SEC. 3.03-Electronic Data Management System Deliverables

Domestic and Industrial Permitting:

● Online applications to be filled out by the permit applicant with data inherited where possible from prior submissions.

● Automated flow of application information from the online reporting system to the system of record.

● Comprehensive, automated flow of all information in the local systems to the ICIS-NPDES system that is complete and requires little or no manual quality assurance.

● Capture of all data elements pertinent to the domestic and industrial permit program in DEC, not only those related to compliance with the CWA. This would include data for mixing zones that currently cannot be stored in any system.

● Automated generation of permit documents and correspondence. This includes the management of boilerplate text that is common to multiple permits.

● Full integration of information downloaded from ICIS with information in the system-of-record if ICIS will remain the system-of-record for certain data elements (e.g., DMRs).

● Comprehensive reports containing all data captured from the regulated community, as well as information downloaded from ICIS.

● Ad hoc reporting capability.

● Automated correspondence to regulated community informing them of certain deadlines (e.g., 180-day renewal reminder).

● Notifications to DEC staff of upcoming or late submittals.

● The system should tie in with our GIS database.

●The system should allow permittees to attach supplementary documents to the application

Oil and Gas:

● Comprehensive reports containing all data captured from the regulated community, as well as information downloaded from ICIS-NPDES.

● Ad hoc reporting capability.

● There is a desire to provide spatial access to data about permitted facilities to both DOW staff and the public.

● System should provide automated notifications to permittees informing them of deadlines for renewals or compliance reporting.

● System should provide automated notifications to DOW staff of upcoming or late submittals.

Mining:

● An improved invoicing process that integrates the billing system (CRITTS) without the need for intensive reconciliation efforts and without the possibility of missed permit fees.

● Electronic capture of all permit information into OASys and flow of permit data into Water Solution. This will alleviate the need for staff to manually enter information into Water Solution as well as make for more consistent data entry.

● Automatic generation of permit documents, replacing the current labor-intensive process.

● Improved reporting and data access, due to improved data entry by flowing information from the application as well as better reporting options.

Stormwater:

● The system should provide a mapping interface to allow them to accurately locate their discharge points.

● The system should allow an applicant to view the location of impaired water bodies in relation to their project.

● The system should allow an applicant to view nearby existing authorizations on a map before allowing a new facility to be created through a submission so users would be more likely to select an existing, correct facility before creating a new one.

● The system should ideally include a reconciliation tool to allow duplicate facilities to be identified and resolved.

● The new system could possibly include integration with the LexisNexis identity validation tool offer through shared services by US EPA to automate the process of confirming a new user's identity and potentially allowing electronic signature approval to be automated.

● Comprehensive reports containing all data captured from the regulated community through OASys and in Water Solution.

● System should support upload of large attachment files.

●Ad hoc reporting capability.

●Ability for applicants to submit pre-meeting requests and 401 requests for certification of federal permits in accordance with the new CWA §401 rule thru an online interface.

●Provide an electronic dashboard (internal to DEC) of tracking §401, §402, and state permit and authorization development milestones from pre-meeting requests, requests of certification/application or authorizations, public notices, authorization/certification due date, billing/invoice, to issuance of certification/permit/authorization. Functionality would include the ability to selectively edit the permit/certification information and to adapt or edit the electronic dashboard for additional fields as needed.
●Allow for ease of updating permittee points-of-contact for both individual and multiple permits actions, perhaps as a picklist with updated information.

●Allow for ease of updating multiple facilities both on an individual or multiple pick list for facility change of ownership.

●Comprehensive reports containing all data captured from the regulated community, as well as information downloaded from ICIS-NPDES. In regards for the Multi-Sector General Permit specifically, be able to integrate with ICIS and be able to track reporting results and ability to do trend analysis across all 29 reporting sectors for both benchmark monitoring and effluent limits.

●Electronic capture of all permit information into OASys and flow of permit data into Water Solution.

●For state permits where EPA's NetDMR is not used, the ability to allow for permittees to submit their DMR data and other reports electronically. Cruise Ship permit is a prime example.

Seafood

● The system should provide a mapping interface to allow the applicant to accurately locate their current or proposed discharge points.

● As is the case with the currently public Seafood Facility GIS resource, the system should allow an applicant to view the location of impaired water bodies and other sensitive areas, and offer the ability to compare these sites in relation to their proposed discharge points.

● Comprehensive reporting functions should be developed to provide easy access to information about facilities, permits, authorizations and compliance data that is compatible with e-Reporting data flows.

● The system should support automatic generation of draft authorization documents.

● The system should provide support for electronic database submission and acceptance of all application and compliance report types that are received by the Section.

● The system should include an automated interface to the agency billing system to eliminate the need for manual reconciliation of data.

● The system should support:

 o The tracking of incomplete applications and violations identified during permit file review,

 o A means to track permitting pending actions where staff is waiting on information to be submitted by the permittee, milestones of the applicants submitting information,

 o A means to accurately track and refer violations to the Compliance section,

 o A means to track permittee compliance assistance/follow-up actions taken by DEC Permitting staff.

Engineering Support Plan Review:

● Merge all content of the current Plan Tracker, SEPTS, and the Access database into one unified system, or at a minimum make all data available for reporting across the systems.

● Online forms to capture all information for 24-hour notifications, conventional septic tank registrations, and engineering plan requests.

● Automated processes to import information captured from online forms into the system of record.

● System-generated notifications for when DOW must respond to the applicant.

● Automatic correspondence emailed to applicants when additional information is still needed or when reports are due.

● Online payment that captures all fees at the time the application is submitted (where possible), thus alleviating the need for manual invoicing and fee collection processes.

● A system to link facility plan reviews with the Water Solution database information for domestic and industrial permittees to ensure Plan Review has been completed and applicant has applied for any required permits.

● A public side that allows them to see the progress of a plan review including viewing documents that were submitted with the application.

Cruise Ship:

● An improved invoicing process that integrates the billing system (CRITTS) without the need for intensive reconciliation efforts and without the possibility of missed permit fees (or outstanding requests for full or partial refunds).

● Online payment that captures all fees at the time the application is submitted (where possible), thus alleviating the need for manual invoicing and fee collection processes.

● The system should provide a consolidated source of information for the entire cruise ship program including information on registrations, authorizations, BMPs, monitoring reports, and DMRs.

● For state permits where EPA's NetDMR is not used, the ability to allow for permittees to submit their DMR data and other reports electronically

● The system should support online reporting for all types of compliance reports and monitoring data submissions. The system should also enable the Section to collect air emissions data electronically.

● The system should enable automated generation of authorizations and other correspondence. This includes the management of boilerplate text that is common to multiple documents.

● The system needs to accommodate contact information for local and international contacts. Including accommodation of foreign addresses and phone numbers. The system should have a default, but allow selection of other contacts when generating correspondence letters.

●The System shall have the option to link / connect to reference materials such as instructions / boiler plate formats / reports etc. (source draw)

●Ad hoc reporting capability.

Inspections:

● The system should include an inspection planning component that can be used to streamline the process of identifying the facilities to be inspected during a given calendar year based on the dates of prior inspections and other factors (currently being added to Water Solution).

● The system should support the tracking of violations identified during inspections and informal enforcement actions that are taken in response to those violations.

● The system should be fully Web enabled and accessible from outside the DEC network environment. Certain data and functions in Water Solution are now available through the new Water Solution Web interface, but other functions are only available through the Water Solution Windows application interface, and all functionality is only available within the DEC network or over VPN.

● The system should provide a consolidated repository of all information needed to support the APDES program, including the data currently managed separately in Water Solution and ICIS-NPDES, as well as applications, permits, enforcement actions, compliance reports, and other documents.

● The system should provide improved access to data and reporting when compared to the existing systems. Reporting capabilities should include support for data analysis and the provision of key program performance metrics.

● A dashboard should be included for inspectors to be able to easily view their schedule of inspections, the timing for any required compliance actions, and other key activities and responsibilities.

● Document generation capabilities should be provided to allow inspection reports and cover letters to be pre-populated with information from the database about the facility, the permit, the inspection, any violations, and other information.

● The system should be able to track logistical information about inspections, e.g. time taken, mode of transportation, and other expense information.

● Although of less importance, the ability to record inspection observations in the field using mobile devices would also potentially be valuable.

● The system should be able to track all types of compliance monitoring activity conducted by DOW staff, including regular and complaint inspections, and compliance assistance visits.

● All data managed in the local system should be automatically reported to ICIS-NPDES with no need for manual data management in the EPA system.

Compliance Data Management:

● The new system must support electronic submission of all types of required program reports and notices of non-compliance.

● Information collected online via OASys should be automatically flowed into Water Solution to alleviate the need for CDS having to manually key in these submissions.

● All data managed in the local system should be automatically reported to ICIS-NPDES with no need for manual data management in the EPA system by CDS.

● The system should provide improved access to data and reporting when compared to the existing systems. Reporting capabilities should include support for data analysis and the provision of key program performance metrics.

● A dashboard should be provided to be able to easily view the schedule of expected reports for each permit as well as the status of the report.

●Ad hoc reporting capability with administrative access

Enforcement:

● The new system should support comprehensive tracking of all types of enforcement actions, penalties, and associated compliance schedules. The system should also be able to record discussions with the facility.

● The system should provide improved access to data and reporting when compared to the existing systems.

● A dashboard should be included for enforcement officers to be able to easily view the status of their enforcement actions and the schedule for any required compliance actions.

● Document generation capabilities should be provided to allow enforcement documents to be created and pre-populated with information from the database about the facility, the permit, the inspection, any violations, and other information.

● All data managed in the local system should be automatically reported to ICIS-NPDES with no need for manual data management in the EPA system.

● The system should include automated notifications to both agency staff and the facility for scheduled compliance submittals or actions.

● The system should provide a consolidated repository of all enforcement related information, including the data currently managed separately in Water Solution and ICIS-NPDES, as well as the enforcement documents currently managed in WPC.
● Security must be provided to ensure that only certain staff can see an enforcement action until it has been issued.

● The system should easy access to the current status of active enforcement actions.

●Ad hoc reporting capability.

Program Support:

● The new system should be able to support two-way integration with the agency CRITTS system. This would allow information about responsible parties and fee schedules to be exchanged automatically, thereby eliminating the potential for mistakes or omissions in data entry.

● The new system should provide enhanced access to data and reporting capabilities, allowing permitting and compliance staff to easily see the status of invoicing and payments.

● The new system should provide better support for the management of the fee schedule across permits types and billing periods.

- The Offeror must include a training plan for all affected DOW staff.

Water Quality Standards and Restoration:

● The system needs should provide spatial mapping tools to allow users to accurately locate points of discharge and monitoring points, as well as the specific receiving water body.

● The system should also be able to track mixing zone polygons when defined by the permit writer.

● The system should provide a comprehensive repository of all permit condition information and provide ready access to that information through reporting.

Water Information Management (WIM):

● The Agile methodology recommends that a Product Owner be actively engaged with the development team on a regular (i.e., daily) basis. This person is empowered to speak on behalf of the business user stakeholders of the system under development, and can therefore make decisions regarding priority of development tasks (i.e., "stories"), how the features under development should work, and whether a feature can be considered to be "done." Engaging a Product Owner for the overall DOW systems portfolio of existing systems and the related development efforts would yield significant benefits to the WIM Team in terms of efficiency as well as completeness of efforts.

● A clearly-articulated and well-communicated roadmap for the systems being developed and supported by the WIM Team would promote sustained attention to larger development objectives. For example, if data quality issues are due to insufficient data capture in an online form, then a roadmap can express the priority of online forms in the context of the larger goal of improving data quality. This would then allow the WIM Team to prioritize online forms ahead of more reactive efforts to address the problems caused by insufficient data capture.

● Stakeholders have shared concerns with their inability to access the data in Water Solution, as well as the accuracy of the data provided by the available reports. These concerns would be best met through dedicated involvement of the Product Owner and a holistic approach to managing data. Issues with data access could be due to many reasons, including lack of sufficient existing reports, lack of understanding of how the existing reports should work, or lack of sufficient functions for users to independently query the data (i.e., "ad hoc" reports). Issues with data accuracy could similarly be due to many reasons, including inaccurate or insufficient data capture, misunderstandings of how the data is managed in Water Solution (e.g., putting the right data into the wrong field), or errors in the queries used to generate the reports. A product owner with sufficient understanding of program metrics should be able to assist the WIM Team in reviewing the entire process of capturing, managing, and presenting data so that the issues are understood and can be addressed as actionable development stories.

● Water Solution is a web application, but it cannot be used outside of the DEC intranet or VPN. Many stakeholders make frequent field visits to facilities where an intranet connection is unavailable. Making certain features available to users who authenticate over the public internet (e.g., reports) would provide field users access to valuable facility information that must otherwise be printed in advance of the field visit.

eReporting Rule:

With the implementation of the NPDES eReporting Rule, including the Phase 2 implementation deadline of December 31, 2023, EPA requires DEC to make changes to information systems and business practices in order to meet the new reporting requirements, including supporting additional data elements, providing electronic reporting capabilities, and enhancing data submissions to the national ICIS-NPDES system.

Other deliverables:

As the project begins and as development proceeds, DEC-DOW will continually update this list of deliverables as the need arises.