TEXAS PROJECT DELIVERY FRAMEWORK

SOFTWARE  
REQUIREMENTS SPECIFICATION



TCEQ

ICIS-NPDES  
Wastewater Permitting  
TIDEN Dataflow

|  |  |
| --- | --- |
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# Section 1. Overview

## 1.1 Purpose

*Specify the purpose of this Software Requirements Specification (SRS) and its intended audience.*

The Texas Commission on Environmental Quality (TCEQ) Water Quality Division (WQD) issues Individual Permits (IPs) and General Permits (GPs) for wastewater discharges, issues IPs and Registrations for sewage sludge disposal, and oversees the Pretreatment Program in Texas. The Environmental Protection Agency's (EPA) Electronic Reporting Rule, which was effective on December 21, 2015, contains a list of required data elements of the rule that TCEQ must electronically share with EPA.

Moving forward, TCEQ plans to use the Texas Integration Data Exchange Node (TIDEN) to electronically submit ICIS-NPDES Permit data to the EPA. This work will reduce, if not eliminate, manual data entry into ICIS and allow TCEQ to comply with EPA's Electronic Reporting Rule. The System Requirements Specification (SRS) document describes the business process, interface and functions that the TIDEN must support as part of project WO #09 (Contract 582-14-40066), WO #3 (Contract 582-18-80426) and WO #2 (Contract 582-22-30094).

In addition, the SRS includes a detailed overview of the software product, its parameters, and goals. The SRS describes the project’s target audience, hardware, and software requirements. It defines an overall view of how our external/internal stakeholders, team and audience see the product and its functionality.

## 1.2 Business Context

*Provide an overview of the business organization sponsoring the development of the software application, including the mission statement and organizational objectives of the business unit.*

The Office of Water (OW) strives to protect the State's water resources consistent with sustainable economic development, working towards clean and available water. OW oversees all TCEQ water permitting activities. The Water Quality Division (WQD) is dedicated to protecting human health and the environment by issuing protective permits, listening to stakeholder input, considering economic development, and using good science.

The Office of Water and Water Quality Division objective is to collectively satisfy all identified universal reporting requirements to EPA in the context of the ICIS-NPDES permitting module.

EPA’s Integrated Compliance Information System (ICIS) for National Pollutant Discharge Elimination System (NPDES) data exchange allows Partners to provide NPDES data to EPA in an XML format, which includes facilities, permitting, CAFO, compliance, and enforcement data. The new system will provide ease of use for web-based reporting through manual or automated submissions. TCEQ will be utilizing the automated submission through an upload process by extracting and generating data from TCEQ internal databases, submitting XML files to EPA via the Texas Integrated Data Exchange Node (TIDEN) to the Central Data eXchange (CDX), and ICIS-NPDES database.

## 1.3 Scope

*Describe the scope of the software application to be produced.*

The objective of this project is to address the universal reporting requirements to EPA for ICIS-NPDES permitting data flow. TCEQ has committed to streaming Wastewater Permitting data reporting; therefore, ICIS-NPDES data flow is being implemented to replace existing process of manual submissions.

1.3.1 Extract or generate the relevant reporting data from Central Registry (CR) and Application and Registration Tracking System (ARTS).

* + 1. Transform data using XML schemas based on the data mapping and business rules documented (see Section 5 for reference documents). All reference documents will be provided with the SRS.
    2. The following XML operation types are in scope of the project: TXG11 Concrete Batch GP authorizations and renewals

TXG13 Aquaculture GP authorizations and renewals (TPDES Level II, Level III, Level IV and V only)

TXG31 TPDES Oil and Gas Extraction GP authorizations and renewals

TXG34 Petroleum Bulk Stations and Terminals GP authorizations and renewals

TXG50 John Graves Scenic Riverway GP authorizations and renewals

TXG64 Water Treatment Plant GP authorizations and renewals

TXG67 Hydrostatic Test Water GP authorizations and renewals

TXG83 Petroleum Contaminated Waters GP authorizations and renewals

TXG87 Pesticide GP authorizations and renewals

TXG92 CAFO GP authorizations and renewals (TPDES only)

TXR04 MS4 GP authorizations and renewals

TXR05 Multi-Sector GP authorizations and renewals

TXR05 Multi-Sector GP First Batch

TXR15 Construction GP authorizations and renewals

TXR15 Construction GP First Batch

* + 1. Only data flow submission for Master General Permits and General Permit authorizations, as defined in the finalized Work Order, are **in scope** of this project.
    2. The data flow(s) will be designed to submit TCEQ data electronically to EPA’s Integrated Compliance Information System (ICIS).
    3. Any new TIDEN code generated conforms to TCEQ’s Java standards.
    4. Any new TIDEN database scripts generated conform to TCEQ’s SQL standards.
    5. TIDEN will not compare newly retrieved data from source databases against that accepted by EPA (located in TIDEN’s MASTER Tracking tables). Any data retrieved from source database will be submitted as REPLACE transaction type to EPA, except for “Permit Reissuance” and “Permit Termination” submission types – which will be submitted as CHANGE transaction types to EPA.
    6. For TXR05 and TXR15, TIDEN will generate and submit first batch submissions for all active authorizations and associated payloads. Authorizations for these two general permits have never been entered into ICIS. The active authorizations must be initially submitted to ICIS-NPDES so that future permit actions on these permits (ie. renewal, changes to existing authorizations, and termination) are accepted by EPA.
    7. For TGX31 and TGX64, TIDEN will initiate, generate, and send submission files in different methods similar to the existing data transmission (i.e., automatically, manually, re-submit, and renewal). It will pull and parse TIDEN errors as well as EPA acknowledgement files to TIDEN and WQ-TIDEN <WQ-TIDEN@tceq.texas.gov> proxy box. They are assumed to function the same as other operation types as indicated in 1.3.3 and section 3 (requirements) below.

## 1.4 User Characteristics

*Identify each type of user of the software by function, location, and type of device. Specify the number of users in each group and the nature of their use of the software.*

1.4.1 The automatic plug-in tool for submitting XML files to ICIS-NPDES will be added in TIDEN for Work Order# 09 (Contract 582-14-40066) and WO #3 (Contract 582-18-80426). The existing automatic plugin tool will be modified based on the requirements identified in WO #2 (Contract 582-22-30094).

1.4.2 This automated tool will be used by TCEQ staff.

1.4.3 TCEQ program staff will be given TIDEN user accounts (username/password) to access specific “Operations” under the ICIS-NPDES domain of TIDEN’s Administration.

# Section 2. Assumptions, Dependencies, Constraints

## 2.1 Assumptions

*Describe the assumptions that can affect the requirements specified in this SRS.*

2.1.1 Business Area Management (Executive Sponsors) support the project as a strategic asset by defining scope and allocating resources.

2.1.2 Business Area Management (Executive Sponsors) ensure business area participation from beginning to end; give final approval for the solution to be implemented.

2.1.3 OW and WQD program staff support is vital during and after development as well as deployment.

2.1.4 Information Resources Division (IRD), Enterprise Application Management Team (EAMT) and Enterprise Support Services (ESS) support is essential during and after development.

2.1.5 Code developed under WO #09 will conform to ICIS-NPDES schema v5.3 and will not incorporate scheduled updates under Iteration 1 and 2 to ICIS-NPDES schemas by the Environmental Protection Agency (EPA); or any ICIS-NPDES schema updates after v5.3.

2.1.6 Existing process for Wastewater permitting data submission, specifically Master General Permits and General Permit authorizations, will be deprecated upon implementation.

## 2.2 Dependencies

*Describe the dependencies that can affect the requirements specified in this SRS.*

The following summary identifies any dependencies on which the Work Order# 09 is based:

* + 1. The automatic plug-in tool required by Work Order# 09 will be built on or interface with TIDEN.
    2. WQD program staff will need to establish TIDEN local user accounts to use new “Operations” created under the ICIS-NPDES domain of TIDEN’s Administration website.
    3. A valid National Authentication & Authorization System (NAAS) account with permission to ICIS-NPDES is required for submission of TCEQ data to access the Exchange Network using the state node (TIDEN).
    4. A valid NAAS account with access to ICIS-NPDES gateway is required to view standard reports after the submission has been made to EPA’s Central Data eXchange (CDX).

## 2.3 Constraints

*Describe the constraints that can affect the requirements specified in this SRS.*

2.3.1 The development, review, and approval of the Software Requirement Specification document have a time constraint and cost.

2.3.2 Application must function with existing Agency platforms and software.

2.3.3 Solution must comply with EPA’s documentation regarding ICIS-NPDES dataflow.

# Section 3. Requirements

## 3.1 Business Requirements

*Describe all business requirements for the software.*

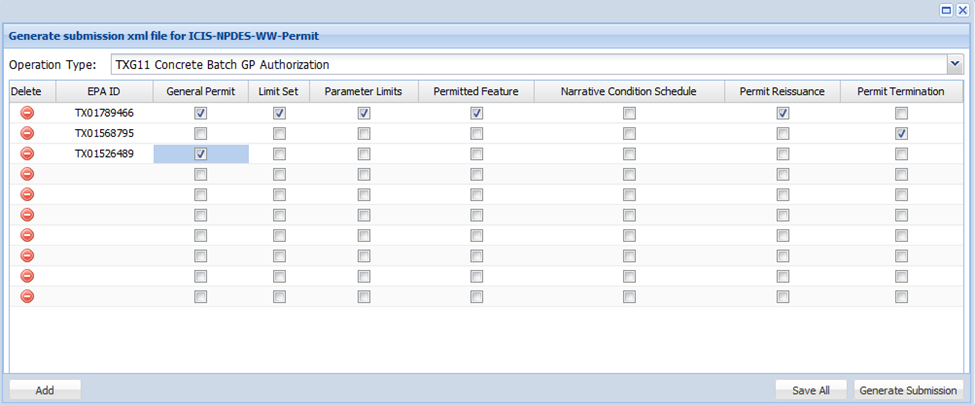
3.1.1 Batch XML files process:

3.1.1.1 Ability to initiate submission.

3.1.1.1.1 Automatically at a minimum once a week frequency with the option to adjust the frequency of the automated process for each task/operation as needed. This process will submit all permits that match criteria defined for automatic submission.

3.1.1.1.2 Re-submission by selecting an existing submission with status of Error, Failed, or Transfer Failed and re-submit all permit information that had rejected transaction for at least one of its data elements for the task (refer to requirement 3.4.8 for mapping of task and submittal types). For example, if Parameter Limit, Narrative Condition, and Limit Set payloads were submitted upon permit issuance and one of the Narrative Condition data elements was rejected for that permit, then re-submission will submit data for Narrative Condition payload for that permit only.

3.1.1.1.3 Manually by specifying permit number and payload(s) for that permit. TIDEN will retrieve permit-related data from source databases for selected payloads only. This relation between operation type and available payloads for each task will be defined in TIDEN UI in a format similar to the following screenshot.



3.1.1.1.4 First Batch Submission for TXR05 and TXR15 will generate and submit associated payloads for authorizations that are active. The following requirements will be used to initially generate and submit these authorizations to ICIS-NPDES. The re-submission functionality as defined in Section 3.1.1.1.2 will apply to the First Batch Submission. After all active permits are accepted by ICIS-NPDES, this requirement will no longer apply to the TXR05 and TXR15 operations.

* The Permit Reissuance and Termination payloads will not be sent for TXR05 and TXR15 authorizations regardless of the last application type received.
* The system date will be used in lieu of the permit effective date to calculate certain data elements in limit set and limit payloads for TXR05 authorizations.

NOTE 1: Due to the number of records that will be generated and submitted, the first batch submissions may consist of multiple smaller submissions or another equivalent solution to prevent system and/or server time out errors.

NOTE 2: Re-submissions of the First Batch submission (or re-submissions of the First Batch re-submissions) for TXR05 and TXR15 permits should follow the same logic as the First Batch submission, except only the records that had TIDEN or EPA errors in the parent submission are extracted (and validated) in the re-submission.

3.1.1.2 Extract or generate data from CR and ARTS as defined in the Data Exchange Document (DED).

3.1.1.3 Separate Oracle schema within TIDEN identified to ICIS-NPDES Wastewater permitting.

3.1.1.4 Ability to process Change (C) and Replace (R) transaction types, as applicable. Note that only Replace (R) transactions are in scope of the project for all payloads, except for “Permit Reissuance” and “Permit Termination” payloads – which allow Change (C) transaction type only.

3.1.1.5 Allow TCEQ staff to easily review content of XML files before submitting to EPA. This is achieved through the use of .XSLX files generated for the submission record. The format should be easy for permit writers to review and understand such as an excel spreadsheet or word table.

3.1.1.6 Compress and zip generated files for submittal purposes.

3.1.1.7 Validate generated XML files conform to EPA’s XML schema reporting format.

3.1.1.8 Automatic plug-in tool built to allow for submittal of mandatory and conditional fields.

3.1.1.9 Electronically submit XML files via TIDEN to CDX for data validation via the plugin.

3.1.1.10 View and download TIDEN Error reports from User Interface (UI). Report will identify, for each general permit covered facility (GPCF), any and all data gaps for mandatory fields with no or null values.

3.1.1.11 If EPA CDX or other offerings provide the technical ability, TIDEN will retrieve EPA’s validation reports and present report to ICIS-NPDES domain users to investigate error log.

3.1.1.12 Email notifications will be issued to a designated WQD proxy box when the following actions are executed.

3.1.1.12.1 An ICIS-NPDES submission is generated in TIDEN and one or more records contain TIDEN validation errors; email shall contain TIDEN Error report.

3.1.1.12.2 TIDEN is unable to submit the XML Submission file to the EPA-CDX Node, and the transaction status is updated from Pending to Transfer Failed.

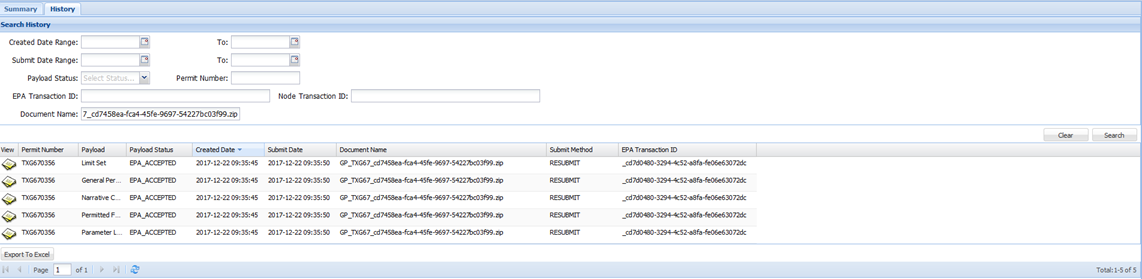
3.1.1.12.3 TIDEN receives an EPA Report that contains either a “Rejected Transactions XML Report” or a “Batch File-Level Error Report”; emails shall contain a copy of the EPA Error Report.

3.1.1.13 View and download EPA Processing reports from User Interface (UI).

3.1.1.14 View Wastewater Permitting data accepted by EPA.

3.1.1.14.1 TIDEN needs to be able to capture payloads that are successfully accepted or have rejected transactions for each data submission.

3.1.1.14.2 TIDEN needs to display status of payloads for a given data submission as depicted in the following screenshot.



3.1.1.14.3 If at least one of the records is rejected for a permit, then entire payload is indicated as rejected. For example, if three (3) Narrative Conditions are submitted for a permit and one (1) of them is rejected by EPA, then Narrative Conditions payload for that permit will be indicated with EPA\_REJECTED status for the permit.

## 3.2 Functional Requirements

*Customize this subfunction to contain the subfunctions necessary to comprehensively define the fundamental actions that must take place within the software to accept and process the inputs and to process and generate the outputs.*

*Subfunction templates for each of the means of specifying functional requirements are provided below.*

*When functional decomposition is used as the means of specifying the functional requirements, provide a 3.2.xf subfunction for each function. Each 3.2.xf subfunction should be labeled and titled appropriately for a specific function, where xf is the appropriate sequential subfunction number and X is the name of the specific function.*

#### 3.2.1 Function of Data Flow

*Describe the intent of the function.*

### 3.2.1 The data flow will be a web-based solution that is available 24/7 by authorized users. The data flow will populate required and optional fields as identified in each XML Schema to complete the upload.

#### 3.2.2 ICIS-NPDES XML Schema

TCEQ has completed JAD sessions for Phase I to identify all reportable requirements that will be included in the submittal process to EPA. The data elements in yellow highlight on the data mapping spreadsheet represent the universe that will be submitted to EPA, based on the input from TCEQ WQD.

*Describe the inputs to the function.*

Following table lists all payload and transaction types that can be submitted under ICIS data flow v5.3. In addition to all such data elements, table also lists:

1. **Transaction Types:** types of transactions available that can be submitted for the payload type.
2. **Transaction Types In Scope:** types of transactions that will be supported in schema v5.3.

| **Payload Type** | **Transaction Types Available** | **Transaction Types In Scope** |
| --- | --- | --- |
| CAFO Permit | X, N, R, C | R |
| General Permit | D, N, R, C | R |
| Limit Set | X, D, N, R, C | R |
| Master General Permit | D, N, R, C | R |
| Narrative Condition Schedule | X, R | R |
| Parameter Limits | X, D, R | R |
| Permit Reissuance | C | C |
| Permitted Feature | X, D, N, R, C | R |
| Permit Termination | C | C |
| SW Construction Permit | X, N, R, C | R |
| SW Industrial Permit | X, N, R, C | R |
| SW MS4 Small Permit Component | X, N, R, C | R |

#### 3.2.3 Function Operations

*Describe the operations to be performed within the function.*

3.2.3 Batch programs extracting and generating data from CR and ARTS promote data to EPA ICIS-NPDES.

#### 3.2.4 Function Outputs

*Describe the outputs from the function.*

3.2.4 Extract data using automatic plug-in tool to create XMLs, compress and zip files to CDX via TIDEN.

### 3.2.*5* Use Case *Y*

*When use cases are used as the means of specifying the functional requirements, provide a 3.2.xu subfunction for each use case. Each 3.2.xu subfunction should be labeled and titled appropriately for a specific use case, where xu is the appropriate sequential subfunction number and Y is the name of the specific use case.*

*Within each use case subfunction, specify the use case information, including the actor, pre-conditions, post-conditions, scenarios, and alternate scenarios.*

**N/A**

## 3.3 Logical Data Requirements

*Describe the logical data requirements for the software.*

**N/A**

## 3.4 User Requirements

*Describe the user requirements for the software.*

### 3.4.1 User must have access to TIDEN.

3.4.2 User must have ability to initiate the extract/generate on demand for each XML operation type.

3.4.3 The user must have the ability to change the frequency of the automatic submission process for each XML operation type.

3.4.4 Isolate data based on type of data being submitted and/or group it is being submitted for. This is to segregate data based on the WQD team reviewing the transaction, thereby expediting data review and corrections. Following table maps payload types in scope of the project to operation task types desired by TCEQ. NOTE: Permit Reissuance must be submitted to ICIS on or after the permit effective date. So each General Permit has one operation for new authorizations and a second operation for renewal authorizations. This allows renewal applications to be submitted to EPA on a separate schedule than the new authorizations.

|  |  | **Payload Types** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Operations** | General Permit | CAFO Permit | Master General Permit | SW Construction Permit | SW Industrial Permit | Limit Set | Parameter Limits | Narrative Condition Schedule | Permitted Feature | Permit Reissuance | Permit Termination | SW MS4 Small Permit |
| 1 | Submit\_MasterGeneralData |  |  | X |  |  |  |  |  |  | X | X |  |
| 2 | Submit\_TXG11Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 3 | Submit\_TXG11Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 4 | Submit\_TXG13Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 5 | Submit\_TXG13Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 6 | Submit\_TXG31Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 7 | Submit\_TXG31Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 8 | Submit\_TXG34Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 9 | Submit\_TXG34Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 10 | Submit\_TXG50Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 11 | Submit\_TXG50Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 12 | Submit\_TXG64Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 13 | Submit\_TXG64Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 14 | Submit\_TXG67Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 15 | Submit\_TXG67Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 16 | Submit\_TXG83Data | X |  |  |  |  | X | X | X | X |  | X |  |
| 17 | Submit\_TXG83Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X |  |
| 18 | Submit\_TXG87Data | X |  |  |  |  |  |  | X |  |  | X |  |
| 19 | Submit\_TXG87Data\_Renewal | X |  |  |  |  |  |  | X |  | X | X |  |
| 20 | Submit\_TXG92Data | X | X |  |  |  |  |  | X |  |  | X |  |
| 21 | Submit\_TXG92Data\_Renewal | X | X |  |  |  |  |  | X |  | X | X |  |
| 22 | Submit\_TXR04Data | X |  |  |  |  | X | X | X | X |  | X | X |
| 23 | Submit\_TXR04Data\_Renewal | X |  |  |  |  | X | X | X | X | X | X | X |
| 24 | Submit\_TXR05Data | X |  |  |  | X | X | X | X | X |  | X |  |
| 25 | Submit\_TXR05Data\_Renewal | X |  |  |  | X | X | X | X | X | X | X |  |
| 26 | Submit\_TXR05\_FirstBatch | X |  |  |  | X | X | X | X | X |  |  |  |
| 27 | Submit\_TXR15Data | X |  |  | X | X | X | X | X | X |  | X |  |
| 28 | Submit\_TXR15Data\_Renewal | X |  |  | X | X | X | X | X | X | X | X |  |
| 29 | Submit\_TXR15\_FirstBatch | X |  |  | X |  |  |  | X |  |  |  |  |

## 3.5 Information Management Requirements

*Describe the information management requirements for the software.*

**N/A**

## 3.6 Systems Requirements

### 3.6.1 Performance Requirements

*Describe the performance conditions and their associated capabilities.*

The system must perform as the user expects in every action response with no excess delays. For example, the ICIS-NPDES module tabs should not take over 30-60 seconds to load and display data. The performance of the TIDEN application will be affected by various factors such as the hosting server’s memory and CPU space, the speed of TCEQ’s internal network, the TIDEN database design, and the TIDEN application code. enfoTech will create the ICIS-NPDES staging tables and develop the application code with optimal performance in mind.

The system must be designed to allow multiple users to log into TIDEN and view the ICIS-NPDES module. If performing a manual submission, only one user should initiate the submission from TIDEN to prevent the same dataset from being submitted multiple times.

At any given time, the system must be able to maintain performance levels specified above.

### 3.6.2 Quality Requirements

*Describe requirements for the quality characteristics of the software.*

The scalability of the software must be achieved without modification to the underlying architecture of the plug-in.

The software should be in a simplicity design state to promote ease of testing.

Once the software is deployed, it must be in a supportable state to ensure ease of support without severely inconveniencing software use.

## 3.7 Interfaces

*Describe the logical characteristics of each interface between the application and other hardware, software, and communication protocols.*

3.7.1 Use TIDEN infrastructure in order to interface with EPA’s National Authentication & Authorization System (NAAS)/CDX to authenticate, send and receive XML files via CDX.

## 3.8 Other Requirements

*Identify any other requirements that do not fit appropriately into the preceding requirement sections.*

3.8.1 System must be designed to support Oracle Database11g release.

3.8.2 System must be upgradable to the next Oracle Database release.

3.8.3 Parameter Limits payload must allow two limit blocks for the same parameter code to resolve EPA business rule PLT050.

3.8.4 General Permit Payload must include the following components:

3.8.4.1 Middle name field in Facility Contact

3.8.4.2 Contact Foreign Addresses

3.8.5 Semi-Annually and Quarterly Discharge Monitoring Reports (DMR) frequency values must be included for all Limits/Parameter Limits operations.

3.8.6 The automatic process operation logic for existing authorizations of TXG92-CAFO permits must include the application type “NOI-Significant Expansion” to not send this application type as a NOI (Notice of Intent).

3.8.7 The new authorization type “TPDES Level V” must be included in the existing reference list (e.g., TPDES Levels II, III, and IV) for the TXG13 General Permit operation in TIDEN to send to EPA’s ICIS database/system.

3.8.8 The following XML data fields must be included in the existing dataflow logic:

1) LimitSetName

2) FrequencyOfAnalysisCode

3) SampleTypeText

4) StateRegionCode

5) NAICSCode

6) NAICSPrimaryIndicatorCode

7) AssociatedPermitIdentifier

8) AssociatedPermitReasonCode

3.8.9 Add TXG64 program to TIDEN.

3.8.9.1 Modify the existing logic for the MonthLimitApplies, UnitMeasureCode, and NumericConditionText fields on the Parameter limit payload to flow the limits applicable to the TXG64 master general permit.

3.8.10 Add TXG31 program to TIDEN.

3.8.10.1 Modify the existing logic for the UnitMeasureCode and NumericConditionText fields on the Parameter limit payload to flow the limits according to the TXG31 master general permit.

3.8.10.2 The logic for the parameter code needs to be modified to evaluate Criteria's A, B, C, D, and E. *(The current parameter code logic evaluates Criteria’s A, B, and C.)*

# Section 4. Requirements Traceability Matrix

*Provide reference to the location of the Requirements Traceability Matrix that indicates traceability from the system requirements documented in the System Requirements Specification to the design elements documented in the System Design Description to the software requirements documented in this Software Requirements Specification (SRS).*

**N/A**

# Section 5. References

*Provide a list of all documents and other sources of information referenced in the SRS and utilized in developing the SRS. Include for each the document number, title, date, and author.*

| **Document No.** | **Document Title** | **Date** | **Author** |
| --- | --- | --- | --- |
| N/A | ICIS\_Data\_Exchange\_Template\_v5.3.xlsx |  | EPA |
| N/A | ICIS-NPDES\_Batch\_User\_Guide\_v5.3.pdf |  | EPA |
| N/A | ICIS-NPDES\_Example\_XML\_Instance\_Document\_v5.3.pdf |  | EPA |
| N/A | Submission\_Types\_for\_each\_Task.docx | Initial 07/28/2016 revised 1/3/2018 | TCEQ |
| N/A | ICIS\_NPDES\_WO\_09\_Work Plan vFinal.docx | 05/03/2016 | TCEQ |
| N/A | DCN 0200 Data Element Analysis for Final Rule.xlsm | 02/18/2016 | TCEQ |
| N/A | java\_dev\_standards.xlsx | 02/18/2016 | TCEQ |
| N/A | sql\_dev\_standards.xlsx | 02/18/2016 | TCEQ |
| N/A | Appendix A - Final Rule.docx | 01/11/2016 | TCEQ |
| N/A | [ITR7669&ITR7557-Ticket-Details.docx](https://svnprd.tceq.texas.gov/svn/pmo/icis_npdes_ww_permit/Analysis/ITR7557-7669-Enhancements/ITR7669&ITR7557-Ticket-Details.docx) (*SVN hyperlink*) | 04/12/2023 | TCEQ |
| N/A | [*Executed-WorkOrder#02-582-22-30094.pdf*](https://svnprd.tceq.texas.gov/svn/pmo/icis_npdes_ww_permit/Contracting/Work-Order-Document(s)/WorkOrder%2302-Dataflow-Enhancements/WorkOrder/Executed-WorkOrder%2302-582-22-30094.pdf) (*SVN hyperlink*) | 04/12/2023 | TCEQ |

# Section 6. Glossary

*Define all terms and acronyms required to interpret the SRS properly.*

| **Acronym** | **Acronym Description** |
| --- | --- |
| ARP | Application Review and Processing Team |
| ARTS | Application and Registration Tracking System |
| CDX | Central Data eXchange |
| CR | Central Registry |
| EAMT | Enterprise Applications Management Team |
| EDT | Electronic Data Transfer |
| EPA | Environmental Protection Agency |
| ESS | Enterprise Support Services |
| ICIS | Integrated Compliance Information System |
| IRD | Information Resources Division |
| JAD | Joint Application Development |
| NAAS | National Authentication & Authorization System |
| NEIEN | National Environmental Information Exchange Network |
| OW | Office of Water |
| TCEQ | Texas Commission on Environmental Quality |
| TIDEN | Texas Information Exchange Node |
| WQD | Water Quality Division |
| XML | Extensible Markup Language |

# Section 7. Revision History

*Identify changes to the SRS.*

| **Version** | **Date** | **Name** | **Description** |
| --- | --- | --- | --- |
| 1.0 | 06/29/2016 | Karan Arora | Initial Draft |
| 1.0R | 7/11/2016 | TCEQ | Response to initial draft |
| 1.1 | 7/11/2016 | Karan Arora | Update based on TCEQ comments |
| 1.1R | 7/14/2016 | TCEQ | Response to v1.1 |
| 1.2 | 7/18/2016 | Karan Arora | Updated based on TCEQ comments |
| 1.2.1 | 7/29/2016 | Karan Arora | Updated based on TCEQ input received on 7/28/2016. |
| 1.2.1R | 8/3/2016 | TCEQ | Response to v1.2.1 |
| 1.3 | 8/3/2016 | Karan Arora | Updated based on TCEQ input received on 8/3/2016. |
| 1.3.1 | 8/5/2016 | Karan Arora | Updated based on discussion with John on 8/5/2015. Following sections are updated:   * Update requirement 3.1.1.1.3 to state that data for manual submission will be defined in TIDEN UI, not excel file. * Clarification on requirement 3.1.1.4. * Update example excel file provided (to add status) for requirement 3.1.1.14.2. * Address comment LF10 on (former) requirements 3.4.4 – 3.4.7 and provide comments accordingly. |
| 1.3.1R | 8/11/2016 | TCEQ | Response to v1.3.1. accepted changes. One update made to 3.1.1.1 |
| Final | 8/11/2016 | Karan Arora | Final version of the SRS. |
| 1.4 (Post-Prod Final) | 01/26/2018 | TCEQ | Updated to remove PARIS and Individual Permit requirements and added revisions made during Coding, UAT, and Deployment, for ARTS and General Permits. |
| 1.5 | 1/26/2018 | TCEQ | Added requirements for TXR05 and TXR15 first batch (shown in yellow highlights). |
| 1.5R | 6/6/2018 | Karan Arora (enfoTech) | Provided review redlines to TCEQ |
| 1.6 | 6/18/18 | Tracy Edwards (TCEQ) | TCEQ reviewed and agreed to all changes for version 1.5R. Version 1.6 represents the new version. |
| 1.6 | 6/27/18 | Tracy Edwards and Laurie Fleet | Revision clean-up |
| 1.7 | 4/12/23 | Mark Thompson | Updated based on WO #2 requirements |
| 1.8 | 04/19/2023 | Nick Smith and Kim Nguyen | TCEQ provided feedback/comments on v1.7 and updated document to v1.8 |
| 1.9 | 04/20/2023 | Nick Smith and Kim Nguyen | Updated verbiage for TXG31. Changed document version to v1.9 |
| 2.0 | 4/21/2023 | Mark Thompson | Accepted and finalized |
| 2.1 | 4/25/2023 | Mark Thompson | Updated based on TCEQ comments |
| 2.2 | 04/27/2023 | Kimberly Sladek | Updated document format to make document accessible |
| 2.3 | 05/16/2023 | Nick Smith and Patrick McSorley | Updated content based on ESS comments provided on v2.2 |
| 2.3 | 06/14/2023 | Nick Smith | Signature/approval block with SVN approval URLs. Version 2.3 received formal approval on 06/14/2023. |

# Section 8. Appendices

*Include any relevant appendices.*

The following documents are located on the Project Team website: http://projects.enfotech.net:8080/TCEQ/ICISNPDESWWPermit/

| **Document No.** | **Document Title** | **Date** | **Author** |
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