The Implementation Guide is a working document that will be modified based on input from subsequent pilots and testing. It is available on SharePoint at this [link](#).

Shared Facility Services documentation was deployed as part of the services. Service documentation adheres to API best practices and standards as developed by 18F, an office within the General Services Administration focused on digital services, except in portions of the document that are only applicable once a service is available in a production environment. Once services are deployed to production, services documentation will adhere to 18F standards.

5. POST-MVP ISSUES

The focus of the State MDM Pilot was to develop services that will work for FRS and PLOVER. The group made efforts to ensure broad applicability where possible, however future partners may have different requirements and will need to evaluate the services along with the Implementation Guide to determine how to implement shared facility management to best meet the needs of their organizations. It is also possible that future partners will see significant alignment between their use cases and the current version of the services. For example, RIDEM was interested in using query services to enhance the search capability on their ePLOVER public search page. Doing so helps public users get a more complete answer to the "what's near me?" question. This is a common use case among partners and may not need significant adjustments going forward.

During the course of the Pilot, the Facility Team identified issues and service functionality expansions that were deemed out of scope for the current Phase II MVP effort. These unresolved questions and potential future functionality were documented so that they can be addressed in subsequent facility work. The list of items to be addressed in the future will continue to evolve as more partners use the shared services.

5.1 Policy/Governance Issues

The team identified six issues that need to be discussed with a broader audience because they touch upon policy/governance topics.

- The concept of facility status and how to populate FRS facility status and status date needs to be addressed. Facility status attempts to describe whether activity is taking place at a given facility and in some systems relies on descriptors such as "active", "inactive", "temporary", "permanently

closed,” among others. A future discussion may benefit from evaluating what other E-Enterprise groups, such as the ECHO workgroup, have discussed with respect to facility status.

- The management of a state’s program systems in conjunction with EPA’s program data remains an issue. States may manage program data in a state system that is provided to a corresponding EPA program system and then populated into FRS from that EPA program system.
 - For example, a state may have its own system to manage emissions data within the state, a subset of which is provided to EPA’s Emissions Inventory System (EIS), which then populates FRS. This issue also includes the matching of specific program records with potentially different facility records in FRS and a State MDM system. A change can be made in FRS but how does that change get reflected in the EPA program source system?
- Incorporating partner Geographic Information Systems (GIS) data and changing how the Best Pick location for an FRS facility record is determined is an open technical issue for the geocoding component of FRS.
- The business rules and logic surrounding facility records being archived (“deleted”) needs to be discussed. FRS does not delete records permanently; they are archived so history is preserved. Some partner systems may perform a true delete and guidance surrounding how joint facility services should manage this is needed.
- Discussing a facility’s lifecycle with respect to different media/program perspectives and how that concept should be addressed with respect to sharing facility data.
- Defining and implementing a longer-term goal of simplifying reporting for permitted entities by utilizing shared facility data among partners.

While the group agreed these issues were important, they were judged to be out of scope for the current pilot effort. In addition, these topics overlap with other areas that are currently being examined through the lens of E-Enterprise and have an impact broader than facility alone. The facility status and management of a state’s program system data were referred to the Business Rules work stream and will need to be revisited by the Facility Team in the future.

5.2 Refinements to Pilot Shared Facility Services

During the course of MVP development, it is common to discover additional functionality needs that are deemed important, but not critical, to the immediate MVP product. These additional features/functions will expand the current services or implement additional business logic changes in FRS. The Facility Team will consider these for future services deployments.

- Provide information about merged facilities as part of the Submit to FRS service to inform partners about other FRS program facility records associated with the partner record.
- Add duplicates fields that are already in the schema to the data exchange.
- Modify FRS business logic for null Supplemental Program Interests.
- Add Quality Assurance (QA) fields to the Submit to FRS service response.
- Evaluate the need for additional FRS business logic changes as a result of the services.
- Add failed changes to a staging table to ease the ability to investigate issues if a submission is not successful.
- Develop a versioning plan to support future pre-production and eventual production deployments of all of the services that will eventually be part of the service suite for shared facility services.
- Configure test routines to ensure services are working properly.

- Implement automated regression testing to make developer testing more efficient.

5.3 Expanded Services

The Facility Team identified potential new services or new exchanges that could be incorporated into future releases.

- Implement lookup services to provide standard code sets to partners.
- Create XML (XSD) schemas for partner that may not be able to use JSON.
- Exchange data for the following FRS tables:
 - Organization
 - Contact
 - Alternative Name
 - Alternative ID
 - Sub-Facility
 - NAICS
 - SIC
 - Mailing Address
 - Tribal Codes

5.4 Preparing for Production Deployment

Several tasks need to be complete before any shared facility services can be deployed to production.

- Test pilot services with other SLTs to ensure broad applicability.
- Develop a Shared Services Commitment (SLC) to describe EPA's commitment for supporting shared services.
- Develop Shared Services Agreements (SLAs) with partners who want to adopt joint facility data management to address the business expectations in maintaining data.
- Register services in the Reusable Component Services (RCS) catalog along with all required supporting documentation.

6. LESSONS LEARNED

The State MDM Pilot team compiled lessons learned throughout the course of Phase II activities. They are documented here to inform additional development and testing within the SLT community.

- Clearly define dependencies which may exist between different E-Enterprise projects and which also include dependencies between partners participating in development and those entities outside of the existing development team. This is especially relevant to E-Enterprise broadly.
- Provide flexibility to staff within the partner agency regarding their use of project tools and documentation. Some partners may wish to directly use the same set of project management, requirements gathering, and Agile development tracking tools used by EPA (e.g., the Agile IQ Suite). Some partners may wish to communicate via email and not use the tools used by the EPA development team.
- For tasks that require coordination between partners, establish a coordination mechanism between sprint reviews. For tasks that may require additional explanation, holding a short (30 minutes or less) meeting may be more productive than exchanging emails.
- Capture hours spent on tasks to help inform future planning.
- For all sprints, identify the must-completes from the nice-to-haves.

- During services development/implementation, establish a good communication between partner and EPA/contractor technical team members. Availability of technical staff when issues arise helps make more efficient use of everyone's time.
- Complete project documentation as the project progresses. This enables the team to be more efficient.
- Allow sufficient time for testing between partners and downstream evaluation. Prior to testing, establish a plan for who will do what, and in what order.

7. SUGGESTED NEXT STEPS

The initial services represent the work completed as part of the State MDM Pilot in Phase II of the Facility Team. The Facility Team expects that the services will evolve to expand functionality and that future phases will include efforts to expanded services with additional partners. Future pilots are expected to take place in test environments with continued evaluation of the impacts to other users of FRS facility data. After the services have been evaluated with an additional partner or partners, the Facility Team expects to plan for production implementation of the services. At that time, the service documentation and necessary Service Level Commitments will be created and the services will be discoverable for use across the Enterprise. Once in production, the Facility Team expects that services will continue to develop in future versions to meet the evolving needs of EPA and partner agencies.

The Facility Team created an Implementation Guide which is intended to serve as a document that will be adapted for future versions of shared facility services and aid in future pilots with additional partners and in production implementation of the shared facility services. The Implementation Guide can be found on SharePoint at this [link](#).

8. ACKNOWLEDGEMENTS

The Facility team wishes to acknowledge the tremendous effort, time, attentiveness and dedication shown by the RIDEM participants and Facility team members. Their contribution to this effort will help usher in a new era of joint collaborative information management. Their help in advancing the mission of E-Enterprise is greatly appreciated. Team members and their roles are listed in [Appendix H](#).

9. SUMMARY MATERIAL

Materials for the State MDM Pilot meetings, including slide decks and meeting minutes can be found on [SharePoint](#). SharePoint is used by the Facility Team and E-Enterprise as a way to share content with multiple partners. It requires a login and password. For access to SharePoint or for questions on access, please visit the E-Enterprise 'Contact Us' page at: <https://www.epa.gov/e-enterprise/forms/contact-us-about-e-enterprise-environment>.

APPENDIX A – TERMINOLOGY AND DATA STRUCTURES

A.1 Terminology and Data Structures in Master Data Management Systems

Many facilities that fall under environmental regulations or requirements are subject to multiple regulations. For example, an industrial facility may have an air permit, a National Pollutant Discharge Elimination System (NPDES) discharge permit, and may fall under reporting requirements for TRI. These individual requirements are often separated by media (air, water, waste), by organizational “program” areas, or by statutory or regulatory authority. This results in individual records for each type of requirement, meaning a single facility can be separately represented by an air record, a NPDES record, a TRI record, and more. Each of these records has a facility name, address, location (latitude/longitude and metadata), and unique ID in addition to other data attributes. In FRS, these records are referred to as *Program Facility Records*. There is an additional subset of facility data related to program facility records. In FRS, these are called *Supplemental Program Interests*. These typically represent a permit or facility type.

In a facility Master Data Management (MDM) system, such as FRS or PLOVER, individual Program Facility records are recognized as belonging to the same physical facility and are linked together and tied to a “master” or parent record. This higher-level record usually contains a single facility name, address, location and a unique ID (among other attributes). In FRS, these records are referred to as the *FRS Facility Record*. The methods used to identify program records that should be linked under a single higher-level record and to populate the data attributes are unique to each MDM system.

A.2 FRS Facility Records and Partner Data – Before the Pilot

FRS integrates facility data from EPA programs and partners. Regardless of the source of the data, all records provided to FRS from EPA programs result in the creation of FRS program records, underneath the FRS facility record. Records provided to FRS from EPA partners, such as from a partner MDM system, result in the creation of an FRS partner facility record. Within the data structure of FRS both FRS program facility records and FRS partner facility records are stored in equivalent FRS database tables. **Figure A-1** illustrates the relationship between an FRS facility record and associated FRS program facility records and an FRS partner facility record and their associated supplemental program interests. In this example, the PLOVER partner facility record is shown bolded and with a dashed border to differentiate it from the other records, which are provided from EPA program systems.

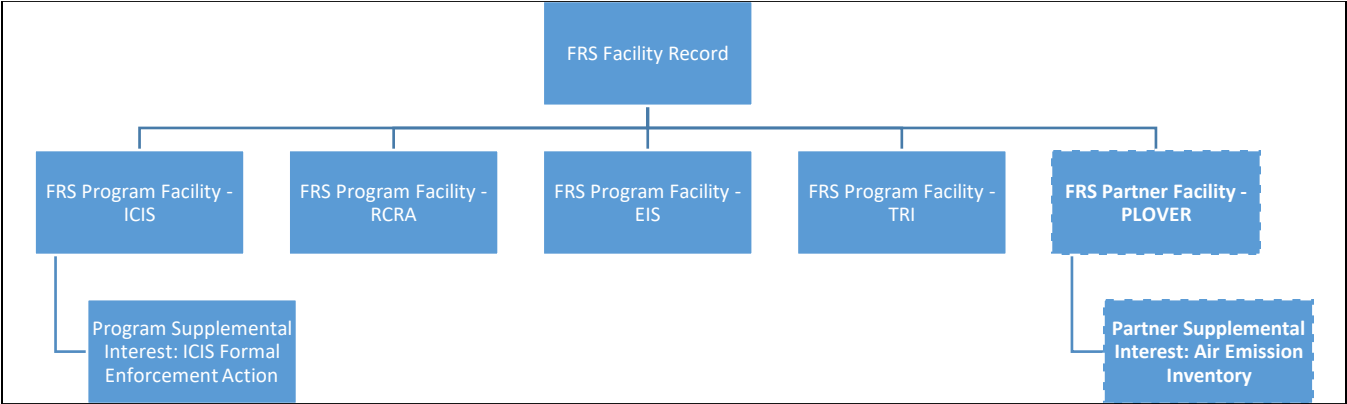


Figure A-1: Example of the relationship between an FRS facility record and FRS program facility records and FRS partner facility records.

Using the example data structure illustrated in **Figure A-1**, **Figure A-2** applies sample data to this scenario. **Figure A-3** represents how FRS stores this partner data prior to execution of the Pilot and reflects

that, pre-pilot, partner facility data is not used to populate FRS facility data attributes. The PLOVER record is shown bolded and with a dashed boarder to differentiate it from other records.

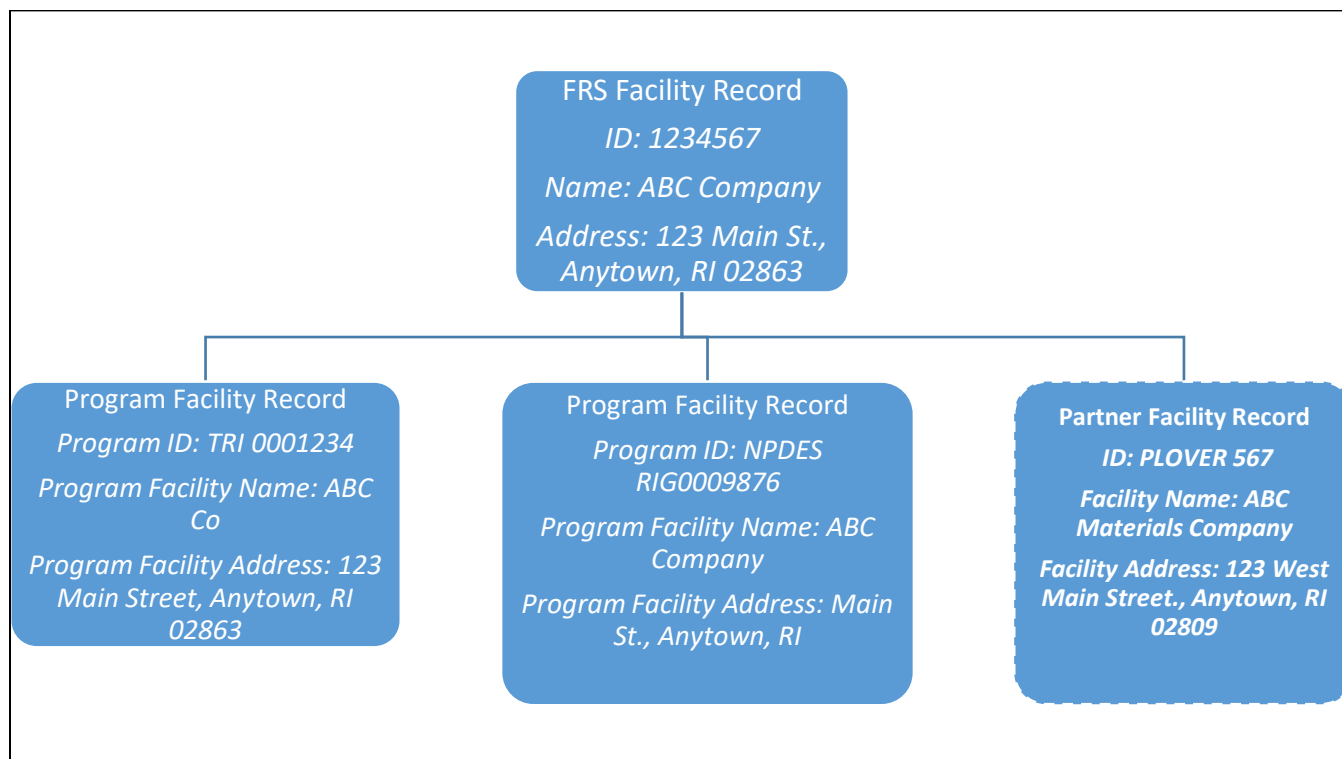


Figure A-2: Example relationship between FRS facility records, program facility records, and a partner facility record from PLOVER. Note that the FRS facility record does not incorporate data attributes from the PLOVER partner facility record.

APPENDIX B – STATE MDM USE CASES AND SCENARIOS

The team developed four use cases and seven scenarios to capture requirements of the facility services in scope for the State MDM pilot. A scenario description, preconditions, user stories, and links are provided below.

- Use Case: PLOVER Add New
 - Scenario: PLOVER adding a new record
 - *Precondition: The record is new to PLOVER*
 - *User Story: As an RI PLOVER user, I want to add a new facility record to PLOVER. I want this record to be sent to FRS (assuming it is of interest to FRS) to maintain consistency between PLOVER and FRS*
 - [SharePoint link](#)
- Use Case: PLOVER Edit
 - Scenario: PLOVER Edit (not de-duplication) to an existing PLOVER record
 - *Precondition: Every record with an FRS Registry ID in PLOVER has a PLOVER Program Interest ID in FRS*
 - *User Story: As an RI PLOVER Data Steward, I want to edit a PLOVER facility record and I want the edit to be sent to FRS in order to maintain consistency between PLOVER and FRS*
 - Scenario: PLOVER de-duplication between two existing PLOVER records
 - *Precondition: Every record with an FRS Registry ID in PLOVER has a PLOVER Program Interest ID in FRS*
 - *User Story: As an RI PLOVER Data Steward, I want to de-duplicate two PLOVER records and I want the actions I take in PLOVER to be reflected in FRS in order to maintain consistency between PLOVER and FRS*
 - [SharePoint link](#)
- Use Case: FRS Edit to an existing FRS Facility Record
 - Scenario: FRS Edit to FRS Facility Fields (not a merge)
 - *Precondition: Every FRS record with a PLOVER program interest has an FRS Registry ID in PLOVER*
 - *User Story: As someone interested in shared facility data curation, I want any edits to the FRS facility record by FRS data stewards to be provided to PLOVER to maintain consistency*
 - Scenario: FRS Edit to Merge FRS Facility Records
 - *Precondition: Every FRS record with a PLOVER program interest has an FRS Registry ID in PLOVER*
 - *User Story: As an FRS data steward, I want to merge FRS records and I want the merge to be reflected in PLOVER to maintain consistency*
 - [SharePoint link](#)
- Use Case: PLOVER Query FRS
 - Scenario: Public Query
 - *Precondition: None*
 - *User Story: As a public user, I want to query Rhode Island's PLOVER system and have the ability to see both PLOVER and FRS results for a complete picture of facilities that match my query*

- Scenario: Query within PLOVER
 - *Precondition: PLOVER records that are already linked to FRS contain the FRS Registry ID in PLOVER tables*
 - *User Story: As a PLOVER user, I want to query FRS to see if FRS has a facility that matches a new facility I need to add in PLOVER. If there is a match, I want to use the FRS record as a basis for my PLOVER record*
- [SharePoint link](#)

APPENDIX C – FRS FACILITY RECORDS BEFORE AND AFTER PILOT IMPLEMENTATION

C.1 Pre-Pilot Approach to Populate FRS Facility Records

Appendix A outlines the traditional (pre-pilot) approach to incorporating facility partner data from a partner in FRS. FRS incorporates the facility information from partner systems and creates a record underneath an FRS facility record; however, the information within the partner record (in this case, the PLOVER record) has traditionally not been used to make changes to the FRS facility record. Instead, FRS populates the FRS facility record with information from EPA program offices, based on business logic and a hierarchy that takes multiple factors into account. These factors include source of the data (some EPA program systems take precedence over others), whether the data passes QA validation, age of the data and other factors. FRS data stewards can also edit FRS facility records if they become aware that a change is needed.

C.2 Updating FRS Facility Records through Pilot Services

Work completed in this pilot includes development of web services to share facility data and changes to FRS business logic for how FRS processes data from a partner. In this pilot, the team developed the capability to apply data provided in the partner facility record to the FRS facility record itself – in essence, *allowing the partner system to determine attributes for the FRS facility record*. **Figure C-1** illustrates the difference by highlighting the data attributes in the FRS facility record that are populated from the PLOVER partner record and resulted in changes to the FRS facility record.

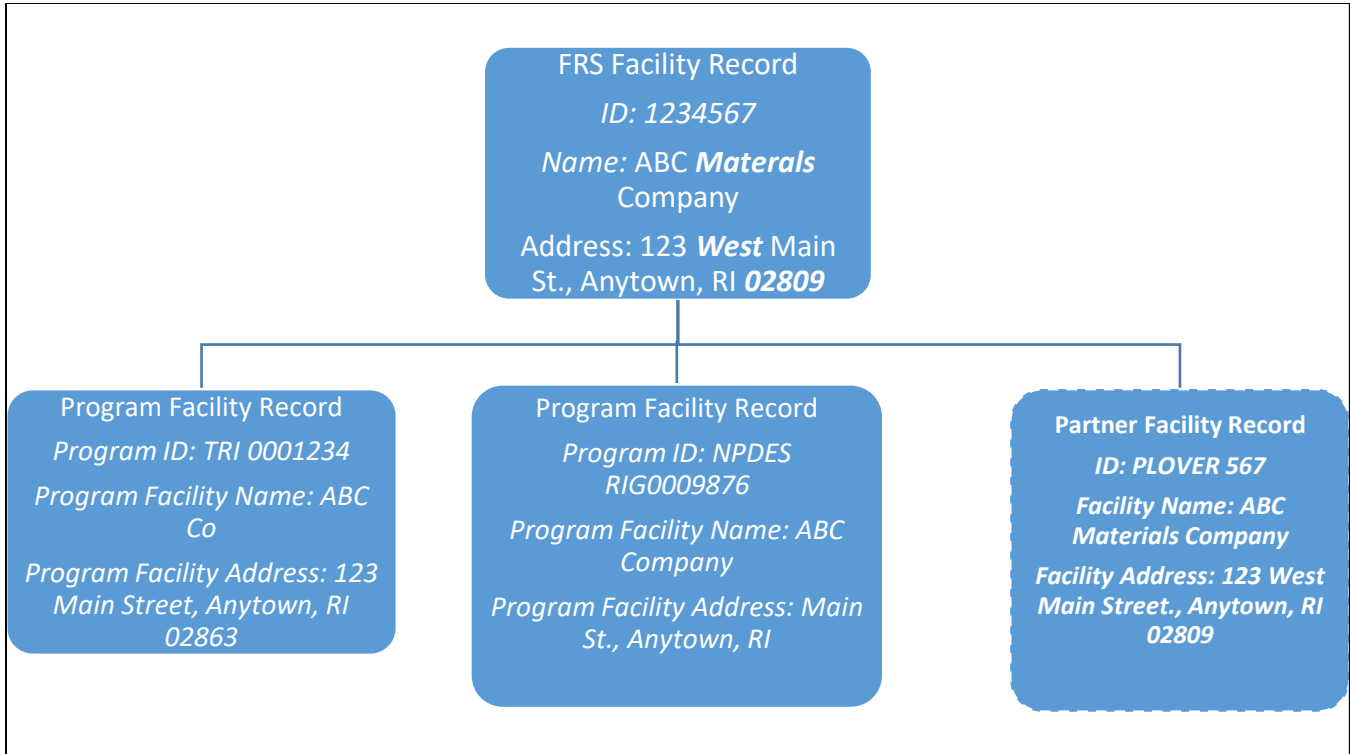


Figure C-1: Example illustrating how the FRS facility record is populated with attributes from the PLOVER partner facility record. Note that the FRS facility record has incorporated data from the PLOVER partner facility record and has been updated.

APPENDIX D – DATA ATTRIBUTES EXCHANGED IN PILOT FACILITY SERVICES

Detailed information on the Facility Services created as part of the Facility Team State MDM Pilot can be found at: <https://ofmext.epa.gov/facilityiptwebervices/>. There are three sets of data attributes that are part of the services. **Figure D-1** describes these sub-sets.

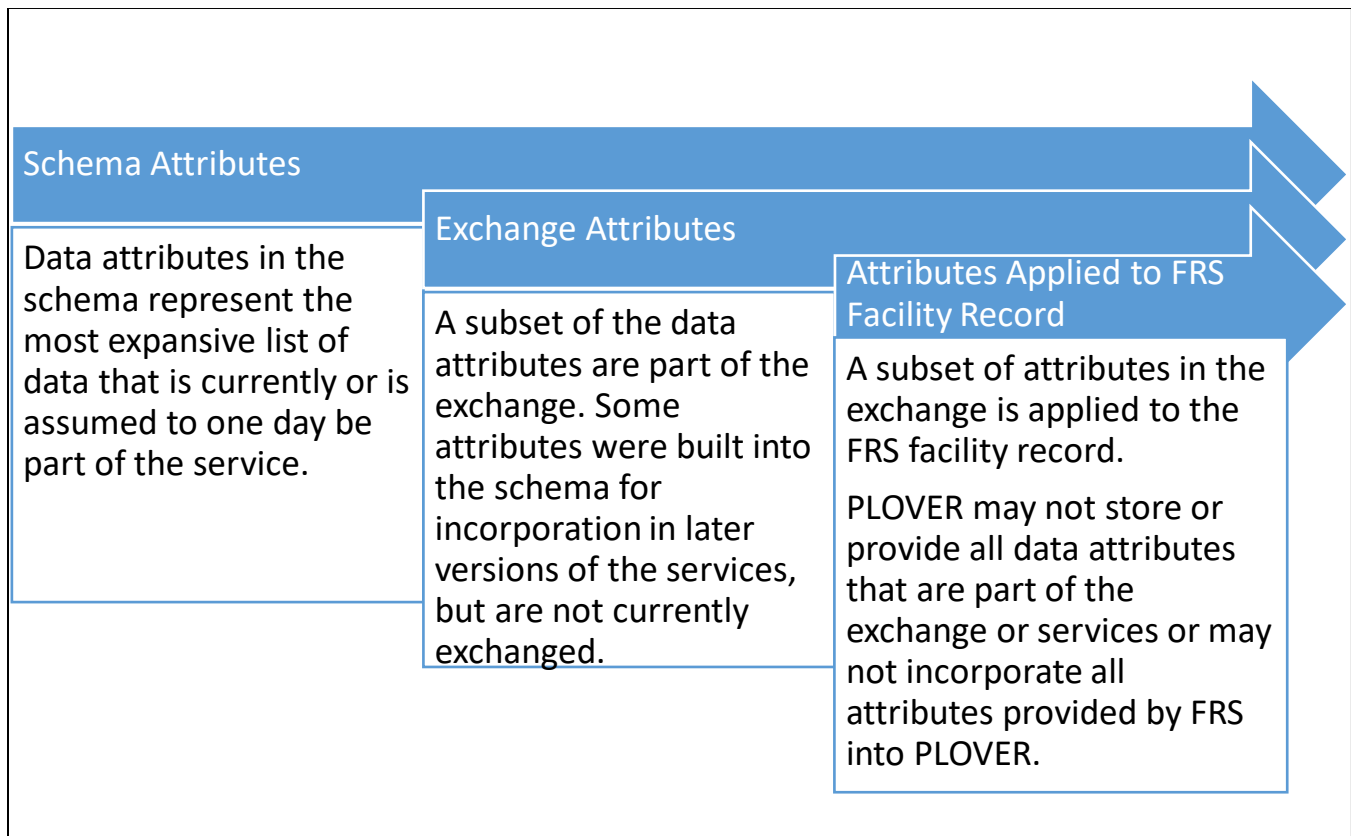


Figure D-1: Relationship between data attribute sets. Note as you progress from left to right in the diagram, the set of attributes decreases.

Figures D-2 and **D-3** list the data attributes that are part of the Submit to FRS and Submit to Partner services exchange and **Figure D-4** lists the data attributes that are part of the Query FRS services exchange. The two submit services create or update PLOVER partner facility records in FRS and some exchanged data elements are also applied to FRS facility records. There are some data attributes that are part of the schemas but that are not part of the data exchange. These were incorporated in the schema for adoption in later implementations of the shared facility services; however, the business logic to manage this data was not part of the MVP. There are eight data attributes that are part of the Submit Schema that are not part of the data exchange. During the pilot, the Team elected to move these items to Post-MVP work.

Facility and Partner Facility Data Attributes Exchanged in Submit Services			
Data Attribute	Definition	Example	Applied to FRS Facility Record?
RegistryID	Unique ID assigned by FRS for this FRS Facility Record.	110000312091	Yes
ProgramSystemAcronym	Abbreviated name that represents the data source for the record.	RI-PLOVER	No

Facility and Partner Facility Data Attributes Exchanged in Submit Services			
Data Attribute	Definition	Example	Applied to FRS Facility Record?
ProgramSystemID	Unique ID assigned by a program system (e.g., PLOVER) to identify the record.	5058	No
PrimaryName	Public or commercial name of a facility.	Premier Thread-Coats America	Yes
LocationAddress	Address that describes the front door or main entrance of a facility.	82 Smith Street	Yes
SupplementalLocation	Additional information about a location such as a building name or suite number.	Suite 45	Yes
CityName	Name of the city, town or locality in which the facility is located.	Providence	Yes
CountyName	The name of the county in which the facility is located.	Bristol County	Yes
CountyFIPSCode	Code that represents the county in which the facility is located.	44007	Yes
StateCode	U.S. Postal Service abbreviation in which the facility is located.	RI	Yes
CountryName	The Country in which the facility is located.	United States	Yes
PostalCode	The 5-digit or 5 plus 4 digit zip code in which the facility is located.	02903	Yes
FederalFacilityCode	Code indicating whether the facility site is the property of the federal government.	Y or N	Yes
AgencyID	The Federal Agency Bureau Code indicating the agency that owns the federal property.	D000	Yes
SiteTypeName	Name for the facility type.	Monitoring Site	Yes
SmallBusinessInd	Code indicating whether a business is requesting relief under EPA Small Business Policy.	Y or N	Yes
UserID	User ID of the person who entered the data or method by which the data was entered into the system.	John_Doe	Yes
ActiveStatus	Status of the facility.	Active, Inactive	No
MergedRegistryIds	FRS facility records that have been merged into the RegistryID value.	123456789	No
DataQualityCode	A code assigned by the automated integration process to indicate whether the address data are missing, invalid or non-standard.	V (for valid)	No
GeoDerviedAddress	The complete, standardized address as provided by FRS to PLOVER.	82 Smith ST Suite 45 Providence, RI 02903	No
GeoDerivedMessage	A message indicating the quality of the geocode (whether the address, city, state, and zip passed FRS geocoding standards. This is provided by FRS to PLOVER.	Good/Warning/Flunk Additional text about the nature of the good/warning/flunk is also included	No

Figure D-2. Data Attributes Exchanged in Submit Services. 15 out of 22 attributes are applied to the FRS Facility Record.

Supplemental Facility Interest Data Attributes Exchanged in Submit Services		
Data Attribute	Definition	Example
SupplementalProgramAcronym	Abbreviated name that represents the data system that is the source of the supplemental program interest.	PLOVER
SupplementalProgramID	Unique ID assigned to the supplemental interest.	123
SupplementalInterestType	The environmental or regulatory program that applies to the supplemental interest. This is often a permit type or facility type.	Underground Storage Tank Site or NPDES Major

Figure D-3. Supplemental Program Interest Data Attributes Exchanged in Submit Services.

Facility Data Attributes Exchanged in Query Services			
	Data Attribute	Definition	Example
GET/Query Facility: Data Attributes Used to Search for FRS Data	RegistryID	Unique ID assigned by FRS for this FRS Facility Record.	110000312091
	ProgramSystemAcronym	Abbreviated name that represents the data source for the record.	RI-PLOVER
	ProgramSystemID	Unique ID assigned by a program system (e.g., PLOVER) to identify the record.	5058
	PrimaryName	Public or commercial name of a facility.	Premier Thread-Coats America
	LocationAddress	Address that describes the front door or main entrance of a facility.	82 Smith Street
	SupplementalLocation	Additional information about a location such as a building name or suite number.	Suite 45
	CityName	Name of the city, town or locality in which the facility is located.	Providence
	CountyName	The name of the county in which the facility is located.	Bristol County
	CountyFIPSCode	Code that represents the county in which the facility is located.	44007
	StateCode	U.S. Postal Service abbreviation in which the facility is located.	RI
	StateName	The U.S. State Name.	Rhode Island
	CountryName	The Country in which the facility is located.	United States
	PostalCode	The 5-digit or 5 plus 4 digit zip code in which the facility is located.	02903
RESPONSE: FRS Data Attributes Included in the Query Response	ResponseCode	Code representing the success of the operation.	200
	ResponseMessage	The message corresponding to the response code.	Successful operation
	RegistryID	Unique ID assigned by FRS for this FRS Facility Record.	110000312091
	ProgramSystemAcronym	Abbreviated name that represents the data source for the record.	RI-PLOVER

Facility Data Attributes Exchanged in Query Services			
	Data Attribute	Definition	Example
	ProgramSystemID	Unique ID assigned by a program system (e.g., PLOVER) to identify the record.	5058
RESPONSE: FRS Data Attributes Included in the Query Response	PrimaryName	Public or commercial name of a facility.	Premier Thread-Coats America
	LocationAddress	Address that describes the front door or main entrance of a facility.	82 Smith Street
	SupplementalLocation	Additional information about a location such as a building name or suite number.	Suite 45
	CityName	Name of the city, town or locality in which the facility is located.	Providence
	CountyName	The name of the county in which the facility is located.	Bristol County
	CountyFIPSCode	Code that represents the county in which the facility is located.	44007
	StateCode	U.S. Postal Service abbreviation in which the facility is located.	RI
	StateName	The U.S. State Name.	Rhode Island
	CountryName	The Country in which the facility is located.	United States
	PostalCode	The 5-digit or 5 plus 4 digit zip code in which the facility is located.	02903
	FederalFacilityCode	Code indicating whether the facility site is the property of the federal government.	Y or N
	AgencyID	The Federal Agency Bureau Code indicating the agency that owns the federal property.	D000
	SiteTypeName	Name for the facility type.	Monitoring Site
	SmallBusinessInd	Code indicating whether a business is requesting relief under EPA Small Business Policy.	Y or N
	UserID	User ID of the person who entered the data or method by which the data was entered into the system.	John_Doe
	ActiveStatus	Status of the facility.	Active, Inactive
	PossibleDuplicateIndicator	If the record is believed to be a possible duplicate, a Y will be provided here. The corresponding possible duplicate IDs are provided in the DuplicateValues string.	Y
	PossibleDuplicateValues	A string of possible unique IDs of duplicate facility values.	12345; 67890
	Latitude	Latitude for facility location.	41.469858
	Longitude	Longitude for facility location.	-71.295265

Facility Data Attributes Exchanged in Query Services			
	Data Attribute	Definition	Example
	ReferencePointCode	Code that represents the place for which the geographic coordinates were established.	101
	CollectionMethodCode	The code that represents the method by which the geographic coordinates were collected.	101
	AccuracyValue	Measure of accuracy (in meters) of the latitude and longitude coordinates.	75
RESPONSE: FRS Data Attributes Included in the Query Response	Scale	Proportional distance on the ground for a unit of measure on a map. This element is provided for all horizontal collection methods except GPS.	100000
	MergedRegistryIDs	FRS Facility Records that have been merged into the RegistryID value.	123456789
	DataQualityCode	A code assigned by the automated integration process to indicate whether the address data are missing, invalid or non-standard.	V (for valid)
	GeoDerivedAddress	The complete, standardized address as provided by FRS to PLOVER.	102 Christiana Rd, New Castle DE 19720 US
	GeoDerivedMessage	A message indicating the quality of the geocode (whether the address, city, state, and zip passed FRS geocoding standards. This is provided by FRS to PLOVER.	Good/Warning/Flunk Additional text about the nature of the good/warning/flunk is also included

Figure D-4. Facility Data Attributes Exchanged in Query Services.

APPENDIX E – PILOT ARCHITECTURES

Figure E-1 illustrates the architecture used in the Pilot.

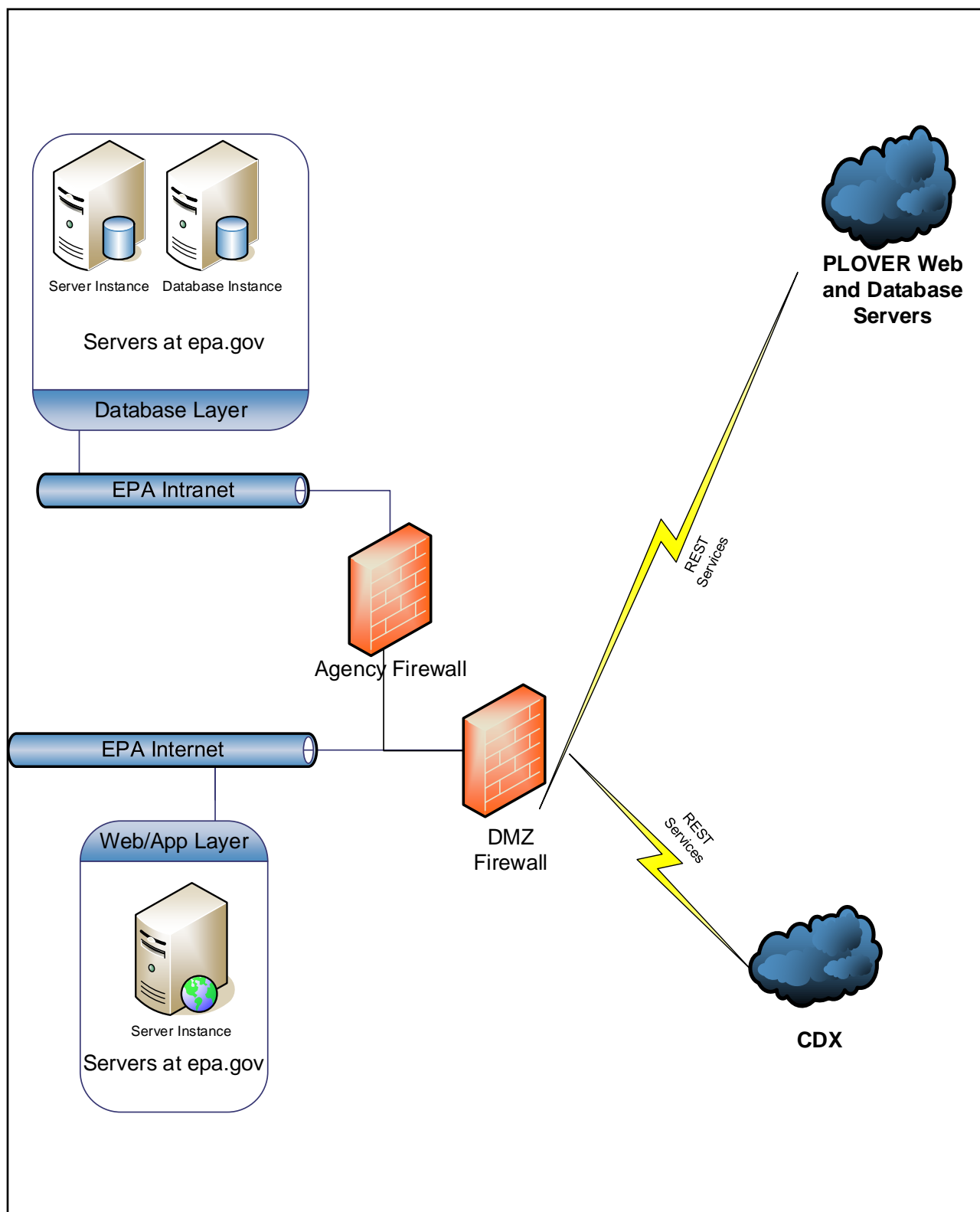


Figure E-1. Facility Data Attributes Exchanged in Query Services.

APPENDIX F – INCORPORATING FRS QUERY IN PLOVER PUBLIC WEBPAGE SEARCH

ePLOVER is Rhode Island’s public search page that accesses PLOVER data. As part of this pilot, RIDEM has incorporated FRS Query services to enhance the ePLOVER search results. **Figures F-1** and **F-2** illustrate screenshots from ePLOVER. The final changes to the ePLOVER user interface are still being finalized; therefore, these screenshots represent a conceptual approach and may be updated in the future.

DEM Map Search Search Tips About This Data Report Issues

Enviro Site Search

Find sites that match one or more of the criteria below

Name
Enter Name

Street Name
Enter Street Name

City
Barrington

Program
All

Search

Currently showing matching facility records from RIDEM. Click button to include EPA facility records.

Add matching EPA facility records

Found 158 matching facilities...

COMPREHENSIVE HEALTHCARE
147 COUNTY RD
BARRINGTON

10 ELEANOR DRIVE
10 ELEANOR DR
BARRINGTON

100 ACRE COVE

Figure F-1. ePLOVER Search Page. Search criteria have been entered for facilities located in Barrington, RI. By default, the search will query only RI (PLOVER) facilities. The 158 search results refer to the number of results within PLOVER.

If a user wants both FRS and PLOVER facilities, they click on the ‘Add matching EPA Facility Records’ button. The user will see a list of FRS facilities and PLOVER facilities (in that order).



Enviro Site Search

Find sites that match one or more of the criteria below

Name

Street Name

City



Program



Search

Found 187 EPA facilities and 158 RIDEM facilities...

(EPA) CVS PHARMACY #0210

180 COUNTY RD
BARRINGTON

(EPA) AUBIN PATRICK

6 MAUDSLEY AVE
BARRINGTON

(EPA) BARRINGTON POWER EQUIPMENT

448 MAPLE AVE
BARRINGTON

(EPA) HARBOR ANIMAL HOSPITAL

Figure F-2. ePLOVER Search Results Page Including FRS Results. EPA facilities have "EPA" prefixed to the facility name. Clicking an EPA Facility Name will take the user to the FRS Facility Detail Report page for that facility.

APPENDIX G – DOWNSTREAM EVALUATION TEST SCENARIOS AND RESULTS

G.1 Downstream Evaluation Scenarios

As part of the pilot, the Team executed nine downstream evaluation scenarios. EPA and RIDEM staff collaborated to execute the scenarios and document the results. **Figure G-1** lists details and results for each scenario. Some scenarios originally part of the list were not completed because the corresponding logic is not part of the Pilot.

Downstream Evaluation Scenarios Executed in the Pilot					
Scenario No.	Description	Evaluation Steps	Tester	Test Data	Result
1.	Create a new record to become a duplicate of an existing record	1. PLOVER submits a new record that is an exact copy of PLOVER ID 1870 but with a new PLOVER ID of 18111.	RI	FRS ID: 110070037977 Name: National Car Rental Location: 2053 Post Rd, Warwick, RI 02886	Pass
		2. FRS returns the message that this record is a duplicate of another PLOVER record.	RI		
3.	Process another program update to make sure it doesn't override PLOVER change	1. FRS developer process a RCRAINFO program record update for Program ID: RID982766958 which is linked to PLOVER ID 1840.	CGI	FRS ID: 110004920426 Name: Metropolitan Oil Company, Inc. Location: 1086 Main St, West Warwick, RI 02893 CGI changed the RCRA Program Facility name from "Allen Plumbing Heating Inc." to "Smith St Plumbing & Heating Inc."	Pass
		2. FRS Analyst verifies the program record did not update the 11000492046 FRS facility record.	CGI		
		3. PLOVER verifies they did not receive an update for this FRS facility record.	RI		
4.	FRS data steward edits an FRS facility record and confirms that the edits are submitted to PLOVER	1. FRS Analyst edits the FRS facility record for registry ID 110004920426, which corresponds to PLOVER ID 1840.	CGI	FRS ID: 110004920426 Name: Metropolitan Oil Company, Inc. Location: 1086 Main St, West Warwick, RI 02893 FRS Analyst changed the name to "Allen Plumbing Heating Inc."	Pass
		2. PLOVER verifies their data has been updated correctly.	RI		
5.	PLOVER overrides an edit made by an FRS data steward and the FRS facility record correctly retains the edit	1. PLOVER submits an update for PLOVER ID 1889 (FRS ID 110070037991).	RI	FRS ID: 110070037991 Name: Pace Gas Location: 1150 Westminster St, Providence RI 02903 RI edited this record in PLOVER and added a new supplemental location.	Pass
		2. FRS Analyst verifies FRS has been updated accordingly.	CGI		
6.	Part 1: PLOVER	1. PLOVER submits changes for PLOVER ID 8726, also related to a TRI record.	RI	FRS ID: 110004899245	Pass

Downstream Evaluation Scenarios Executed in the Pilot					
Scenario No.	Description	Evaluation Steps	Tester	Test Data	Result
	submits changes linked to TRI record	2. FRS analyst verifies that the TRI program record has not been changed.	CGI	PLOVER ID: 8726 TRIS ID: 02865GRYST7WELL Name: Greystone of Lincoln Location: 7 Wellington Rd, Lincoln, RI 02865	
		3. FRS Team verifies the test was successful and the FRS facility record was updated before initiating the second test.	CGI		
	Part 2: Repeat of Part 1 with slightly different data simulating a new TRI reporting year	1. PLOVER submits changes for PLOVER ID 8726, also related to a TRI record.	RI	FRS ID: 110004899245 PLOVER ID: 8726 TRIS ID: 02865GRYST7WELL Name: Greystone of Lincoln Location: 7 Wellington Rd, Lincoln, RI 02865 PLOVER team changed the name to: Greystone Tarzan.	Pass
		2. FRS Analyst verifies that the TRI program record has not been changed but that changes were applied to the FRS facility record.	CGI		
7.	Part 1: TRI user edits a program record linked to a PLOVER record	1. TRI record is updated with a different facility name.	CGI	FRS ID: 110015322159 PLOVER ID: 1464 TRIS ID: 2920TFFNY4KENN Name: GSM Metals, Inc. Location: 40 Kenney Dr., Cranston, RI 02920 TRI program record updated name from: Tiffany Metals & More to: Tiffany & Co.	Pass
		2. FRS Analyst verifies that the TRI program record has been updated, but not the FRS facility record.	CGI		
		3. PLOVER team verifies they did not receive an update for the associated PLOVER record.	RI		
		4. FRS Analyst verifies the test was successful before executing Part 2.	CGI		
	Part 2: Repeat of Part 1 but with slightly different data simulating a new TRI reporting year	1. FRS submits a new TRI record for a new reporting year on the same TRI program record (TRI facility) with a new facility name.	CGI	FRS ID: 110015322159 PLOVER ID: 1464 TRIS ID: 2920TFFNY4KENN Name: GSM Metals, Inc. Location: 40 Kenney Dr., Cranston, RI 02920 TRI program record updated name from: Tiffany & Co to: Great Stone Metals Inc.	Pass
		2. FRS team verifies that the TRI record has been updated but not the FRS facility record.	CGI		
		3. PLOVER team verifies they did not receive an update for the associated PLOVER record.	RI		
8.	Part 1: PLOVER submits changes	1. PLOVER submits changes for PLOVER ID 644, also related to a CEDRI record.	RI	FRS ID: 110064263915 PLOVER ID: 644 CEDRI ID: CEDRI121243	Pass
		2. FRS Analyst verifies that the CEDRI program record has not been changed.	CGI		

Downstream Evaluation Scenarios Executed in the Pilot					
Scenario No.	Description	Evaluation Steps	Tester	Test Data	Result
	linked to CEDRI record	3. FRS Team verifies the test was successful before initiating the second test.	CGI	Name: Veterans Administration Medical Center Location: 830 Chalkstone Ave, Providence, RI 02908 PLOVER team added a new supplement location record for the PLOVER record.	Pass
	Part 2: Repeat of Part 1 with slightly different data simulating a new CEDRI reporting year	1. PLOVER submits changes for PLOVER ID 644, also related to a CEDRI record.	RI	FRS ID: 110064263915 PLOVER ID: 644	
		2. FRS Analyst verifies that the CEDRI program record has not been changed.	CGI	CEDRI ID: CEDRI121243 Name: Veterans Administration Medical Center Location: 830 Chalkstone Ave, Providence, RI 02908 PLOVER team changed the name to: VA Medical Center.	
9.	PLOVER submits merge of two facility records to FRS.	1. PLOVER submits merge data with two FRS registry IDs and identifies which FRS registry ID should be kept.	RI	Merged Registry IDs: 110012483268 (PLOVER ID: 14711) and 110058348676 (PLOVER ID: 9229). FRS Registry ID: 110012483268 (PLOVER ID: 14711) should be the record that is kept. PLOVER ID 9229 was successfully moved to be under FRS Registry ID 110012483268 and FRS registry ID 110058348676 was successfully archived.	Pass
		2. FRS Analyst verifies that the merge was successful in FRS.	CGI		
10.	PLOVER submits	1. PLOVER submits the updated data multiple times.	RI	FRS ID: 110070037984	Pass

Downstream Evaluation Scenarios Executed in the Pilot					
Scenario No.	Description	Evaluation Steps	Tester	Test Data	Result
	multiple updates to a PLOVER record within a short time span	2. FRS Analyst verifies the changes are all applied to the PLOVER record in FRS and the FRS facility record.	CGI	PLOVER ID: 1881 Name: Norwood Sunoco Location: 1335 Post Rd, Warwick, RI 02886 PLOVER team made a change to the PLOVER record and correctly received the FRS ID. They made 4 subsequent edits within 1 minute of each other and the changes were applied correctly each time.	

Figure G-1. Downstream Evaluation Scenarios and Results

Screenshots illustrating data in both PLOVER and FRS were captured for most scenarios and are provided in the remaining portions of this appendix. For some scenarios, screenshots that show the potential effects of PLOVER edits to FRS facility records to regulated facilities that report data via the Facility Widget are also included.

G.2 Scenario 1: PLOVER Submits Duplicate Records to FRS

This scenario contains two parts and simulates PLOVER submitting PLOVER records to FRS that create duplicates for FRS facility records.

Step 1: PLOVER submits a new record that is an exact copy of PLOVER ID 1870 but with a new PLOVER ID. In FRS PLOVER ID 1870 corresponds to FRS Registry ID 110070037977. PLOVER submits a new record for PLOVER ID 18111.

PLOVER
DEV Application | PLOVER Feedback

Main Menu
Main Search Page
Create New Facility
Map Search
QueryRunner
PLOVER Reports
User Security
Security Roles
Manage Page Links
Client/Contact MasterList
Inventory Administration
Stage II LON Letters
Workflow Maint
DeDuping Utility
OCI Targeted Insp
OCI Inspector To Do
OCI Help
Add New Complaint

PLOVER History
[FacilityEdit.ASPX?ploverid=1870](#)
[FacilityEdit.ASPX?ploverid=944](#)
[FacilityEdit.ASPX?ploverid=9720](#)
[FacilityInformation.aspx?ploverid=1840](#)
[FacilityEdit.ASPX?ploverid=1840](#)

Plover Facility Edit - General Facility Information

Save All New Facility Delete Facility

General Details Aliases Owners Projects Add New Proj

Facility Name*: NATIONAL CAR RENTAL PLOVER ID: 1870

Physical Address:
Address: 2053 POST RD
Address2:
City*: WARWICK RI, Zip*: 02886
(County): KENT
Plat: 323 Lot: 350 Addl Lot #:

Mailing Address:
☐ Mailing Address is same as Physical Address?
Mail Addr1: 2053 POST RD
Mail Addr2:
Mail City: WARWICK St: RI Zip: 02886

Facility Status/Class:
Facility Status*: ACTIVE Facility Class/Type*: COMMERCIAL

Figure G-2. PLOVER Before screenshot for Scenario 1, Step 1. Note that this is the PLOVER Record for ID 1870.

Registry Name: NATIONAL CAR RENTAL

Registry Location: 2053 POST RD, WARWICK RI 02886

Details • History

Registry ID: 110070037977

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update
RI-PLOVER	1870	NATIONAL CAR RENTAL	2053 POST RD	WARWICK	RI	02886	KENT COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06

Figure G-3. FRS Before screenshot for Scenario 1, Step 1. Note the FRS Registry ID and related PLOVER ID.

Step 2: FRS returns the message that this record is a duplicate of another PLOVER record.

The screenshot displays the 'Plover Facility Edit - General Facility Information' form. At the top, a green message bar states: 'Your save was successful and FRS status: "[Possible duplicate found for program ID 1870]"'. A 'Close Window' link is to the right of the message. Below the message bar are three buttons: 'Save All', 'New Facility', and 'Delete Facility'. The form has several tabs: 'General', 'Details', 'Aliases', 'Owners', 'Projects', and 'Add New Proj'. The 'General' tab is selected. The form fields include: 'Facility Name*' (NATIONAL CAR RENTAL), 'PLOVER ID' (18111), 'Physical Address' (Address: 2053 POST RD, Address2: , City*: WARWICK RI, Zip*: 02886, (County): KENT, Plat: 323, Lot: 350, Addl Lot #:), 'Mailing Address' (Mail Addr1: 2053 POST RD, Mail Addr2: , Mail City: WARWICK, St: RI, Zip: 02886, with a checkbox for 'Mailing Address is same as Physical Address?'), and 'Facility Status/Class' (Facility Status*: ACTIVE, Facility Class/Type*: COMMERCIAL). On the left side, there is a 'Main Menu' with links like 'Main Search Page', 'Create New Facility', 'Map Search', 'QueryRunner', 'PLOVER Reports', 'User Security', 'Security Roles', 'Manage Page Links', 'Client/Contact MasterList', 'Inventory Administration', 'Stage II LON Letters', 'Workflow Maint', 'DeDuping Utility', 'OCI Targeted Insp', 'OCI Inspector To Do', 'OCI Help', and 'Add New Complaint'. Below the menu is a 'PLOVER History' section with links to previous records.

Figure G-4. FRS After screenshot for Scenario 1, Step 2. Note that this record corresponds to PLOVER ID 18111 and the response from FRS indicating this is a duplicate of another PLOVER record.

G.3 – Scenario 3: Process Different Program Update

Note: Scenario 2 was removed because the functionality it will evaluate is not part of the Pilot MVP.

Scenario 3 includes an update to a different program record linked to an FRS facility record that is also related to a PLOVER record. This evaluation is to ensure that the update to the other program record does not override the PLOVER information stored as part of the FRS facility record.

Step 1: FRS developer processes a RCRAINFO program record update for Program ID: RID982766958, which is linked to PLOVER ID: 1840. The FRS developer changed the RCRA Program record name from “Allen Plumbing Heating Inc.” to “Smith St Plumbing & Heating Inc.”

Registry Name
METROPOLITAN OIL COMPANY, INC.

Registry Location
1086 MAIN ST
WEST WARWICK RI 02893
[Details](#) • [History](#)

Registry ID
110004920426

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	1840	METROPOLITAN OIL COMPANY, INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
RCRAINFO	RID982766958	ALLEN PLUMBING HEATING 1086 MAIN ST INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	18-FEB-21	N

Figure G-5. FRS Before Screenshot for Scenario 3, Step 2. Note that the RCRA record has a facility name that does not match the PLOVER or FRS facility record value for facility name.

Step 2: FRS Analyst verifies that the program record did not update the FRS facility record for FRS ID: 11000492046.

Registry Name
METROPOLITAN OIL COMPANY, INC.

Registry Location
1086 MAIN ST
WEST WARWICK RI 02893
[Details](#) • [History](#)

Registry ID
110004920426

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	1840	METROPOLITAN OIL COMPANY, INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
RCRAINFO	RID982766958	SMITH S T PLUMBING & HEATING INC	1086 MAIN ST	WEST WARWICK	RI	02893	KENT	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	14-MAR-28	N

Figure G-6. FRS After Screenshot for Scenario 3, Step 2. See the RCRA record has been updated with a different facility name that still does not match the PLOVER or the FRS facility record value for facility name.

Step 3: PLOVER team verifies they did not receive an update for the associated PLOVER record (no screenshot).

G.4 – Scenario 4: FRS Edits FRS Facility Record

The purpose of this scenario is to edit an FRS facility record and ensure that those edits are successfully submitted to and processed by PLOVER.

Step 1: FRS Analyst edits the FRS facility record for ID 110004920426, which corresponds to PLOVER ID 1840. The Analyst changed the facility name from “Metropolitan Oil Company” to “Allen Plumbing Heating Inc.”

Registry Name
METROPOLITAN OIL COMPANY, INC.

Exit

Registry Location
1086 MAIN ST
WEST WARWICK RI 02893
[Details](#) • [History](#)

0

0

0

0

0

Units

Release Points

Processes

Controls

Permitted Features

Registry ID
110004920426

Data Quality
Valid

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	1840	METROPOLITAN OIL COMPANY, INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
RCRAINFO	RID982766958	ALLEN PLUMBING HEATING INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	18-FEB-21	N

Figure G-7. FRS Before Screenshot for Scenario 4, Step 1. This screenshot illustrates the FRS data before the FRS facility name was changed.

PLOVER

* DEV Application *

PLOVER Feedback

Main Menu

- Main Search Page
- Create New Facility
- Map Search
- QueryRunner
- PLOVER Reports
- User Security
- Security Roles
- Manage Page Links
- Client/Contact MasterList
- Inventory Administration
- Stage II LON Letters
- Workflow Maint
- DeDuping Utility
- OCI Targeted Insp
- OCI Inspector To Do
- OCI Help
- Add New Complaint

PLOVER History

- [FacilityInformation.aspx?ploverid=1840](#)
- [FacilityEdit.aspx?ploverid=1840](#)
- [FacilityInformation.aspx?ploverid=4584](#)
- [FacilityEdit.aspx?ploverid=4584](#)
- [FacilityInformation.aspx?ploverid=94](#)

PLOVER Facility Edit - General Facility Information

Facility Name: METROPOLITAN OIL COMPANY, INC. **PLOVER ID:** 1840

Physical Address:

Address: 1086 MAIN ST

Address2: 1086 MAIN ST

City: WEST WARWICK RI Zip: 02893

(County): KENT

Plat: 17 Lot: 41 Add Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 1086 MAIN ST

Mail Addr2:

Mail City: WEST WARWICK St: RI Zip: 02893

Facility Status/Class:

Facility Status*: Facility Class/Type*: COMMERCIAL

Figure G-8. PLOVER Before Screenshot for Scenario 4, Step 1. This screenshot illustrates the data in PLOVER before the change was applied to the FRS record.

Registry Name
ALLEN PLUMBING HEATING INC.

Registry Location
1086 MAIN ST
WEST WARWICK RI 02893
[Details](#) • [History](#)

Registry ID
110004920426

Data Quality
Valid

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	1840	METROPOLITAN OIL COMPANY, INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
RCRAINFO	RID982766958	ALLEN PLUMBING HEATING INC.	1086 MAIN ST	WEST WARWICK	RI	02893	KENT	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	18-FEB-21	N

Figure G-9. FRS After Screenshot for Scenario 4, Step 1. This screenshot illustrates the FRS data after the FRS facility name was changed to "Allen Plumbing Heating Inc."

Step 2: PLOVER team verifies their data has been updated.

PLOVER
* DEV Application * | PLOVER Feedback

[Close Window](#)

Main Menu
Main Search Page
Create New Facility
Map Search
QueryRunner
PLOVER Reports
User Security
Security Roles
Manage Page Links
Client/Contact MasterList
Inventory Administration
Stage II LON Letters
Workflow Maint
DeDuping Utility
OCI Targeted Insp
OCI Inspector To Do
OCI Help
Add New Complaint

PLOVER History
[FacilityEdit.aspx?ploverid=1840](#)
[FacilityEdit.aspx?ploverid=1870](#)
[FacilityEdit.aspx?ploverid=8742](#)
[Facilityinformation.aspx?ploverid=18108](#)
[FacilityEdit.aspx?ploverid=18108](#)

Save All **New Facility** **Delete Facility**

General **Details** **Aliases** **Owners** **Projects** **Add New Proj**

PLOVER Facility Edit - General Facility Information

Facility Name*: ALLEN PLUMBING HEATING INC. PLOVER ID: 1840

Physical Address:

Address: 1086 MAIN ST

Address2: 1086 MAIN ST

City*: WEST WARWICK RI, Zip*: 02893 -

(County): KENT

Plat: 17 Lot: 41 Addl Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 1086 MAIN ST

Mail Addr2:

Mail City: WEST WARWICK St: RI Zip: 02893 -

Facility Status/Class:

Facility Status*: Facility Class/Type*: COMMERCIAL

Figure G-10. PLOVER After Screenshot for Scenario 4, Step 2. This screenshot illustrates the data in PLOVER after the edit to the FRS facility record. Note the change to the facility name and address 2 information.

G.5 – Scenario 5: PLOVER Edits Applied to FRS Facility Record

The purpose of this scenario is to verify that an edit in PLOVER will apply to the FRS facility record.

Step 1: PLOVER submits an update for PLOVER ID 1889, which corresponds to FRS ID 110070037991. RI edited this record to add a new supplemental location.

PLOVER
* DEV Application * | PLOVER Feedback

Main Menu
[Main Search Page](#)
[Create New Facility](#)
[Map Search](#)
[QueryRunner](#)
[PLOVER Reports](#)
[User Security](#)
[Security Roles](#)
[Manage Page Links](#)
[Client/Contact MasterList](#)
[Inventory Administration](#)
[Stage II LON Letters](#)
[Workflow Maint](#)
[DeDuping Utility](#)
[OCI Targeted Insp](#)
[OCI Inspector To Do](#)
[OCI Help](#)
[Add New Complaint](#)

PLOVER History
[FacilityEdit.aspx?ploverid=1889](#)
[FacilityEdit.aspx?ploverid=8742](#)
[FacilityEdit.aspx?ploverid=2472](#)
[FacilityEdit.aspx?ploverid=1870](#)
[FacilityEdit.aspx?ploverid=644](#)

Save All **New Facility** **Delete Facility**

General **Details** **Aliases** **Owners** **Projects** **Add New Proj**

PLOVER Facility Edit - General Facility Information

Facility Name*: PACE GAS **PLOVER ID:** 1889

Physical Address:

Address: 1150 WESTMINSTER ST **ST** **City:** PROVIDENCE **RI** **Zip:** 02903 - **(County):** PROVIDENCE

Address2:

Plat: **Lot:** **Add Lot #:**

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 1150 WESTMINSTER ST **Mail Addr2:**

Mail City: PROVIDENCE **St:** RI **Zip:** 02903 -

Facility Status/Class:

Facility Status*: ACTIVE **Facility Class/Type*:** COMMERCIAL

Figure G-11. PLOVER Before Screenshot for Scenario 5, Step 1. This screenshot illustrates PLOVER ID 1889 before edits are made. Note the absence of Address 2 data.

[Back](#)

Registry Name

PACE GAS

Registry Location

1150 WESTMINSTER ST
PROVIDENCE RI 02903

[Details](#) • [History](#)

Registry ID

110070037991

Federal Facility Indicator

No

Federal Agency

Units

0

Release Points

0

Processes

0

Data Quality

Valid

Additional Registry Details

Supplemental Location

-

User ID

STATE-RIDEM

Review Flag

-

Review Reason

-

County Name

PROVIDENCE

State and County FIPS Code

7

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	1889	PACE GAS	1150 WESTMINSTER ST	PROVIDENCE	RI	02903	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-14	-

Figure G-12. FRS Before Screenshot for Scenario 5, Step 1. This screenshot illustrates the FRS record before edits are made to PLOVER ID 1889. Note the absence of Address 2 in the Supplemental Location field under ‘Additional Registry Details.’

PLOVER
" DEV Application "

PLOVER Feedback

Close W

Main Menu

- Main Search Page
- Create New Facility
- Map Search
- QueryRunner
- PLOVER Reports
- User Security
- Security Roles
- Manage Page Links
- Client/Contact MasterList
- Inventory Administration
- Stage II LON Letters
- Workflow Maint
- DeDuping Utility
- OCI Targeted Insp
- OCI Inspector To Do
- OCI Help
- Add New Complaint

PLOVER History

- [FacilityEdit.aspx?ploverid=1889](#)
- [FacilityEdit.aspx?ploverid=1840](#)
- [FacilityEdit.aspx?ploverid=1870](#)
- [FacilityEdit.aspx?ploverid=8742](#)
- [FacilityInformation.aspx?ploverid=18108](#)

Save All New Facility Delete Facility

General Details Aliases Owners Projects Add New Proj

PLOVER Facility Edit - General Facility Information

Facility Name*: PACE GAS PLOVER ID: 1889

Physical Address:

Address: 1150 WESTMINSTER ST

Address2: 1150 WESTMINSTER STREET

City*: PROVIDENCE RI, Zip*: 02903

(County): PROVIDENCE

Plat: Lot: Add'l Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 1150 WESTMINSTER ST

Mail Addr2:

Mail City: PROVIDENCE St: RI Zip: 02903

Facility Status/Class:

Facility Status*: ACTIVE Facility Class/Type*: COMMERCIAL

Figure G-13. PLOVER After Screenshot for Scenario 5, Step 1. This screenshot illustrates PLOVER ID 1889 after edits are made. Note the addition of Address 2 data.

Step 2: FRS analyst verifies that FRS has been updated appropriately.

Back

Registry Name
PACE GAS

Google this

Registry Location
1150 WESTMINSTER ST
PROVIDENCE RI 02903
Details • History

Registry ID
110070037991

Federal Facility Indicator
No

Federal Agency

Units: 0, Release Points: 0, Processes: 0

Data Quality
Valid

Additional Registry Details

Supplemental Location
1150 WESTMINSTER STREET

User ID

STATE: RI/02903

Review Flag
-

Review Reason
-

County Name
PROVIDENCE

State and County FIPS Code
7

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	1889	PACE GAS	1150 WESTMINSTER ST	PROVIDENCE	RI	02903	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	18-FEB-21	-

Figure G-14. FRS After Screenshot for Scenario 5, Step 2. This screenshot illustrates the updated FRS facility record reflecting the additional Address 2, listed as Supplemental Location in the ‘Additional Registry Details’ section of the page.

G.6 – Scenario 6: PLOVER Changes and Related TRI Records

The purpose of this scenario is to ensure that a change made by PLOVER, and applied to the FRS facility record, does not affect a TRI program record. This section also includes a screenshot to illustrate how an update to an FRS facility record will be visible to a TRI reporter in the Facility Widget.

Part 1: PLOVER submits a change to a record that is linked to a TRI record.

Step 1: PLOVER edits the record for PLOVER ID 8726, which is linked to the FRS facility 110004899245. The TRI record linked to the same FRS facility record has a TRIS ID 02865GRYST7WELL.

PLOVER
DBV Application | PLOVER Feedback

Main Menu
Main Search Page
Create New Facility
Map Search
QueryRunner
PLOVER Reports
User Security
Security Roles
Manage Page Links
Client/Contact MasterList
Inventory Administration
Stage II LON Letters
Workflow Maint
DeDuping Utility
OCI Targeted Insp
OCI Inspector To Do
OCI Help
Add New Complaint

PLOVER History
[FacilityEdit.aspx?ploverid=8726](#)
[FacilityInformation.aspx?ploverid=1840](#)
[FacilityEdit.aspx?ploverid=1840](#)
[FacilityInformation.aspx?ploverid=4384](#)
[FacilityEdit.aspx?ploverid=4384](#)

Save All **New Facility** **Delete Facility**

General **Details** **Aliases** **Owners** **Projects** **Add New Proj**

PLOVER Facility Edit - General Facility Information

Facility Name*: GREYSTONE OF LINCOLN **PLOVER ID:** 8726

Physical Address:

Address: 7 WELLINGTON RD

Address2:

City*: LINCOLN RI Zip*: 02865

(County:) PROVIDENCE

Plat: Lot: Add Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 7 WELLINGTON RD

Mail Addr2:

Mail City: LINCOLN St: RI Zip: 02865

Facility Status/Class:

Facility Status*: ACTIVE Facility Class/Type*: OTHER

Figure G-15. PLOVER before Screenshot for Scenario 6, Part 1, Step 1. This screenshot shows the record for PLOVER ID 8726 before an edit is applied. Note there is no Address 2 information.

Back

Registry Name

GREYSTONE OF LINCOLN

Registry Location

7 WELLINGTON RD
LINCOLN RI 02865

Details • History

Registry ID

110004899245

Federal Facility Indicator

No

Federal Agency

Google this

Exit

0

Units

0

Release Points

0

Processes

Data Quality

Valid

Additional Registry Details

Supplemental Location

-

User ID

FLA

Review Flag

-

Review Reason

-

County Name

PROVIDENCE


State and County FIPS Code

44007

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
BR	R1500009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10-SEP-10	N
RI-PLOVER	8726	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-14	-
OIS	980632248	GREYSTONE OF LINCOLN	7 WELLINGTON ROAD	LINCOLN	RI	02865	-	Missing County OSHA ESTABLISHMENT (mO)		OIS	14-MAY-14	-
ICIS	5869888	GREYSTONE INC	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	ENFORCEMENT/COMPLIANCE/ICIS ACTIVITY FORMAL ENFORCEMENT ACTION		07-FEB-21	-
RCRAINFO	R1500009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	12-JAN-27	N
TRIS	02865GRYST7WELL	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	TRI REPORTER	TRIS	03-OCT-09	ACTIVE

Figure G-16. FRS Before Screenshot for Scenario 6, Part 1, Step 1. This screenshot shows the FRS record before the edit is applied to the PLOVER record. Note that there is no Supplemental Location information and the presence of the TRI Program record.



PLOVER

DEV Application

PLOVER Feedback

Your save was successful and FRS status: "110004899245"

Close

Save All
 New Facility
 Delete Facility

General

Details

Aliases

Owners

Projects

Add New Proj

PLOVER Facility Edit - General Facility Information

Facility Name*: GREYSTONE OF LINCOLN
 PLOVER ID: 8726

Physical Address:

Address: 7 WELLINGTON RD

Address2: 7 WELLINGTON RD

City*: LINCOLN RI, Zip*: 02865 -

(County): PROVIDENCE

Plat: Lot: Addl Lot #:

Mailing Address:
 ☐ Mailing Address is same as Physical Address?

Mail Addr1: 7 WELLINGTON RD

Mail Addr2:

Mail City: LINCOLN St: RI Zip: 02865 -

Facility Status/Class:

Facility Status*: ACTIVE
 Facility Class/Type*: OTHER

Figure G-17. PLOVER after Screenshot for Scenario 6, Part 1, Step 1. This screenshot shows the record for PLOVER ID 8726 after an edit is applied. Note that an address 2 has been added for this record.

Step 2: FRS analyst verifies that the edit was applied to the FRS facility record, but that the TRI record did not change.

Registry Name: GREYSTONE OF LINCOLN

Registry Location: 7 WELLINGTON RD
LINCOLN RI 02865
[Details](#) • [History](#)

Registry ID: 110004899245

Federal Facility Indicator: No

Units: 0 **Release Points:** 0 **Processes:** 0

Data Quality: Valid

Additional Registry Details:

- Supplemental Location:** 7 WELLINGTON RD
- User ID:**
- FLA:**
- Review Flag:** -
- Review Reason:** -
- County Name:** PROVIDENCE
- State and County FIPS Code:**

Program Data


Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
BR	RI500009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10-SEP-10	N
RI-PLOVER	8726	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	18-FEB-21	-
OIS	980632248	GREYSTONE OF LINCOLN	7 WELLINGTON ROAD	LINCOLN	RI	02865	-	Missing County OSHA ESTABLISHMENT (mO)		OIS	14-MAY-14	-
ICIS	5869888	GREYSTONE INC	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	ENFORCEMENT/COMPLIANCE/ICIS ACTIVITY FORMAL ENFORCEMENT ACTION		07 FEB 21	-
RCRAINFO	RI500009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	12-JAN-27	N
TRIS	02865GRYST7WELL	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	TRI REPORTER	TRIS	03-OCT-09	ACTIVE

Figure G-18. FRS After Screenshot for Scenario 6, Part 1, Step 2. This screenshot shows the record for PLOVER ID 8726 after an edit is applied. Note that an address 2 has been added for this record and the TRI record has not changed.

Step 3: FRS team verifies the test was successful before initiating the second part of the scenario (no screenshot).

Part 2: PLOVER submits an additional change to the same record as in Part 1. This is to simulate a new TRI reporting year.

Step 1: PLOVER edits the record for PLOVER ID 8726, which is linked to the FRS facility 110004899245. The TRI record linked to the same FRS facility record has a TRIS ID 02865GRYST7WELL. The facility name is changed from ‘Greystone of Lincoln’ to ‘Greystone Tarzan.’



PLOVER

* DEV Application *

| PLOVER Feedback

Main Menu




- Main Search Page
- Create New Facility
- Map Search
- QueryRunner
- PLOVER Reports
- User Security
- Security Roles
- Manage Page Links
- Client/Contact MasterList
- Inventory Administration
- Stage II LON Letters
- Workflow Maint
- DeDuping Utility
- OCI Targeted Insp
- OCI Inspector To Do
- OCI Help
- Add New Complaint

PLOVER History

- [FacilityInformation.aspx?ploverid=8720](#)
- [FacilityEdit.ASPX?ploverid=8720](#)
- [FacilityInformation.aspx?ploverid=1880](#)
- [FacilityEdit.ASPX?ploverid=1880](#)
- [FacilityEdit.aspx?ploverid=18108](#)

Your save was successful and FRS status: "110004899245"

[Close](#)

 Save All
  New Facility
  Delete Facility

General Details Aliases Owners Projects Add New Proj

PLOVER Facility Edit - General Facility Information

Facility Name*: GREYSTONE OF LINCOLN
 PLOVER ID: 8726

Physical Address:

Address: 7 WELLINGTON RD

 Address2: 7 WELLINGTON RD

 City*: LINCOLN RI, Zip*: 02865 -

 (County): PROVIDENCE

 Plat: Lot: Addl Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 7 WELLINGTON RD

 Mail Addr2:

 Mail City: LINCOLN St: RI Zip: 02865 -

Facility Status/Class:

Facility Status*: ACTIVE
 Facility Class/Type*: OTHER

Figure G-19. PLOVER before Screenshot for Scenario 6, Part 2, Step 1. This screenshot shows the record for PLOVER ID 8726 before an edit is applied.

Back

Registry Name

GREYSTONE OF LINCOLN

Registry Location

7 WELLINGTON RD
LINCOLN RI 02865

Details • History

Registry ID

110004899245

Federal Facility Indicator

No

Google this

Exit

0

Units

0

Release Points

0

Processes

Data Quality

Valid

Additional Registry Details

Supplemental Location

7 WELLINGTON RD

User ID

FLA

Review Flag

-

Review Reason

-

County Name


PROVIDENCE

State and County FIPS Code

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
BR	RI5000009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10 SEP 10	N
RI PLOVER	8726	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE COUNTY	Valid	STATE MASTER	RI PLOVER	18 FEB 21	-
OIS	980632248	GREYSTONE OF LINCOLN	7 WELLINGTON ROAD	LINCOLN	RI	02865	-	Missing CountyOSHA ESTABLISHMENT (mO)	OSHA ESTABLISHMENT	OIS	14 MAY 14	-
ICIS	5869888	GREYSTONE INC	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	ENFORCEMENT/COMPLIANCE ACTIVITY FORMAL ENFORCEMENT ACTION	ICIS	07 FEB 21	-
RCRAINFO	RI5000009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	12 JAN 27	N
TRIS	02865GRYST7WELL	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	TRI REPORTER	TRIS	03 OCT 09	ACTIVE

Figure G-20. FRS Before Screenshot for Scenario 6, Part 2, Step 1. This screenshot shows the FRS record before the edit is applied to the PLOVER record.



PLOVER

DEV Application

PLOVER Feedback

Your save was successful and FRS status: "110004899245"

Save All New Facility Delete Facility

General Details Aliases Owners Projects Add New Proj

PLOVER Facility Edit - General Facility Information

Facility Name*: GREYSTONE TARZAN PLOVER ID: 8726

Physical Address:

Address: 7 WELLINGTON RD

Address2: 7 WELLINGTON RD

City*: LINCOLN RI Zip*: 02865

(County): PROVIDENCE

Plat: Lot: Addl Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 7 WELLINGTON RD

Mail Addr2:

Mail City: LINCOLN St: RI Zip: 02865

Facility Status/Class:

Facility Status*: ACTIVE Facility Class/Type*: OTHER

PLOVER History

[FacilityInformation.aspx?ploverid=14711](#)

[FacilityEdit.aspx?ploverid=14711](#)

[FacilityInformation.aspx?ploverid=1881](#)

[FacilityEdit.aspx?ploverid=1881](#)

[FacilityEdit.aspx?ploverid=18109](#)

Figure G-21. PLOVER after Screenshot for Scenario 6, Part 2, Step 1. This screenshot shows the record for PLOVER ID 8726 before after an edit is applied. The facility name is now 'Greystone Tarzan'.

Part 2: FRS analyst verifies that the FRS facility record is updated but that there is no change to the TRI record.

Back

Registry Name
GREYSTONE TARZAN

Google this Exit

Registry Location
7 WELLINGTON RD
LINCOLN RI 02865
[Details](#) • [History](#)

Registry ID
110004899245

Federal Facility Indicator
No

Federal Agency

Units: 0 Release Points: 0 Processes: 0

Data Quality
Valid

Additional Registry Details

Supplemental Location
7 WELLINGTON RD

User ID

STATE-RIDEM

Review Flag
-

Review Reason
-

County Name
PROVIDENCE

State and County FIPS Code
44007

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
BR	RI5000009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10-SEP-10	N
RI-PLOVER	8726	GREYSTONE TARZAN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	18-FEB-21	-
OIS	980632248	GREYSTONE OF LINCOLN	7 WELLINGTON ROAD	LINCOLN	RI	02865	-	Missing County OSHA ESTABLISHMENT (mO)		OIS	14-MAY-14	-
ICIS	5869888	GREYSTONE INC	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	ENFORCEMENT/COMPLIANCE/ICIS ACTIVITY FORMAL ENFORCEMENT ACTION		07-FEB-21	-
RCRAINFO	RI5000009068	GREYSTONE OF LINCOLN INC.	7 WELLINGTON ROAD	LINCOLN	RI	02865	PROVIDENCE	Valid	UNSPECIFIED UNIVERSE	RCRAINFO	12-JAN-27	N
TRIS	02865GRYST7WELL	GREYSTONE OF LINCOLN	7 WELLINGTON RD	LINCOLN	RI	02865	PROVIDENCE	Valid	TRI REPORTER	TRIS	03-OCT-09	ACTIVE

Figure G-22. FRS After Screenshot for Scenario 6, Part 2, Step 2. This screenshot shows the edit to the FRS facility record but the TRI record is not changed. The FRS facility name is now 'Greystone Tarzan'.

G.6.1 Impact to TRI Reporters

The screenshots in this section were taken within the Facility Widget that has been integrated into the TRI-MEweb application and reflect the impact to a TRI user for Scenario 6. **Figure G-23** shows the Facility Widget search results screen for a user who has searched for the TRI Program ID 02865GRYST7WELL. The maroon 'i' icon in the 'Facility Address' column indicates that the TRI program record does not match FRS' facility record for that facility. When a user selects and opens the record for editing, a note indicates that the program record does not match what EPA has on file for that field in the facility record. The user is able to select the radio button for this facility and proceed to the 'Unsaved Facilities' screen, where they user can choose to view and edit the facility before saving it to their TRI-MEweb user role.

Add Facility

If you were unable to find your facility, try providing more general search criteria. You can update your search criteria by clicking the **Change** button. If you are sure your facility is not listed, you can create a new facility by clicking the **Create New Facility** link. If you want to start the add facility process from the beginning click **Add Facility** in the bread crumbs.

Facility Search Results (1 facility found) List View | Map View

Search Criteria: 02865GRYST7WELL Change

Filter: Export Options

	EPA Registry ID	Facility Name	Facility Address	EPA Programs Reporting	Alternate EPA Registry IDs/Program IDs
<input type="radio"/>	110004899245	GREYSTONE OF LINCOLN	7 WELLINGTON RD LINCOLN, RI 02865 PROVIDENCE COUNTY ❗	TRIS	02865GRYST7WELL

Showing 1 to 1 of 1 facilities Previous 1 Next

Figure G-23. Facility Widget/TRI-MEweb Search Results Page Screenshot for TRI ID 02865GRYST7WELL. Note the maroon icon indicating that the program and FRS facility record do not match. A user is not forced to make a change to their TRI record but does have the opportunity to view the FRS facility record data and edit their TRI record if they choose to do so.

It is important to note that an edit of an FRS facility record does not ‘force’ or require a TRI user to do anything differently when they report their data. The user can choose to ignore the icon and not update their TRI program record to match the FRS facility record. Their TRI record will remain linked to the FRS facility record as appropriate.

Figure G-24 shows the ‘Facility Details’ for the same TRI-MEweb record as the previous screenshot. The message next to the maroon icon indicates that the FRS facility record has a different facility name than what is included in the TRI-MEweb program record. The user has the option to open the facility for editing and change the facility name to match the FRS facility record or to keep it as-is.

Facility Details
[Back to Unsaved Facilities](#)

EPA Registry ID
110004899245

Program ID
02865GRYST7WELL

Facility Name
GREYSTONE OF LINCOLN

❗ EPA has "GREYSTONE OF LINCOLN INC." on record for "Facility Name." Please verify entered value.

Facility Address
7 WELLINGTON RD
LINCOLN, RI 02865
PROVIDENCE COUNTY

Coordinates
41.919203
-71.478975

BIA Code [?](#)

NAICS Code(s) = Primary NAICS
332721 - Precision Turned Product Manufacturing

Facility Type
NEITHER

Is Mailing Address Same as Facility Address?
Yes

Edit Facility

Figure G-24. Facility Widget/TRI-MEweb Facility Details Page Screenshot for TRI ID 02865GRYST7WELL. Note the maroon icon indicating that FRS facility record’s facility name does not match the TRI-MEweb facility name. A user is not forced to make a change to their TRI record but does have the opportunity to edit their record if they choose to do so.

Figure G-25 illustrates the ‘Edit Facility’ screen in the Facility Widget/TRI-MEweb application. In this case, the user has chosen to edit the TRI-MEweb facility used in this scenario. Note the icon and highlighted text indicating the difference between the FRS facility record and the TRI-MEweb facility record. Editing a TRI-MEweb facility is optional; the user may choose to leave it as-is even if it does not

match the FRS facility record. Leaving the record as-is will not prevent the user from successfully submitting their TRI reporting data.

My Facilities **Add Facility** **Unsaved Facility**

Edit Facility
[< Back to Unsaved Facilities](#)

EPA Registry ID
110004899245

Program ID
02865GRYST7WELL

Facility Name
GREYSTONE OF LINCOLN

Facility Address
7 WELLINGTON RD
Address 2
LINCOLN RI 02865
PROVIDENCE COUNTY

Coordinates
41.919203
-71.478975

BIA Code

NAICS Code(s) 🔍 = Primary NAICS
332721 - Precision Turned Product Manufacturing

Facility Type
Neither

Is Mailing Address Same as Facility Address?
☒ Yes ☐ No

Submit

GREYSTONE OF LINCOLN
Facility Address: 7 WELLINGTON RD
LINCOLN, RI 02865
EPA Registry ID: 110004899245
Program ID: 02865GRYST7WELL
FRS Envirofacts: [Open](#)
[Move point on map](#)
[Zoom To Facility](#)

Figure G-25. Facility Widget/TRI-MEweb Edit Facility Page Screenshot for TRI ID 02865GRYST7WELL. Note the maroon icon and text indicating that FRS facility record's facility name does not match the TRI-MEweb facility name. A user is not forced to make a change to their TRI record but does have the opportunity to edit their record if they choose to do so.

G.7 – Scenario 7: Edits to a TRI Program Record

The purpose of this scenario is to confirm that a change can be made to a TRI record, such as through the Facility Widget/TRI-MEweb application, and there will be no changes to the FRS facility record and no updates sent to PLOVER.

Part 1: TRI user edits a program record that is also linked to a PLOVER record.

Step 1: Update to TRI record 02920TFFNY4KENN, which is related to FRS facility record 110015322159. This FRS facility record is linked to PLOVER record 1464. The FRS facility record has a facility name of ‘GSM Metals, Inc.’ and the TRI record has an initial facility name of ‘Tiffany Metals & More Inc.’ The TRI facility name is changed to ‘Tiffany & Co.’

Registry Name
GSM METALS, INC.

Registry Location
**40 KENNEY DR
CRANSTON RI 02920**
[Details](#) • [History](#)

0

0

0

0

0

Units
Release Points
Processes
Controls
Permitted Features

Registry ID
110015322159

Data Quality
Valid

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
NPDES	RIR5AA011	GSM METALS, INC.	40 KENNEY DRIVE	CRANSTON	RI	02920	PROVIDENCE	Valid	ICIS-NPDES NON-MAJOR STORM WATER INDUSTRIAL	NPDES	16-NOV-09	EFFECTIVE EFFECTIVE
RCRAINFO	RIR000503326	G S M METALS INC	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	SQG	RCRAINFO	12-JAN-27	Y
OSHA-OIS	980620528	GSM METALS, INC.	40 KENNY DRIVE	CRANSTON	RI	02920	-	Missing County (mO)	OSHA ESTABLISHMENT	OSHA-OIS	16-NOV-09	-
TRIS	02920TFFNY4KENN	TIFFANY METALS & MORE INC.	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	TRI REPORTER	TRI REPORTING FORM	14-JUL-27	ACTIVE
BR	RIR000503326	G S M METALS INC	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10-NOV-01	Y
RI-PLOVER	1464	GSM METALS, INC.	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
E-PLAN	FATR2012LDSTAY51235LE	GSM METALS, INC.	40 KENNEY DRIVE	CRANSTON	RI	2920	PROVIDENCE	Invalid Zip (IZ)	TIER 2 REPORTER	E-PLAN	16-NOV-09	REPORTING YEAR 2012

Figure G-26. FRS Before Screenshot for Scenario 7, Part 1, Step 1. This screenshot represents the view of the TRI Program Record. Note the FRS facility name is ‘GSM Metals, Inc.’ and the TRI Program Facility record name is ‘Tiffany Metals & More Inc.’

My Facilities

Add Facility

Unsaved Facility

Edit Facility

< Back to Unsaved Facilities

EPA Registry ID

110015322159

Program ID

02920TFFNY4KENN

Facility Name

TIFFANY METALS & MORE INC.

EPA has "GSM METALS, INC." on record for 'Facility Name.' Please verify entered value.

Facility Address

40 KENNEY DR

Address 2

CRANSTON

RI

02920

PROVIDENCE COUNTY

Coordinates

41.741111

-71.448056

BIA Code

NAICS Code(s)

= Primary NAICS

331491 - Nonferrous Metal (Except Copper And Aluminum) Rolling, Drawing, And Extruding

Facility Type

Neither

Is Mailing Address Same as Facility Address?

Yes

No

Submit

+

-

Kenney Dr

Kenney Dr

TIFFANY METALS & MORE INC.

Facility Address:

40 KENNEY DR

CRANSTON, RI 02920

EPA Registry ID: 110015322159

Program ID: 02920TFFNY4KENN

FRS Envirofacts: [Open](#)

Move point on map

bing

© 2018 Microsoft Corporation, © 2018 DigitalGlobe, © CNES (2018) DLI...

Map Legend

Tribal Lands Layer

Figure G-27. Facility Widget Before Screenshot for Scenario 7, Part 1, Step 1. This screenshot represents the view of the TRI Program Record in the Facility Widget. Note the TRI Program Facility record name is 'Tiffany Metals & More Inc.' and the Facility Widget indicates that the FRS Facility Name has a different name.

Although the TRI user is informed that the FRS facility name is different than the facility name on the TRI record, they are not forced to update their record to match the FRS facility record.

My Facilities

Add Facility

Unsaved Facility

Edit Facility

< Back to Unsaved Facilities

EPA Registry ID

110015322159

Program ID

02920TFFNY4KENN

Facility Name

TIFFANY & CO

EPA has "GSM METALS, INC." on record for 'Facility Name.' Please verify entered value.

Facility Address

40 KENNEY DR

Address 2

CRANSTON

RI

02920

PROVIDENCE COUNTY

Coordinates

41.741111

-71.448056

BIA Code

NAICS Code(s)

= Primary NAICS

331491 - Nonferrous Metal (Except Copper And Aluminum) Rolling, Drawing, And Extruding

Facility Type

Neither

Is Mailing Address Same as Facility Address?

☒ Yes
☐ No

Submit

+

-

Kenney Dr

Kenney Dr

TIFFANY & CO

Facility Address:

40 KENNEY DR

CRANSTON, RI 02920

EPA Registry ID: 110015322159

Program ID: 02920TFFNY4KENN

FRS Envirofacts: [Open](#)

Move point on map

bing

© 2018 Microsoft Corporation, © 2018 DigitalGlobe, ©CNES (2018)

Map Legend

Figure G-28. Facility Widget After Screenshot for Scenario 7, Part 1, Step 1. This screenshot represents the view of the TRI Program Record in the Facility Widget after the TRI facility name has been changed to 'Tiffany & Co'. Note the Facility Widget indicates that the FRS Facility Name has a different name.

Step 2: FRS analyst verifies that the TRI record has been updated, but not the FRS facility record.

Registry Name
GSM METALS, INC.

Registry Location
40 KENNEY DR
CRANSTON RI 02920
[Details](#) • [History](#)

Registry ID
110015322159

Data Quality
Valid

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
NPDES	RIR5AA011	GSM METALS, INC.	40 KENNEY DRIVE	CRANSTON	RI	02920	PROVIDENCE	Valid	ICIS-NPDES NON-MAJOR STORM WATER INDUSTRIAL	NPDES	16-NOV-09	EFFECTIVE EFFECTIVE
RCRAINFO	RIR000503326	G S M METALS INC	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	SQG	RCRAINFO	12-JAN-27	Y
OSHA-OIS	980620528	GSM METALS, INC.	40 KENNY DRIVE	CRANSTON	RI	02920	-	Missing County (mO)	OSHA ESTABLISHMENT	OSHA-OIS	16-NOV-09	-
TRIS	02920TFFNY4KENN	TIFFANY & CO	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	TRI REPORTER	TRI REPORTING FORM	14-JUL-27	ACTIVE
BR	RIR000503326	G S M METALS INC	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10-NOV-01	Y
RI-PLOVER	1464	GSM METALS, INC.	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
E-PLAN	FATR2012LDSTAY51235LE	GSM METALS, INC.	40 KENNEY DRIVE	CRANSTON	RI	2920	PROVIDENCE	Invalid Zip (iZ)	TIER 2 REPORTER	E-PLAN	16-NOV-09	REPORTING YEAR 2012

Figure G-29. FRS After Screenshot for Scenario 7, Part 1, Step 2. This screenshot represents the view of the FRS Facility Record after the TRI Program Record has updated the TRI Facility Name. Note the FRS facility name is ‘GSM Metals, Inc.’ and the TRI Program Facility record name has been changed to ‘Tiffany & Co.’

Step 3: PLOVER team verifies that they did not receive an update for the associated PLOVER record. This passed validation but no screenshot is available.

Step 4: FRS team verifies that the test was successful before executing Part 2 (no screenshot).

Part 2: Repeat of part 1 but with an edit to the TRI facility name and TRI data simulating a new TRI reporting year.

Step 1: Update to TRI record 02920TFFNY4KENN, which is related to FRS facility record 110015322159. This FRS facility record is linked to PLOVER record 1464. In this step, the TRI program facility name changed from ‘Tiffany & Co’ to ‘Great Stone Metals Inc.’. There is no before screenshot available.

My Facilities

Add Facility

Unsaved Facility

Facility Details

[< Back to Unsaved Facilities](#)

EPA Registry ID

110015322159

Program ID

02920TFFNY4KENN

Facility Name

GREAT STONE METALS INC.

EPA has "GSM METALS, INC." on record for 'Facility Name.' Please verify entered value.

Facility Address

40 KENNEY DR
CRANSTON, RI 02920
PROVIDENCE COUNTY

Coordinates

41.741111
-71.448056

BIA Code

NAICS Code(s)

331491 - Nonferrous Metal (Except Copper And Aluminum) Rolling, Drawing, And Extruding

Facility Type

NEITHER

Is Mailing Address Same as Facility Address?

Yes

Edit Facility

+

-

Kenney Dr

Kenney Dr

bing

© 2018 Microsoft Corporation, © 2018 DigitalGlobe, ©CNES (2018) Di...

Map Legend

GREAT STONE METALS INC.

Facility Address:

40 KENNEY DR
CRANSTON, RI 02920
EPA Registry ID: 110015322159
Program ID: 02920TFFNY4KENN
FRS Envirofacts: [Open](#)

Edit this Facility

Figure G-30. Facility Widget After Screenshot for Scenario 7, Part 2, Step 1. This screenshot represents the view of the TRI Program Record in the Facility Widget after the TRI facility name has been changed to 'Great Stone Metals Inc.' Note the Facility Widget indicates that the FRS Facility Name has a different name.

Although the TRI user is informed that the FRS facility name is different than the facility name on the TRI record, they are not forced to update their record to match the FRS facility record.

52

Step 2: FRS team verifies that the TRI record has been updated, but the FRS facility record has not.

Back

Registry Name

GSM METALS, INC.

Google this

Exit

Registry Location

40 KENNEY DR
CRANSTON RI 02920

Details • History

Registry ID

110015322159

Data Quality

Valid

Units

0

Release Points

0

Processes

0

Controls

0

Permitted Features

0

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
NPDES	RIR5AA011	GSM METALS, INC.	40 KENNEY DRIVE	CRANSTON	RI	02920	PROVIDENCE	Valid	ICIS-NPDES NON-MAJOR STORM WATER INDUSTRIAL	NPDES	16-NOV-09	EFFECTIVE EFFECTIVE
RCRAINFO	RIR000503326	G S M METALS INC	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	SQG	RCRAINFO	12-JAN-27	Y
OSHA-OIS	980620528	GSM METALS, INC.	40 KENNY DRIVE	CRANSTON	RI	02920	-	Missing County (mO)	OSHA ESTABLISHMENT	OSHA-OIS	16-NOV-09	-
TRIS	02920TFFNY4KENN	GREAT STONE METALS INC.	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	TRI REPORTER	TRI REPORTING FORM	14-JUL-27	ACTIVE
BR	RIR000503326	G S M METALS INC	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE	Valid	HAZARDOUS WASTE BIENNIAL REPORTER	BR	10-NOV-01	Y
RI-PLOVER	1464	GSM METALS, INC.	40 KENNEY DR	CRANSTON	RI	02920	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
E-PLAN	FATR2012LDSTAY51235LE	GSM METALS, INC.	40 KENNEY DRIVE	CRANSTON	RI	2920	PROVIDENCE	Invalid Zip (IZ)	TIER 2 REPORTER	E-PLAN	16-NOV-09	REPORTING YEAR 2012


Figure G-31. FRS After Screenshot for Scenario 7, Part 2, Step 2. This screenshot represents the FRS facility record after the TRI record has been edited. Note that the FRS facility record does not reflect the new TRI record facility name.

G.8 – Scenario 8: PLOVER Edits to FRS Facility Record Linked to a CEDRI Program Record

The purpose of this scenario is to confirm that a change can be made to a PLOVER record related to a CEDRI record, and that there will be no updates on the CEDRI Record.

Part 1: PLOVER submits changes to a record also linked to a CEDRI record.

Step 1: Update to PLOVER record 644. This is related to FRS facility record 1100064263915 and CEDRI record CEDRI121243. In this step, PLOVER added Address 2 information.



PLOVER

DEV Application




PLOVER Feedback

Main Menu

- [Main Search Page](#)
- [Create New Facility](#)
- [Map Search](#)
- [QueryRunner](#)
- [PLOVER Reports](#)
- [User Security](#)
- [Security Roles](#)
- [Manage Page Links](#)
- [Client/Contact MasterList](#)
- [Inventory Administration](#)
- [Stage II LON Letters](#)
- [Workflow Maint](#)
- [DeDuping Utility](#)
- [OCI Targeted Insp](#)
- [OCI Inspector To Do](#)
- [OCI Help](#)
- [Add New Complaint](#)

PLOVER History

- [FacilityEdit.aspx?plowend=644](#)
- [FacilityEdit.aspx?plowend=3720](#)
- [FacilityInformation.aspx?plowend=1840](#)
- [FacilityEdit.aspx?plowend=1840](#)
- [FacilityInformation.aspx?plowend=4584](#)

 Save All
  New Facility
  Delete Facility

[General](#)
[Details](#)
[Aliases](#)
[Owners](#)
[Projects](#)
[Add New Proj](#)

PLOVER Facility Edit - General Facility Information

Facility Name:
PLOVER ID:

Physical Address:

Address:
 Address2:
 City: RI, Zip: -
 (County):
 Plat: Lot: Addl Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1:
 Mail Addr2:
 Mail City: St: Zip: -

Facility Status/Class:

Facility Status:
 Facility Class/Type:

Figure G-32. PLOVER before Screenshot for Scenario 8, Part 1, Step 1. This screenshot represents shows the PLOVER record before an edit is made. Note there is no information for Address 2.

Back

Registry Name

VETERANS ADMINISTRATION MEDICAL CENTER

Google this

Registry Location

830 CHALKSTONE AVE
PROVIDENCE RI 02908

Details • History

Registry ID

110064263915

Federal Facility Indicator

Federal Agency

Units

0

Release Points

0

Processes

0

Data Quality

Valid

Additional Registry Details

Supplemental Location

User ID

BATCH

Review Flag

-

Review Reason

-

County Name

PROVIDENCE


State and County FIPS Code

44007

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	644	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-14	-
EIS	5491411	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	-	Missing County (mO)	CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY	EIS	14-APR-06	Y
CEDRI	CEDRI121243	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE	Valid	-	CEDRI	16-AUG-12	-

Figure G-33. FRS Before Screenshot for Scenario 8, Part 1, Step 1. *Note there is no supplemental location information and note that there is a related CEDRI record.*



PLOVER

DEV Application

PLOVER Feedback

Your save was successful and FRS status: "110064263915"

Save All New Facility Delete Facility

General Details Aliases Owners Projects Add New Proj

PLOVER Facility Edit - General Facility Information

Facility Name*: VETERANS ADMINISTRATION MEDICAL CENTER PLOVER ID: 644

Physical Address:

Address: 830 CHALKSTONE AVE

Address2: 830 CHALKSTONE AVE

City*: PROVIDENCE RI, Zip*: 02908 - 4799

(County): PROVIDENCE

Plat: Lot: Addl Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?

Mail Addr1: 830 CHALKSTONE AVE

Mail Addr2:

Mail City: PROVIDENCE St: RI Zip: 02908 - 4799

Facility Status/Class:

Facility Status*: ACTIVE Facility Class/Type*: COMMERCIAL

Main Menu

- Main Search Page
- Create New Facility
- Map Search
- QueryRunner
- PLOVER Reports
- User Security
- Security Roles
- Manage Page Links
- Client/Contact MasterList
- Inventory Administration
- Stage II LON Letters
- Workflow Maint
- DeDuping Utility
- OCI Targeted Insp
- OCI Inspector To Do
- OCI Help
- Add New Complaint

PLOVER History

- [FacilityInformation.aspx?ploverid=644](#)
- [FacilityEdit.aspx?ploverid=644](#)
- [FacilityInformation.aspx?ploverid=9726](#)
- [FacilityEdit.aspx?ploverid=9726](#)
- [FacilityInformation.aspx?ploverid=13890](#)

Figure G-34. PLOVER after Screenshot for Scenario 8, Part 1, Step 1. This screenshot represents shows the PLOVER record after an edit is made. Note there is now information for Address 2.

Step 2: FRS analyst verifies that the CEDRI program record has not changed due to the edit made by PLOVER.

Back

Registry Name
VETERANS ADMINISTRATION MEDICAL CENTER

Google this

Registry Location
830 CHALKSTONE AVE
PROVIDENCE RI 02908
[Details](#) • [History](#)

Registry ID
110064263915

Federal Facility Indicator

Federal Agency

Tribal Land Indicator
No

Tribal Land Name

Additional Registry Details

Supplemental Location
830 CHALKSTONE AVE

User ID

BATCH

Review Flag

Review Reason

County Name
PROVIDENCE

State and County FIPS Code
44007

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	644	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	18 FEB 21	-
EIS	5491411	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	-	Missing County (mO)	CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY	EIS	14-APR-06	Y
CEDRI	CEDRI121243	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE	Valid	-	CEDRI	16-AUG-12	-

Figure G-35. FRS After Screenshot for Scenario 8, Part 1, Step 2. *Note there is now supplemental address information for this FRS facility record, but the CEDRI record did not change.*

Part 2: Repeat Part 1 with slightly different data, simulating a new CEDRI reporting year.

Step 1: Update to PLOVER record 644. This is related to FRS facility record 1100064263915 and CEDRI record CEDRI121243. In this step, the facility name changed from ‘Veterans Administration Medical Center’ to ‘VA Medical Center’.

PLOVER
* DEV Application * | PLOVER Feedback

Your save was successful and FRS status: "110064263915" [Close](#)

Main Menu
Main Search Page
Create New Facility
Map Search
QueryRunner
PLOVER Reports
User Security
Security Roles
Manage Page Links
Client/Contact MasterList
Inventory Administration
Stage II LON Letters
Workflow Maint
DeDuping Utility
OCI Targeted Insp
OCI Inspector To Do
OCI Help
Add New Complaint

PLOVER History
[DeDupingUtility.aspx](#)
[FacilityInformation.aspx?ploverid=14711](#)
[FacilityEdit.ASPX?ploverid=14711](#)
[FacilityInformation.aspx?ploverid=1881](#)
[FacilityEdit.ASPX?ploverid=1881](#)

Save All **New Facility** **Delete Facility**

General **Details** **Aliases** **Owners** **Projects** **Add New Proj**

PLOVER Facility Edit - General Facility Information

Facility Name*: VA MEDICAL CENTER **PLOVER ID:** 644

Physical Address:
Address: 830 CHALKSTONE AVE
Address2: 830 CHALKSTONE AVE
City*: PROVIDENCE RI, Zip*: 02908 - 4799
(County): PROVIDENCE
Plat: Lot: Add Lot #:

Mailing Address: ☐ Mailing Address is same as Physical Address?
Mail Addr1: 830 CHALKSTONE AVE
Mail Addr2:
Mail City: PROVIDENCE St: RI Zip: 02908 - 4799

Facility Status/Class:
Facility Status*: ACTIVE Facility Class/Type*: COMMERCIAL

Figure G-36. PLOVER after Screenshot for Scenario 8, Part 2, Step 1. *Note the updated facility name.*

Step 2: FRS analyst verifies that the FRS facility record has been updated but the CEDRI program record has not been changed.

Back

Registry Name
VA MEDICAL CENTER

Google this

Registry Location
830 CHALKSTONE AVE
PROVIDENCE RI 02908
Details • History

Registry ID
110064263915

Data Quality
Valid

Units: 0, Release Points: 0, Processes: 0, Controls: 0, Permitted Features: 0

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
EIS	0491411	VETERANS ADMINISTRATION MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE	Valid	AIR EMISSIONS CLASSIFICATION UNKNOWN	EIS	17-JUN-01	OPERATING
RI-FLOVER	644	VA MEDICAL CENTER	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE	Valid	STATE MASTER	RI-FLOVER	17-APR-06	ACTIVE
CEDRI	CEDRI121243	VA MED	830 CHALKSTONE AVE	PROVIDENCE	RI	02908	PROVIDENCE	Valid	COMPLIANCE AND EMISSIONS REPORTING	CEDRI	16-AUG-12	-

Figure G-37. FRS After Screenshot for Scenario 8, Part 2, Step 2. Note the updated facility name for the FRS facility record, but the CEDRI record has not been changed.

G.8.1 Impact to CEDRI Reporters

The screenshots in this section were taken within the Facility Widget in the CEDRI user's MyCDX profile for the user's CEDRI user role. It reflects the impact to a CEDRI user for Scenario 8. **Figure G-38** shows the Facility Widget screen for a user who has searched for the CEDRI Program ID CEDRI121243. The maroon icon in the 'Facility Address' column indicates that the CEDRI program record does not match FRS' facility record for that facility. When a user selects and opens the record for editing, a note indicates that the program record does not match what EPA has on file for that field in the facility record. The user is able to check the checkbox for this facility and proceed to the 'Unsaved Facilities' screen, where they can choose to view and edit the facility before saving it to their CEDRI user role.

My Facilities Add Facilities

Facility Search Results (1 facility found)
< Back to My Facilities

Search Criteria: CEDRI121243 Change

Filter: Export Options

(Select All)	EPA Registry ID	Facility Name	Facility Address	EPA Programs Reporting	Alternate EPA Registry IDs/Program IDs
<input type="checkbox"/>	110064263915	VA MED	830 CHALKSTONE AVE PROVIDENCE, RI 02908 PROVIDENCE COUNTY	CEDRI	CEDRI121243

Showing 1 to 1 of 1 facilities

Proceed with Selections Can't find your facility? Click here to create it

Previous 1 Next

Figure G-38. Facility Widget/CEDRI Search Results Page Screenshot for CEDRI ID CEDRI121243. Note the maroon icon indicating that the program and FRS facility record do not match. A user is not forced to make a change to their CEDRI record but does have the opportunity to view the FRS facility record's facility name and address data and edit their CEDRI record if they choose to do so.

It is important to note that an edit of an FRS facility record does not ‘force’ or require a CEDRI user to do anything differently when they report their data. The user can choose to ignore the icon and not update their CEDRI record to match the FRS facility record. Their CEDRI record will remain linked to the FRS facility record as appropriate.

Figure G-39 shows the ‘Facility Details’ for the same CEDRI record as the previous screenshot. The message next to the maroon icon indicates that the FRS facility record has a different facility name than what is included in the CEDRI program record. The user has the option to open the facility for editing and change the facility name to match the FRS facility record or to keep it as-is.

My Facilities **Add Facilities** **Unsaved Facilities**

Facility Details
[Back to Unsaved Facilities](#)

EPA Registry ID
 110064263915

Program ID
 CEDRI121243

Program Acronym
 CDX: CEDRI - FRS: CEDRI

Facility Name
 VA MED

Message: EPA has "VA MEDICAL CENTER" on record for 'Facility Name.' Please verify entered value.

Facility Address
 830 CHALKSTONE AVE
 PROVIDENCE, RI 02908
 PROVIDENCE COUNTY

Coordinates
 41.83396
 -71.434808

Operating Status
 OPERATING

Operating Status Change Year

BIA Code ⓘ

NAICS Code(s) ⓘ = Primary NAICS

Responsible Agency Facility ID
 (e.g., State Facility Identifier)
 ID Not Available

Responsible Agency

Is Mailing Address Same as Facility Address?
 Yes

Edit Facility

Figure G-39. Facility Widget/CEDRI Facility Details Page Screenshot for CEDRI Program ID CEDRI121243. *Note the maroon icon indicating that FRS facility record facility name does not match the CEDRI facility name. A user is not forced to make a change to their CEDRI record but does have the opportunity to edit their record if they choose to do so.*

Figure G-40 illustrates the ‘Edit Facility’ screen in the Facility Widget for CEDRI. In this case, the user has chosen to edit the CEDRI facility used in this scenario. Note the icon and highlighted text indicating the difference between the FRS facility record and the CEDRI facility record. Editing a CEDRI facility is optional; the user may choose to leave it as-is even if it does not match the FRS facility record. Leaving the record as-is will not prevent the user from successfully submitting their CEDRI reporting data.

Edit Facilities	Add Facilities	Unsaved Facilities
Edit Facility Back to Unsaved Facilities		
EPA Registry ID 999982977175		
Program ID CEDRI10002310		
Facility Name VA MED		
<div style="background-color: #f8d7da; padding: 5px;"> EPA has "VA MEDICAL CENTER" on record for 'Facility Name.' Please verify entered value. </div>		
Facility Address 2025 LIBRARY AVE Address 2 CROZET VA 22932 ALBEMARLE COUNTY		
Coordinates 38.068407 -78.701351		
Operating Status OPERATING		
Operating Status Change Year <input type="text"/>		
BIA Code No tribal lands associated with selected state.		
NAICS Code(s) = Primary NAICS <input type="text"/>		
Responsible Agency Facility ID <i>(e.g., State Facility Identifier)</i> ID Not Available		
Responsible Agency -----		
Is Mailing Address Same as Facility Address? <input checked="" type="radio"/> Yes <input type="radio"/> No		
<input type="button" value="Submit"/>		

Map Legend

G.9 – Scenario 9: PLOVER Submits Merge Records to FRS

The purpose of this scenario is to verify that PLOVER can identify duplicates within that system and submit them to FRS for FRS to successfully process.

Step 1: PLOVER submits merge data with two FRS facility records and identifies which FRS facility record should be kept, and which should be archived. PLOVER merged records FRS ID 110012483268 (PLOVER ID 14711) and FRS ID 110058348676 (PLOVER ID 9229). FRS ID 110012483268 (PLOVER ID 14711) should be kept, and the other should be archived.

Registry Name
XIMEDICA

Registry Location
55 DUPONT DR
PROVIDENCE RI 02907
[Details](#) • [History](#)

0

0

0

0

0

Units
Release Points
Processes
Controls
Permitted Features

Registry ID
110012483268

Data Quality
Valid

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
AIR	RI0000004400700497	COTO WABASH	55 DUPONT DRIVE	PROVIDENCE	RI	02907	-	Missing County (mO)	AIR MINOR	AIR	00-NOV-13	OPERATING
OSHA-OIS	980471648	COTO TECHNOLOGY	55 DUPONT DRIVE	PROVIDENCE	RI	02907	-	Missing County (mO)	OSHA ESTABLISHMENT	OSHA-OIS	16-NOV-09	-
RI-PLOVER	14711	XIMEDICA	55 DUPONT DR	PROVIDENCE	RI	02907	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
RCRAINFO	RID987492956	ITEM HOLDINGS	55 DUPONT DR	PROVIDENCE	RI	02907	PROVIDENCE	Valid	SQG	RCRAINFO	02-MAY-19	Y
AIRS/AFS	4400700497	COTO WABASH	55 DUPONT DRIVE	PROVIDENCE	RI	02907	PROVIDENCE	Valid	AIR MINOR	AIRS/AFS	14-APR-30	OPERATING
NEI	NEI2RIIR2703	COTO CORPORATION	55 DUPONT DR	PROVIDENCE	RI	02907	-	Missing County (mO)	CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY	NEI	09-JAN-28	-

Figure G-41. FRS Before Screenshot for Scenario 9, Step 1. This screenshot shows that FRS ID 110012483268 is related to PLOVER ID 14711.

Registry Name
XIMEDICA

Registry Location
**55 DUPONT RD
PROVIDENCE RI 02907**

Registry ID
110058348676

Units: 0
Release Points: 0
Processes: 0
Controls: 0
Permitted Features: 0

Data Quality
Valid

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	9229	XIMEDICA	55 DUPONT RD	PROVIDENCE	RI	02907	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	17-APR-06	-
EIS	16436211	XIMEDICA	55 DUPONT RD	PROVIDENCE	RI	02907	PROVIDENCE	Valid	AIR EMISSIONS CLASSIFICATION UNKNOWN	EIS	17-JUN-01	OPERATING

Figure G-42. FRS Before Screenshot for Scenario 9, Step 1. This screenshot shows that FRS ID 110058348676 is related to PLOVER ID 9229.

POST `https://ofmext.epa.gov/facility/powebservices/v1/FRS/SubmitFacility` Params Send Save

Authorization Headers (3) Body Pre-request Script Tests

form-data x-www-form-urlencoded raw binary JSON (application/json)

```

10 "registryId": "110012483268",
11 "mergedRegistryIds": "RI-PLOVER",
12 "programSystemId": "14711",
13 "facilityName": "XIMEDICA",
14 "locationAddress": "55 DUPONT DR",
15 "supplementalLocation": "55 DUPONT DRIVE",
16 "cityName": "PROVIDENCE",
17 "countyName": "PROVIDENCE",
18 "countyFIPSCode": "7",
19 "stateCode": "RI",
20 "stateName": "RHODE ISLAND",
21 "countryName": "UNITED STATES",
22 "postalCode": "02907",
23 "federalFacilityCode": "N",
24 "agencyId": "D000",
25 "siteTypeName": "STATIONARY",
26 "smallBusinessInd": "N",
27 "userId": "RIDEH",
28 "activeStatus": "ACTIVE",
29 "possibleDuplicateIndicator": "N",
30 "possibleDuplicateValues": null,
31 "latitude": "41.8009933",
32 "longitude": "-71.4367129",
33 "referencePointCode": null,
34 "collectionMethodCode": null,
35 "accuracyValue": null,
36 "scale": null,
37 "mergedRegistryIds": "9229",
38 "geoDerivedAddress": null,
39 "geoDerivedMessage": null,
40
41 }

```

PLOVER SITE ID OF PRIMARY

PLOVER SITE ID OF DUPLICATE

FRS ID RETURNED

Body Cookies Headers (10) Test Results

Pretty Raw Preview JSON

Status: 200 OK Time: 2114 ms

Figure G-43. PLOVER Before/After Screenshot for Scenario 9, Step 1. For this scenario, the PLOVER team manually submitted a JSON file to FRS simulating the merge of PLOVER facilities 14711 and 9229. They correctly identified the primary site (to be kept) as 14711 and set the mergedRegistryIds field to 9299. The response from FRS provided the correct FRS ID for the record that was kept (not archived).

Step 2: FRS analyst verifies that the merge was successful in FRS.

Registry Name
XIMEDICA

Registry Location
55 DUPONT DR
PROVIDENCE RI 02907
[Details](#) • [History](#)

Registry ID
110012483268

Data Quality
Valid

Program Data

Program	Program ID	Facility name	Location	City	State	Zip	County	DQ Code	Interest Type	Data Source	Last Update	Status
RI-PLOVER	9229	XIMEDICA	55 DUPONT RD	PROVIDENCE	RI	02907	PROVIDENCE COUNTY	Valid	STATE MASTER	RI-PLOVER	18-FEB-21	-
AIR	8300000054600700197	COTO WABASH	55 DUPONT DRIVE	PROVIDENCE	RI	02907	-	Missing County (mO)	AIR MINOR	AIR	00-NOV-13	OPERATING
EIS	16436211	XIMEDICA	55 DUPONT RD	PROVIDENCE	RI	02907	PROVIDENCE	Valid	AIR EMISSIONS CLASSIFICATION UNKNOWN	EIS	17-JUN-01	OPERATING
OSHA-OIS	568172576	COTO TECHNOLOGY	55 DUPONT DRIVE	PROVIDENCE	RI	02907	-	Missing County (mO)	OSHA ESTABLISHMENT	OSHA-OIS	16-NOV-09	-
RI-PLOVER	14711	XIMEDICA	55 DUPONT DR	PROVIDENCE	RI	02907	PROVIDENCE	Valid	STATE MASTER	RI-PLOVER	17-APR-06	ACTIVE
RCRAINFO	4400700497	ITEM HOLDINGS	55 DUPONT DR	PROVIDENCE	RI	02907	PROVIDENCE	Valid	RCRAINFO	RCRAINFO	02-MAY-19	Y
AIRS/AFS	4400700497	COTO WABASH	55 DUPONT DRIVE	PROVIDENCE	RI	02907	PROVIDENCE	Valid	AIR MINOR	AIRS/AFS	14-APR-30	OPERATING
NEI	NEI2810R2703	COTO CORPORATION	55 DUPONT DR	PROVIDENCE	RI	02907	-	Missing County (mO)	CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY	NEI	09-JAN-28	-

Figure G-44. FRS After Screenshot for Scenario 9, Step 2. This screenshot shows that FRS ID 110012483268 is now related to PLOVER ID 14711 and PLOVER ID 9229, indicating that the merge was successful and that the PLOVER record previously linked to the other FRS ID is now linked to this FRS ID.

G.10 – Scenario 10: PLOVER Submits multiple updates in a short period of time

The purpose of this scenario is to verify that the services can appropriately handle rapid updates to a record. As part of the PLOVER business process, a record can be edited multiple times in a short period of time. This can occur as a new record is being added and RI staff are updating different portions of facility information on different screens.

Step 1: PLOVER submits updated data multiple times. The PLOVER team submitted five updates to PLOVER record 1881 within one minute of each other. No screenshots are available for this step.

Step 2: FRS verifies that the changes are all applied. This step passed and the services and FRS logic behaved as expected, but no screenshots are available.

APPENDIX H – STATE MDM PILOT PARTICIPANTS

Name	Organization	Email
Ron Evans, Co-Chair	EPA, OAR	ron.evans@epa.gov
Joshua Kalfas, Co-Chair	Oklahoma DEQ	joshua.kalfas@deq.ok.gov
Susan Joan Smiley, Co-Chair	EPA, OEI	smiley.susan@epa.gov
Ben Way, Co-Chair	Wyoming DEQ	ben.way@wyo.gov
Sam Alves	Rhode Island DEM Web Programmer	sam.alves@dem.ri.gov
Warren Angell	Rhode Island DEM Agency Information Technology Director	warren.angell@dem.ri.gov
Pam Galli, Work Stream Lead	Rhode Island DEM State Project Manager	pam.galli@dem.ri.gov
Kien Harris	Rhode Island DEM Programmer and Lead Analyst	kien.harris@dem.ri.gov
Scott Fontenot	EPA, OEI	fontenot.scott@epa.gov
Matt Kelly, Work Stream Lead	EPA, OEI	kelly.matthew@epa.gov
Lynn Capuano/Kelly Poole	Exchange Network/E- Enterprise /ECOS	kpoole@ecos.org
Beth Graves	ECOS	bgraves@ecos.org
Tim Bizal	CGI Federal	timothy.bizal@cgifederal.com
Chris Chafin	CGI Federal	Christopher.chafin@cgifederal.com
Jim Chilton	CGI Federal	james.chilton@cgifederal.com
Luke Gentry	CGI Federal	lucas.gentry@cgifederal.com
Kimberly Hoke	CGI Federal	kimberly.hoke@cgifederal.com
Lydia Lyshevski	CGI Federal	lydia.lyshevski@cgifederal.com
Nikki Spaeth	CGI Federal	Nicole.spaeth@cgifederal.com