

**REGION 2 NPDES  
PROGRAM AND PERMIT QUALITY REVIEW**

**UNITED STATES VIRGIN ISLANDS**

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United States Environmental Protection Agency  
Region 2  
290 Broadway  
New York, New York 10007

## Contents

Executive Summary.....	3
Acronyms .....	5
I. PQR BACKGROUND.....	6
A. 2019 USVI PQR.....	6
B. 2013 USVI PQR.....	7
II. TERRITORY PROGRAM BACKGROUND .....	8
A. Program Structure .....	8
B. Universe and Permit Issuance.....	9
C. Territory-Specific Challenges .....	10
D. Current Territory Initiatives .....	10
III. CORE REVIEW FINDINGS.....	11
A. Basic Facility Information and Permit Application .....	11
1. Facility Information.....	11
2. Permit Application Requirements.....	11
B. Developing Effluent Limitations.....	13
1. Technology-based Effluent Limitations.....	13
2. Reasonable Potential and Water Quality-Based Effluent Limitations .....	15
3. Final Effluent Limitations .....	18
4. Documentation of Effluent Limitations Development .....	20
C. Monitoring and Reporting Requirements .....	21
D. Standard and Special Conditions .....	23
E. Administrative Process .....	24
F. Administrative Record and Fact Sheet.....	26
IV. NATIONAL TOPIC AREA FINDINGS .....	28
A. Permit Controls for Nutrients in Non-TMDL Waters.....	28
B. POTW NPDES Permits with Food Processor Contributions .....	29
C. Small Municipal Separate Storm Sewer System (MS4) Permit Requirements .....	29
V. REGIONAL TOPIC AREA FINDINGS.....	30
A. Hurricane Recovery .....	30
B. Condominiums, Hotels, and Apartments General Permit.....	32
VI. 2013 USVI PQR ACTION ITEMS REVIEW .....	34
Table 1. 2013 USVI PQR – Essential Action Items Status Update.....	34
Table 2. 2013 USVI PQR – Recommended Action Items Status Update .....	38
VII. 2019 USVI PQR ACTION ITEMS .....	42
Table 3. 2019 USVI PQR – Essential Action Items .....	42
Table 4. 2019 USVI PQR – Recommended Action Items.....	44
VIII. 2019 USVI PQR FILES REVIEWED.....	45

## Executive Summary

EPA Region 2's National Pollutant Discharge Elimination System (NPDES) Permit and Program Quality Review (PQR) for the United States Virgin Islands (USVI) found that the permits in the territory were generally of good quality and adhered to federal regulations. The PQR identified areas for improvement. The majority of these improvement areas focus on the development of a complete and robust fact sheet and administrative record to ensure that decisions made during the permit development process are documented and justified.

The PQR examined nine individual permits issued by the USVI Department of Planning and Natural Resources (DPNR) and one pre-draft general permit. As part of the review, EPA reviewed the draft permit and fact sheet, final permit, administrative records, and other permit development documents. In addition to the core review, the PQR also focused on several national and regional priority areas:

- Permit Controls for Nutrients in Non-TMDL Waters,
- Publicly-Owned Treatment Works Permits with Food Processor Contributions,
- Small Municipal Separate Storm Sewer System Permit Requirements,
- Hurricane Recovery, and
- Condominium, Hotel, and Apartment General Permit.

The PQR recognizes the many territory- and region-specific challenges faced by the USVI, including limited staff, limited funding, and ongoing hurricane recovery efforts. The USVI is working diligently to build sustainability and efficiency in the permitting program through the introduction of permit fees; development of the Condominium, Hotel and Apartment General Permit; and working diligently on continued recovery from the devastation caused by Hurricanes Irma and Maria in 2017, part of which, electronic records, helps to improve the permit program in the long-term.

Although the permits reviewed generally conformed to the applicable territory and federal requirements, EPA identified several concerns, including the documentation of the reasonable potential analysis and the basis for other permit development decisions. As many of the deficiencies seem to stem from the fact sheet and administrative record, EPA believes that these will not be onerous to the USVI DPNR to resolve.

Based on this PQR, EPA is recommending improvements to USVI DPNR documentation in the fact sheet and administrative record, updates to reasonable potential practices/tools, and updates to Territory standard operating procedures. EPA and the USVI DPNR are committed to working together to address these concerns, strengthen permit language, improve the documentation of permit development, and establish a stronger permitting program.

USVI DPNR provided comments on a draft of this report, dated December 7, 2019, to EPA on September 13 and 20, 2021. USVI DPNR's comments were generally updates to the draft report to reflect changes that have been made since the onsite in review in 2019. EPA revised the

report to respond to DPNR's comments and updates and to ensure accuracy. Generally, the updates are provided throughout the report with a footnote.

## Acronyms

<b>Acronym</b>	<b>Definition</b>
303(d)	Clean Water Act §303(d) - Impaired Waters and Total Maximum Daily Loads
305(b)	Clean Water Act §305(b) - Water Quality Reporting
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BOD	Biochemical Oxygen Demand
BPJ	Best Professional Judgement
CBOD	Carbonaceous Biochemical Oxygen Demand
CFR	Code of Federal Regulations
CORMIX	Cornell Mixing Zone Expert System
CWA	Clean Water Act
DEP	US Virgin Islands Department of Environmental Protection
DMR	Discharge Monitoring Report
DPNR	US Virgin Islands Department of Planning and Natural Resources
ECHO	Enforcement and Compliance History Online
ELG	Effluent Limitation Guidelines
EPA	US Environmental Protection Agency
FEMA	Federal Emergency Management Agency
ICIS	Integrated Compliance Information System
MS4	Municipal Separate Storm Sewer System
MSGP	Multi Sector General Permit
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
POTW	Publicly owned Treatment Works
PQR	Program and Permit Quality Review
SOP	Standard Operating Procedures
SWMP	Stormwater Management Program
TBEL	Technology-based Effluent Limitation
TMDL	Total Maximum Daily Load
TPDES	Territorial Pollutant Discharge Elimination System
TSS	Total Suspended Solids
USVI	United States Virgin Islands
VICHAGP	Virgin Islands Condominium, Hotel and Apartments General Permit
VIWMA	Virgin Islands Waste Management Authority
WET	Whole Effluent Toxicity
WQBEL	Water Quality-based Effluent Limitation
WQS	Water Quality Standards

## I. PQR BACKGROUND

### A. 2019 USVI PQR

National Pollutant Discharge Elimination System (NPDES) Program and Permit Quality Reviews (PQRs) are an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations. Through this review mechanism, the U.S. Environmental Protection Agency (EPA) promotes national consistency, highlights successes in the implementation of the NPDES program, and identifies opportunities for improvement in the development of NPDES permits.

EPA conducted a review of the United States Virgin Islands (USVI) Territorial Pollutant Discharge Elimination System (TPDES) permitting program, which included a kick-off meeting and on-site file review at the USVI Department of Planning and Natural Resources (DPNR) offices in Frederiksted, St. Croix on July 8-9, 2019.

The 2019 USVI PQR consisted of three components: core permit reviews, national topic area reviews, and regional topic area reviews. The reviews focused on core permit quality and included a review of the permit application, permit, fact sheet, and the correspondence, reports, or other documents that provide the basis for the development of the permit conditions.

The core permit reviews involved the evaluation of selected permits and supporting materials using basic NPDES program criteria. Reviewers completed the core review by examining selected permits and supporting documentation, assessing these materials using standard PQR tools, and talking with USVI DPNR staff and management regarding the permit development process. The core review focused on the Central Tenets of the NPDES Permitting<sup>1</sup> to evaluate the USVI TPDES program. Core topic area permit reviews are conducted to evaluate similar issues or types of permits in all states and territories. In addition, discussions between EPA and USVI DPNR staff addressed a range of topics including program status, the permitting process, responsibilities, organization, and staffing.

The national topic area reviews are conducted to evaluate specific issues or types of permits in all states and territories. The national topic areas reviewed as part of the 2019 USVI PQR were nutrients in receiving waters without a total maximum daily load (TMDL), publicly owned treatment works (POTWs) permits with food processor contributions, and the small municipal separate storm sewer system (MS4) general permit.

The regional topic areas target regionally specific permit types or aspects of permits. The regional topic areas selected by EPA Region 2 for the 2019 USVI PQR were hurricane recovery efforts and the pre-draft Condominium, Hotel and Apartment General Permit.

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<sup>1</sup> Available online at <https://www.epa.gov/npdes/central-tenets-npdes-permitting-program>

It is infeasible to review all the TPDES permits issued by USVI DPNR. Instead, a small selection of permits was reviewed to provide a snapshot view of the USVI TPDES program. A total of nine permits were reviewed as part of the 2019 PQR. Permits, listed in Section VIII, were selected for review based on the issuance date and the review categories that they fulfilled, and were all issued in 2015 or later.

Based on the review, EPA has identified action items to improve the USVI TPDES permit program. The proposed action items are identified in Section VII of this report and are divided into two categories to identify the priority that should be placed on each item.

- **Essential.** Essential action items address noncompliance with respect to a federal regulation, which EPA has cited. USVI DPNR must address these items to be in compliance with applicable federal regulations.
- **Recommended.** Recommended action items are recommendations to increase the effectiveness of the USVI DPNR's permitting program.

The essential action items are used to augment the existing list of PQR follow-up actions currently tracked by EPA Headquarters on an annual basis and will be reviewed during subsequent PQRs.

## B. 2013 USVI PQR

The previous USVI PQR was conducted in 2013<sup>2</sup>. As part of the 2019 USVI PQR, EPA requested updates from USVI DPNR regarding progress on the action items identified in the 2013 PQR. These updates are summarized in Section VI of this report.

Of the 17 essential action items<sup>3</sup> identified in the 2013 PQR, 16 have been resolved. The remaining unresolved action item is in the process of being addressed.

USVI DPNR has resolved 7 of the 12 recommended action<sup>4</sup> items identified in the 2013 PQR. The unresolved recommended action items are either in the process of being addressed or represent actions that are long-term or low priority.

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<sup>2</sup> The resulting report is available at:

[https://www.epa.gov/sites/production/files/2015-09/documents/pqr\\_usvi\\_report.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/pqr_usvi_report.pdf).

<sup>3</sup> In the 2013 PQR, these action items were known as category 1 action items and identified deficiencies or noncompliance with respect to federal regulations. EPA is now referring to these as essential action items.

<sup>4</sup> In the 2013 PQR, these action items were known as either category 2 or category 3 action items and identified recommendations and best practices. EPA has consolidated these items into a single category referred to as recommended action items.

## II. TERRITORY PROGRAM BACKGROUND

### A. Program Structure

The USVI DPNR, Division of Environmental Protection (DEP) manages the TPDES program. DEP is organized into multiple groups that are responsible for specific program areas such as solid waste, air quality management, air pollution control, water quality management, and water pollution control. The water pollution control group within DEP is responsible for the TPDES program. USVI DPNR has one office on St. Croix, one on St. Thomas, and a field office on St. John. The St. Thomas office was housed in Cyril D. King Airport which was heavily damaged during Hurricanes Irma and Maria in September 2017. Post-hurricane, the St. Thomas office has been temporarily housed at Turnbull Library.<sup>5</sup> Plans for a new permanent location are in progress. The St. John office has also been closed since the 2017 hurricanes. Plans are being made to reopen it in the future. The St. Croix office was largely undamaged and has been operating as normal since shortly after the hurricanes.

As of June 2019, the USVI has one permit writer in the St. Croix office and one in the St. Thomas office.<sup>6</sup> Typically, the permit writer on St. Thomas handles the permits for facilities located on St. Thomas and St. John, while the permit writer on St. Croix is responsible for St. Croix facilities. However, depending on workload, staffing and expertise, a permit writer may administer a permit for a facility located on a different island. The responsibilities of the permit writer for each geographic area include drafting municipal and industrial TPDES permits, conducting site visits, responding to comments, and administrative tasks. USVI DPNR does not have any management or staff entirely committed to the TPDES permitting program – all TPDES staff also have responsibilities in other programs such as enforcement or water quality monitoring. The USVI DPNR faces unique challenges due to the limited number of staff and the broad array of programs/tasks for which they are responsible.

Effective January 30, 1993, USVI DPNR and EPA Region 2 entered into the Virgin Islands Corrective Action Plan (VICAP) in order for USVI DPNR to retain authority for the TPDES program. This agreement was signed by the Commissioner of USVI DPNR and the Regional Administrator of EPA Region 2 on January 22, 1993 and outlined several critical items that were necessary for any authorized NPDES program. Section IV of the VICAP addressed Administrative Measures and Resources. Specifically, Corrective Action Item 3 of that section required that DPNR “agree to hire and retain additional staff of professionals/employees (i.e., engineers, scientists, clerical, etc.) ... in order to properly and effectively administer the TPDES program...” As the limited number of USVI DPNR staff continues to pose a challenge, EPA recommends expanding the number of staff working on the TPDES program and limiting the number of programs the existing TPDES staff are responsible for.

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<sup>5</sup> As of September 2021, USVI DPNR offices are no longer in the library but in a longer-term office location.

<sup>6</sup> As of September 2021, USVI DPNR has only 1 permit writer who is located on St. Thomas and writes all USVI TPDES permits. An additional 1 or 2 staff people are being trained as permit writers.



The conditions of a permit are developed solely by the permit writer. In addition to having a science or engineering background, training for USVI permit writers includes attending EPA's five-day NPDES Permit Writers' Course and reviewing EPA's 2010 NPDES Permit Writers' Manual<sup>7</sup> and the USVI DPNR draft Standards of Procedure (SOPs). While the SOPs have not been officially finalized since 2010, they are regularly updated and used in draft to guide staff. The USVI DPNR uses a template for permit and fact sheets that was developed in partnership with EPA shortly after completion of the 2013 PQR. In addition, the USVI permit writers use in-house data systems regarding ambient and beach data, 303(d) and 305(b) reports, TMDL status, and benthic habitat maps to assist with permit development.

USVI DPNR provides the permittee and EPA Region 2 with a pre-public notice draft of the permit and comments are generally resolved during the period before public notice. When the public notice draft of the permit is ready, the permittee is responsible for publishing the notice in the local newspaper and the files are available at the local USVI DPNR office for the public to review.

The TPDES administrative records and enforcement records are maintained as one dossier in the USVI DPNR office on the same island as the facility, although this is not as consistent or clear post-hurricane as many of the records in the St. Thomas office were heavily damaged or lost entirely. Some TPDES files (e.g., draft permit, fact sheets, correspondence) are maintained electronically. Correspondence is maintained both in hard copy and electronically, as are compliance records. Efforts are being made to digitize all records. Significant records of high importance are also maintained in hard copy in the permit files.

### **B. Universe and Permit Issuance**

As of June 2019, USVI DPNR is responsible for administering approximately 88 individual permits, including 8 major permits (2 POTWs and 6 non-POTWs). USVI DPNR also administers 3 general permits:

- USVI Construction General Permit (VIGSA0000) for discharges of stormwater from sites with construction activity totaling 1 acre or more. As of June 2019, 60 permittees had coverage under this permit.
- USVI Multi-Sector General Permit (VIR050000) for discharges of stormwater from sites with industrial activity from one of 20 different industrial sectors. As of June 2019, 8 permittees had coverage under this permit.
- USVI Pesticides General Permit (VIPGP0000) for discharges of pesticides in the USVI Territory. As of June 2019, 2 permittees had coverage under this permit.

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<sup>7</sup> Available online at <http://cfpub.epa.gov/npdes/writermanual.cfm>.

Notices of Intent (NOIs) for general permits are submitted by hard copy or electronically via email and tracked through ICIS. The USVI TPDES permits are not available online but Discharge Monitoring Report (DMR) data and other permit information is available through the Integrated Compliance Information System (ICIS) or Environmental Compliance History Online (ECHO).

The significant industries in the USVI are steam electric generation (2 public and 1 private facilities); oil refinery (1 facility); rum distillery (2 facilities); quarries (3 facilities); multiple cargo ports and marine transportation centers; and multiple marine boat and repair yards.

As of September 2021, USVI DPNR had 32 backlogged<sup>8</sup> individual permits meaning that 60.5% of individual permits in the TPDES program are current.

In the USVI, Underground Injection Control permits and the Vessels General Permit are issued and administered by EPA.

### **C. Territory-Specific Challenges**

The challenges facing USVI DPNR are common to many states and territories. Limited staffing levels have required USVI DPNR to look for new efficiencies in the TPDES program. The TPDES permit development process is time-intensive and onerous, and staff are juggling permit development responsibilities and priorities with the other programs/tasks that are assigned to them. To add further challenges, USVI DPNR and the entire population are still recovering from the damages caused by Hurricanes Irma and Maria in 2017.

### **D. Current Territory Initiatives**

USVI DPNR has a variety of initiatives underway to continue to improve the efficiency and effectiveness of the TPDES permitting program. The first initiative is to develop and issue a general permit for discharges from hotels, apartments, and condominiums. This general permit has the potential to replace approximately 45-50% of the TPDES individual permits, significantly reducing the level of effort and time required to develop, reissue, and track these permits.

In addition to the general permit, USVI DPNR is in the process of requiring payment of TPDES permit fees. The goal of introducing permit fees is to create a self-funded (or partially self-funded) program to ensure its viability in the future.<sup>9</sup>

The territory is also beginning to look into options for cloud/online storage for permit and administrative files. Following the loss of the St. Thomas office and permit files, ensuring that files are safely stored, accessible, and transferable will be instrumental in recovery efforts in the event of another destructive storm.<sup>10</sup>

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<sup>8</sup> Permits administratively continued beyond their expiration date for 180 days or more are considered backlogged.

<sup>9</sup> On December 20, 2019, amendments to VIRR Title 12, Chapter 7, Subchapter 184 were finalized which require an application fee when applying for a TPDES permit. The rule became effective on September 1, 2020.

<sup>10</sup> As of September 2021, USVI DPNR is beginning to use SharePoint to facilitate sharing files between staff and may expand the usage to include long-term file storage in the future.

### III. CORE REVIEW FINDINGS

#### A. Basic Facility Information and Permit Application

##### 1. Facility Information

###### *Background*

Basic facility information is necessary to properly establish permit conditions. For example, information regarding facility type, location, processes, and other factors is required by NPDES permit application regulations (40 CFR 122.21). This information is essential for developing technically sound, complete, clear, and enforceable permits. Similarly, fact sheets must include a description of the type of facility or activity subject to the draft permit.

###### *Program Strengths*

The fact sheets reviewed for the 2019 PQR were all developed using the USVI DPNR fact sheet template and contain a clear description of the subject facility, the wastewater streams, and treatment processes. The fact sheet often provides helpful background information regarding the facility's history and operations and a clear description of the receiving water location, classifications, and the locations of the facility's outfalls.

Permits consistently included the appropriate issuance, effective, and expiration dates, as well as the deadline for submitting a renewal application. Permits were also signed by the appropriate officials. The authorization-to-discharge information (from where, to where, by whom) was also clearly provided on the first page of the permits.

###### *Areas for Improvement*

There are no areas for improvement regarding Facility Information. However, EPA Region 2 advises USVI DPNR to continue to use, update, and implement the permit and fact sheet templates to ensure facility information is clearly provided to EPA, the permittee, and the public.

###### *Action Items*

There are no action items regarding Facility Information.

##### 2. Permit Application Requirements

###### *Background and Process*

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for permittees seeking NPDES permits. Although federal forms are available, authorized states and territories are also permitted to use their own forms provided they include all information required by the federal regulations. This portion of the review assessed whether appropriate, complete, and timely application information was received by the territory and used in permit development.

USVI DPNR requires that permittees submit NPDES applications using EPA forms. Typically, applicants are asked to submit the forms both in hard copy and electronically. USVI DPNR is currently planning its transition to the new application forms required by the NPDES Applications and Program Updates Rule, which was promulgated February 12, 2019, by the June 12, 2020 deadline.<sup>11</sup>

USVI DPNR permit processing procedures occur entirely within DEP. The applications are reviewed for completeness by the assigned permit writer and are processed in the order in which they were received (unless deemed a priority by USVI DPNR or EPA). Generally, applications for minor permits are reviewed within a few days.<sup>12</sup> If the permit writer expects the review to take longer, the permittee will be notified by phone or email.

Application completeness reviews are done using a checklist. The most common reasons for an application to be deemed incomplete are administrative deficiencies (e.g., missing signatures). Typically, requests to resolve incomplete applications for minor permits are handled informally and collaboratively - especially when it is a technical deficiency (e.g., problems with flow diagrams). Requests to resolve deficiencies with applications for major permits are handled formally through letters. When an application is deemed complete, the permittee is notified by mail or email. The USVI DPNR also uses a template for the completeness letter.

To ensure permittees submit applications in a timely manner, the TPDES program manager downloads a list of permits approximately once a month to assess which will be expiring soon. The permit writer then sends a reminder to the permittee about the upcoming application due date. Typically, USVI permittees submit applications on time – especially for major permits.

### *Program Strengths*

Permit applications were submitted using the correct forms and appeared to have all been submitted 180 days prior to the expiration of the current permit. The administrative record contained the application (including attachments, diagrams, etc.) and documentation that USVI DPNR had reviewed the application and determined it to be complete. Additionally, the applications seemed to include all the required analytical data.

### *Areas for Improvement*

There are no areas for improvement regarding Permit Application Requirements.

### *Action Items*

There are no action items regarding Permit Application Requirements.

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<sup>11</sup> As of September 2020, DPNR was not requiring applicants to use the new forms.

<sup>12</sup> As of September 2020, applications are not reviewed as promptly due to staffing constraints.

## B. Developing Effluent Limitations

### 1. *Technology-based Effluent Limitations*

NPDES regulations at 40 CFR 125.3(a) require that permitting authorities develop technology-based requirements where applicable. Permits, fact sheets, and other supporting documentation for POTWs and non-POTWs were reviewed to assess whether technology-based effluent limitations (TBELs) represent the minimum level of control that must be imposed in a permit.

#### *TBELs for POTWs*

##### *Background and Process*

POTWs must meet secondary or equivalent to secondary standards, including numeric limits for biochemical oxygen demand/carbonaceous biochemical oxygen demand (BOD/CBOD), total suspended solids (TSS), pH, and percent pollutant removal, or an authorized alternative, in accordance with regulations at 40 CFR Part 133. A total of three POTW permits were reviewed as part of the PQR.

Most often, the USVI implements secondary treatment standards as are described in 40 CFR 133.102 with numeric limits for BOD, TSS, pH, and percent pollutant removal. When treatment equivalent to secondary is appropriate for a facility, the USVI includes a detailed description of the treatment process and the basis for the decision to permit the facility for “equivalent to secondary treatment” in the fact sheet or administrative record.

##### *Program Strengths*

EPA found that the appropriate numeric secondary treatment standards for BOD/CBOD, TSS, pH, and percent pollutant removal were established in POTW permits. The limits were expressed in an appropriate unit of measure (concentration) and included both short- and long-term (7-day and 30-day average) limits. The fact sheet provided a detailed description of the secondary treatment process and clearly identified which secondary treatment standards were established in the permit (BOD/CBOD, equivalent to secondary, etc.) and the basis for that decision.

##### *Areas for Improvement*

In one POTW permit, there was no specific provision for influent monitoring and reporting in order to calculate percent pollutant removal. As this is included in the template, it was likely inadvertently deleted. Additionally, the influent monitoring location was clearly identified in a footnote, which implies that the failure to explicitly require monitoring and reporting was a typographical error.

##### *Action Items*

There are no action items regarding TBELs for POTWs.

### *TBELs for Non-POTW Dischargers*

#### *Background and Process*

Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources, and consistent with New Source Performance Standards (NSPS) for new sources. Where federal effluent limitations guidelines (ELGs) have been developed for a category of dischargers, the TBELs in a permit must be based on the application of these guidelines. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case basis using best professional judgement (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d). A total of six non-POTW permits were reviewed for this component of the PQR.

Regarding ELG applicability, the USVI permit writers conduct the facility categorization and determine the appropriate performance level. Generally, case-by-case TBELs are established based on the permit writer's professional expertise and knowledge about the facility and the facility's wastestream, the existing effluent quality, and receiving water quality and effluent data provided in the application.

#### *Program Strengths*

When the facility is subject to an ELG, the fact sheet clearly provides a description of the facility, wastestream and its applicability to the ELG. The record documented facility categorization and performance level (BCT, BPT, NSPS). Permits established all appropriate TBELs from the ELG, in the appropriate unit of measure, and as both maximum daily and monthly average limits.

#### *Areas for Improvement*

When the facility was subject to an ELG, the record did not consistently include the calculations used to develop the ELG-based TBELs.

When the facility was not subject to a federally promulgated ELG, the fact sheets did not clearly and consistently provide a basis for the effluent limitations. Generally, the limits are based on existing effluent quality but that is not always clear in the fact sheet. It is also unclear if all conventional, nonconventional, and toxic pollutants in the discharge have an associated limit based on BPJ.

*Action Items*

## Essential

- USVI DPNR must ensure that the calculations used to develop ELG-based TBELs are included in the fact sheets (40 CFR 124.56).
- USVI DPNR must provide a basis for case-by-case TBELs (i.e., when a federally promulgated ELG does not apply) in the fact sheets (40 CFR 124.56).

**2. Reasonable Potential and Water Quality-Based Effluent Limitations***Background*

The NPDES regulations at 40 CFR 122.44(d) require permits to include any requirements in addition to or more stringent than technology-based requirements where necessary to achieve water quality standards, including narrative criteria for water quality. To establish these water quality-based effluent limits (WQBELs), the permitting authority must evaluate whether any pollutants or pollutant parameters cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

The USVI PQR assessed the processes employed to implement these requirements. Specifically, the PQR reviewed permits, fact sheets, and other documents in the administrative record to evaluate how permit writers:

- determined the appropriate water quality standards applicable to receiving waters,
- evaluated and characterized the effluent and receiving water including identifying pollutants of concern,
- determined critical conditions,
- incorporated information on ambient pollutant concentrations,
- assessed any dilution considerations,
- determined whether limits were necessary for pollutants on concern and, where necessary,
- calculated such limits or other permit conditions.

For impaired waters, the PQR also assessed whether and how permit writers consulted and developed limits consistent with the assumptions of applicable EPA-approved TMDLs.

### *Process for Assessing Reasonable Potential*

In the USVI TPDES program, permit writers are responsible for conducting the reasonable potential analysis. In approximately 2012/2013, EPA developed a USVI Reasonable Potential Tool that calculates the reasonable potential for a broad variety of pollutants at each outfall based on the DMR data available in ICIS. While the Tool needs updating, USVI DPNR uses it to evaluate reasonable potential for major facilities and facilities that have ocean discharges. The Tool is not used for discharges to land application as the potential to exceed water-quality standards is so low, this essentially amounts to a no-data reasonable potential evaluation based on the outfall's distance from the receiving water. EPA is currently developing a simplified, updated Reasonable Potential Tool for the USVI that will provide permit writers with a visual representation of the 95<sup>th</sup> percentile of the effluent data in comparison to the existing effluent data available in ICIS.

Pollutants of concern are not specifically identified by USVI DPNR. Instead, all pollutants identified in the application and the DMR are evaluated for reasonable potential. Typically, a few years of DMR data is used to complete the evaluation. USVI permit writers also look at raw ambient data in the National Water Quality Monitoring Council Water Quality Portal<sup>13</sup> in relation to water quality impairments and developing limitations for pollutants that are contributing to an impairment.

The USVI DPNR will conduct reasonable potential analysis on the data that are available and aims for 12 data points to determine reasonable potential through monitoring in the next permit cycle. As a general practice, USVI DPNR does not remove data points prior to conducting the analysis and therefore, does not have a policy guiding data point removal.

Unless the Tool is used, the reasonable potential analysis conducted during the permit development process does not consistently follow the process and equations outlined in EPA's Technical Support Document for Water-Quality Based Toxics Control (TSD).<sup>14</sup> Often, USVI permit writers compare the existing effluent data to the applicable water quality standard and make a determination based on their professional expertise, rather than applying the procedures in the TSD.

The fact sheet, required for all major permits, includes a discussion of the reasonable potential analysis. The Tool information and data used to conduct the reasonable potential analysis are included in the administrative record, often electronically.

There are approximately seven finalized TMDLs in the USVI – some apply to one receiving water while other apply to entire harbors. There are also approximately six additional TMDLs

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<sup>13</sup> Available at <https://www.waterqualitydata.us/portal/>

<sup>14</sup> Available online at <https://www3.epa.gov/npdes/pubs/owm0264.pdf>



currently in draft. Prior to TMDL finalization, impaired receiving waters are still considered during permit development. Impairments in the USVI are generally turbidity and enterococcus, with a few waterbodies impaired for phosphorous or pH. The permit writers review the facility wastestreams for pollutants contributing to the impairment and ensure that the permit contains sufficient monitoring and reporting provisions to inform future TMDL development. When a TMDL is finalized, the permit writers also review the permits that discharge to the affected waterbody and issue modified permits, if necessary. The USVI does not have a specific process for tracking TMDL implementation in permits. Implementation tracking is primarily done reactively through permit issuance and enforcement processes.

### *Process for Developing WQBELs*

USVI permit writers are responsible for developing WQBELs in addition to evaluating reasonable potential. In the USVI, WQBELs are established as the standards applied at end of pipe so no calculations or tools are necessary.

WQBELs are generally applied as end-of-pipe limits so the need for water quality modeling is rare. When water quality modeling is required, permit writers use CORMIX to complete the modeling and the results are included in the administrative record electronically. As it happens rarely, USVI DPNR does not have specific guidance or policies outlining water quality modeling.

The USVI mixing zone policy is outlined clearly in the USVI Water Quality Standards (WQS) (12 VIRR Chapter 7).<sup>15</sup> The USVI WQS also establish a thermal policy that includes a specific mixing zone calculation for thermal discharges.

The USVI does not currently have any permits that contain a variance to water quality standards.

### *Program Strengths*

#### Reasonable Potential

The USVI consistently considered reasonable potential when developing water quality-based effluent limitations.

#### WQBEL Development

When reasonable potential was found, permits consistently included WQBELs for those parameters. The effluent limitations were consistently expressed in the appropriate unit of measure, contained both short- and long-term (e.g., instantaneous, maximum daily) limits, and the fact sheet or administrative record consistently provided the justification for the limit. In general, USVI DPNR includes WQBELs as standard-end-of-pipe limits. Where there is justification for and data supporting a mixing zone, DPNR will consider and in some cases grant limits that reflect mixing.

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<sup>15</sup> Available online at <https://www.epa.gov/sites/production/files/2014-12/documents/viwqs.pdf>

*Areas for Improvement*

## Reasonable Potential

The USVI should partner with EPA Region 2 to develop a new or updated USVI Reasonable Potential Tool, possibly using new tools like Qlik to provide a visual representation of the 95<sup>th</sup> and 99<sup>th</sup> percentile of the existing effluent quality compared to the WQS.

## WQBEL Development

There are no areas for improvement regarding WQBEL development.

*Action Items*

## Recommended

- USVI DPNR should include the reasonable potential analyses in the administrative record, either through use of the Reasonable Potential Tool or written documentation of water quality-based permit decisions.
- USVI DPNR should partner with EPA Region 2 to update or revise the US Virgin Islands Reasonable Potential Tool.

**3. Final Effluent Limitations***Background and Process*

Permits must include all applicable statutory and regulatory requirements, including technology and water quality standards, and must include effluent limitations that ensure that all applicable CWA standards are met. The permitting authority must identify the most stringent effluent limitations and establish them as the final effluent limitations in the permit. In addition, for reissued permits, if any of the limitations are less stringent than limitations on the same pollutant in the previous NPDES permit, the permit writer must conduct an anti-backsliding analysis, and if necessary, revise the limitations accordingly. In addition, for new or increased discharges, the permitting authority should conduct an antidegradation review, to ensure the permit is written to maintain the existing quality of surface waters, or if appropriate, allow for some degradation. The water quality standards regulations at 40 CFR 131.12 outline the common elements of the antidegradation review process.

The USVI permit writers review each permit once the limits have been developed regarding antidegradation. Water body impairments and water quality data are reviewed to determine if degradation is possible with the draft effluent limits. The template fact sheet and permit language are customized to reflect the specific antidegradation review.

Draft permits are also reviewed for backsliding and the fact sheet and permit language are customized accordingly. If no fact sheet was developed, the backsliding review is documented with a note to the file. In the past, backsliding has occasionally been a concern when an outfall was moved from discharging directly to the receiving water to discharging to land application instead. In this instance, WQS would no longer be applied end-of-pipe and would potentially cause backsliding.

### *Program Strengths*

The USVI procedure for developing TBELs and WQBELs is appropriate; however, a more robust discussion of the process for developing each effluent limitation should be included in the fact sheet or administrative record. The fact sheet also consistently and clearly identified whether each effluent limitation is a WQBEL or a TBEL.

The administrative record also consistently included a robust discussion of the antidegradation and anti-backsliding requirements, both in general and as they specifically relate to that permit.

The effluent limitations and other permit conditions described in the fact sheet are all correctly reflected in the permit, as well.

### *Areas for Improvement*

The fact sheets do not specifically state if both the TBEL and WQBEL for each pollutant were considered and the most stringent limit established in the permit. Additionally, the fact sheets often state that an effluent limit was "carried over" from the previous permit. This is not sufficient rationale for an effluent limitation. The fact sheet or record should state what the underlying regulatory basis is for establishing the limit.

### *Action Items*

#### Essential

- USVI DPNR must identify both the TBEL and WQBEL in the record and demonstrate that the most stringent limit was established in the permit (40 CFR 124.8 and 124.56)
- USVI DPNR must ensure that fact sheets include the basis for the permit limit including references to applicable statutory or regulatory provisions (i.e., not "carried over") (40 CFR 124.8).

#### ***4. Documentation of Effluent Limitations Development***

##### *Background and Process*

Permit records for POTWs and industrial facilities should contain comprehensive documentation of the development of all effluent limitations. Technology-based effluent limits should include an assessment of applicable standards, data use, and actual calculations used to develop effluent limitations. The procedures implemented for determining the need for WQBELs and the procedure explaining the basis for establishing, or for not establishing, WQBELs should be clear and straightforward. The permit writers should adequately document changes from the previous permit, ensure draft and final limitations match (unless the basis for change is documented), and include all supporting documentation in the permit file. The permit writer should sufficiently document determinations regarding anti-backsliding and antidegradation requirements.

The USVI DPNR documents the determination of appropriate TBELS for both POTWs and non-POTWs in the fact sheet or in the administrative record. Fact sheets include the facility and treatment process description, the expected wastestreams and pollutants in the discharge, and identification of the applicable treatment standards.

The USVI DPNR also documents the reasonable potential analysis and WQBEL development in the fact sheet or in the administrative record. The fact sheets for all permits include the identification of the applicable water quality standards, consideration of the receiving water impairment status and applicable TMDLs, the reasonable potential analysis, and the consideration of anti-backsliding and antidegradation. For major permits, DPNR also includes the Reasonable Potential Analysis tool spreadsheet results.

##### *Program Strengths*

The fact sheets and administrative record provide a good summary of the basis for the development of TBELS and WQBELs.

The permit and fact sheets consistently and clearly identified the receiving water, the water body classification, and the designated uses. The fact sheets and administrative record also include a description of the 303(d) status of the receiving water.

##### *Areas for Improvement*

The details regarding the reasonable potential analysis or the calculations used to develop TBELS are not consistently or adequately described in the fact sheet or administrative record, particularly for minor permits. Additionally, the record does not consistently include a comparison of the TBELS and the WQBELs and a demonstration that the most stringent effluent limit was established in the permit.

The fact sheet and administrative record do not consistently include a description of how pollutants of concern were identified. Nevertheless, as mentioned, the USVI evaluates all pollutants identified in the application and DMRs for reasonable potential.

The fact sheet and record also do not include a specific description of the reasonable potential analysis (except for whole effluent toxicity) and a specific description of the calculations used to develop the WQBEL.

*Action Items*

Essential

- USVI DPNR must include documentation of the reasonable potential analysis and its results in the fact sheet for all permits (both major and minor) (40 CFR 124.56).
- USVI DPNR must include documentation of the development of TBELS, including the calculations and assumptions used in that development, in the fact sheet (40 CFR 124.56).
- USVI DPNR must include, in the fact sheet, a comparison of the TBEL and the WQBEL when both effluent limitations are calculated (40 CFR 124.56).
- USVI DPNR must ensure that fact sheets include the basis for the permit limit including references to applicable statutory or regulatory provisions (40 CFR 124.8).
- USVI DPNR must include, in the administrative record or fact sheet, a description of how pollutants of concern are identified (40 CFR 124.8).
- USVI DPNR must include the calculations used to develop WQBELs in the fact sheet (40 CFR 124.56).

**C. Monitoring and Reporting Requirements**

*Background and Process*

NPDES regulations at 40 CFR 122.41(j) require permittees to periodically evaluate compliance with the effluent limitations established in their permits and provide the results to the permitting authority. Monitoring and reporting conditions require the permittee to conduct routine or episodic self-monitoring of permitted discharges and where applicable, internal processes, and report the analytical results to the permitting authority with information necessary to evaluate discharge characteristics and compliance status.

Specifically, 40 CFR 122.44(i) requires NPDES permits to establish, at minimum, annual reporting of monitoring for all limited parameters sufficient to ensure compliance with permit limitations, including specific requirements for the types of information to be provided and the methods for collection and analysis of such samples. In addition, 40 CFR 122.48 requires that permits specify the type, intervals, and frequency of monitoring sufficient to yield data which are representative of the monitored activity. The regulations at 40 CFR 122.44(i) also require reporting of monitoring results with a frequency dependent on the nature and effect of the discharge. 40 CFR Part 127 requires NPDES-regulated entities to submit certain data electronically, including discharge monitoring reports and various program-specific reports, as applicable.

NPDES permits should specify appropriate monitoring locations to ensure compliance with the permit limitations and provide the necessary data to determine the effects of an effluent on the receiving water. A complete fact sheet will include a description and justification for all monitoring locations required by the permit. States and territories may have policy or guidance documents to support determining appropriate monitoring frequencies; the fact sheet should include an explicit discussion providing the basis for establishing monitoring frequencies, including identification of the specific territory policy or internal guidance referenced. Permits must also specify the sample collection method for all parameters required to be monitored in the permit. The fact sheet should present the rationale for requiring grab or composite samples and discuss the basis of a permit requirement mandating use of a sufficiently sensitive Part 136 analytical method.

The USVI DPNR permit writers develop monitoring and reporting requirements based on professional expertise, common practices within the USVI, and, when applicable, EPA guidance documents. TBELs generally have the monitoring frequency specified in the regulations, although the USVI DPNR is occasionally more stringent. The USVI does require use of the appropriate sufficiently sensitive analytical method in permits and for applications. Additionally, permit writers ensure that the modeling submitted as part of the application for package plants was also done using sufficiently sensitive methods.

As a general practice, most minor permits in the USVI require the DMRs be submitted quarterly. A few years ago, the USVI DPNR realized that monthly reporting was onerous for the permittees and began switching most minor permittees to quarterly reporting. Monitoring requirements may be more frequent for some parameters, like pH. The USVI DPNR has no specific written guidance regarding the development of monitoring locations, frequencies, or sampling types.

When appropriate, the USVI does allow for reduction in monitoring frequencies and describes the basis for that decision in the fact sheet, when one is developed.

### *Program Strengths*

The USVI TPDES permits clearly and consistently describe the monitoring locations and the monitoring frequency. Both the location and frequency are appropriate for the facility and the pollutant being monitored.

The USVI DPNR also consistently required at least annual monitoring for all parameters and ensured that all monitoring requirements were sufficient to assess compliance.

At permit renewal, USVI DPNR reviews previous whole effluent toxicity (WET) results for reasonable potential or to determine whether more specific testing, such as chronic sublethal toxicity, should be required. When reasonable potential is found, acute WET testing is typically required quarterly. The fact sheet contains a good description of the basis for the WET requirements.

The permits also clearly stated the method, frequency, and timing of the submission of DMRs and other reports. Permittees are required to submit DMRs electronically.

#### *Areas for Improvement*

The USVI does not have a written policy regarding the development of permit conditions for monitoring locations and frequency, sample types, or reporting frequency.

#### *Action Items*

##### Recommended

- USVI DPNR should develop a written policy regarding the development of permit conditions for monitoring locations and frequency, sample types, or reporting frequency.

## **D. Standard and Special Conditions**

### *Background and Process*

Federal regulations at 40 CFR 122.41 require that all NPDES permits, including NPDES general permits, contain certain “standard” permit conditions. Further, the regulations at 40 CFR 122.42 require that NPDES permits for certain categories of dischargers must contain additional standard conditions. Permitting authorities must include these conditions in NPDES permits and may not alter or omit any standard conditions unless such alteration or omission results in a requirement more stringent than those in the federal regulations.

Permits may also contain additional requirements that are unique to a particular discharger. These case-specific requirements are generally referred to as “special conditions”. Special conditions might include requirements such as: additional monitoring or special studies, such as a mercury minimization plan; best management practices [see 40 CFR 122.44(k)]; or permit compliance schedules [see 40 CFR 122.47]. Where a permit contains special conditions, such conditions must be consistent with applicable regulations.

The USVI uses a permit template that includes the standard conditions. The permit template was created in 2012/2013 but is regularly updated and improved. The USVI is in the process of promulgating TPDES regulations for permit fees. Once finalized, standard conditions regarding payment of permit fees will be included in the permit templates and permits.

The USVI has no specific process for determining if special conditions are appropriate. Permit writers generally establish special conditions based on their own experience or based on EPA guidance documents (e.g., signage and setbacks for discharges to land application).

All POTW permits in the USVI include a requirement for a Preventative Maintenance Plan and conditions regarding biosolids removal and reporting. POTWs are also required to submit an annual report.

All USVI TPDES permits also include a specific reopener clause specifying that the permit can be modified in order to comply with a final TMDL, as well as a condition regarding spill/leak notification requirements.

The USVI regulations do allow for compliance schedules and water quality variances but they are rarely established in permits. There is no specific process for the evaluation, development, or implementation of compliance schedules or water quality variances in permits.

#### *Program Strengths*

All standard conditions were included in permits and appeared to be at least as stringent as federal regulations. In most instances, the standard condition specific to POTWs (40 CFR 122.42(b)) and non-POTWs (40 CFR 122.42(a)) were properly established in permits.

#### *Areas for Improvement*

In one instance, the standard condition specific to POTWs at 40 CFR 122.42(b) was not established in the permit.

#### *Action Items*

No new action items were established based on findings from the 2019 PQR.

## **E. Administrative Process**

### *Background and Process*

The administrative process includes documenting the basis of all permit decisions (40 CFR 124.5 and 124.6); coordinating EPA and territory review of the draft or proposed permit (40 CFR 123.44); providing public notice (40 CFR 124.10); conducting hearings if appropriate (40 CFR 124.11 and 124.12); responding to public comments (40 CFR 124.17); and modifying a permit after issuance (40 CFR 124.5). EPA discussed each element of the administrative process with



the USVI DPNR and reviewed materials from the administrative process as they related to the core permit review.

Prior to public notice, the draft permit is peer reviewed by another permit writer (or someone at USVI DPNR with similar qualifications). If necessary, USVI DPNR legal staff will also review the draft permit and provide comments/edits to the permit writer. Following the internal reviews, the draft permit is provided to the permittee and the permittee is provided 14 days to comment. If the permittee has comments, USVI DPNR will respond to the comments and provide another 14-day period for comments. This cycle will repeat until all issues have been addressed or USVI DPNR deems the issues to be sufficiently addressed.

Once the peer, legal, and permittee reviews have been completed, EPA receives a pre-public notice draft permit for review and comment. Again, USVI DPNR and EPA coordinate until all comments have been addressed or until USVI DPNR deems the issues to be sufficiently addressed. Once this is complete, the permit is public noticed.

USVI regulations require the permittee to arrange and fund the public notice. The draft permit, fact sheet, and public notice announcement are provided to the permittee and the permittee is responsible for arranging that the announcement is published in a local newspaper. This process may change in the future based on the NPDES Application and Program Updates Rule, which allows for the publishing of public notice announcements, draft permit, and fact sheets online.

The USVI DPNR rarely receives public comments on draft permits during the public comment period. When comments are received, however, DPNR prepares responses to comments and provides a proposed permit to EPA for review prior to final issuance. As with public comments, hearings are also very rare in the USVI.

Generally, permits are only modified when an error is uncovered or when changes at the facility render the original permit ineffective or inaccurate. Permits with major modifications are public noticed with a 30-day public comment period. Permits with minor modifications (40 CFR 122.63) can be issued without a public notice period.

### *Program Strengths*

The administrative files were generally complete and included a copy of the public notice and affidavit that it was published in a local newspaper. The public notice itself includes a list of pollutants regulated in the proposed permit.

The administrative record also consistently included the comments provided by EPA on the pre-public notice draft permits and correspondence between the USVI and EPA regarding those comments.

*Areas for Improvement*

In order to build efficiencies in the TPDES program, EPA recommends limiting the number of times the permittee is provided a pre-public notice draft prior to public noticing.

*Action Items*

## Recommended

- USVI DPNR should consider limiting the number of times the pre-public notice draft permit is provided to the permittee for comment prior to going to public notice.

**F. Administrative Record and Fact Sheet***Background and Process*

The administrative record is the foundation that supports the NPDES permit. If EPA issues the permit, 40 CFR 124.9 identifies that required content of the administrative record for a draft permit and 40 CFR 124.18 identifies the requirements for a final permit. Authorized state and territory programs should have equivalent documentation. The record should contain the necessary documentation to justify permit conditions. At a minimum, the administrative record for a permit should contain the permit application and supporting data, draft permit, and fact sheet or statement of basis.<sup>16</sup> Items cited in the statement of basis or fact sheet include calculations used to derive the permit limitations, meeting reports, correspondence between the application and regulatory personnel, and all other items supporting the file.

Current regulations require that fact sheets include information regarding the type of facility or activity permitted, the type and quantity of pollutants discharged, the technical, statutory, and regulatory basis for permit conditions, the basis and calculations for effluent limits and conditions, the reasons for application of certain specific limits, rationales for variances or alternatives, contact information, and procedures for issuing the final permit. Generally, the administrative record includes the permit application, the draft permit, any fact sheet or statement of basis, documents cited in the fact sheet or statement of basis, and other documents contained in the supporting file for the permit.

The USVI DPNR relies on a fact sheet template to guide the permit writer and ensure that all elements of the fact sheet are included. In one instance, a portion of the application that had

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<sup>16</sup> Per 40 CFR 124.8(a), every EPA and state-issued permit must be accompanied by a fact sheet if the permit: Incorporates a variance or requires an explanation under 124.56(b); is an NPDES general permit; is subject to widespread public interest; is a Class I sludge management facility; or includes a sewage sludge land application plan.

been provided after the initial application submission was not included in the administrative record.

The administrative record contains printed copies of the EPA comments received on the pre-public notice draft permit and printed copies of any correspondence regarding these comments. It is very rare for USVI DPNR to receive comments during the public comment period.

The USVI DPNR has Standard Operating Procedures for the Filing of TPDES Permit Administrative Record Forms and Associated Paperwork. The SOPs were last formally finalized and signed in 2010. However, permit writers use an updated 2019 draft of the SOPs to guide their day-to-day processing and filing of administrative records.

The administrative records are generally stored in the USVI DPNR office nearest to the facility. However, because the St. Thomas USVI DPNR office was severely damaged in Hurricanes Irma and Maria in 2017, many records were destroyed entirely. EPA provided USVI DPNR with some duplicate records that had been at EPA's office in New York, NY. As there is no permanent USVI DPNR office in St. Thomas yet, those replacement records are stored in St. Croix. Additionally, the replacement records are likely not a complete administrative record for each permit.

#### *Program Strengths*

In general, the administrative records for the permit reviewed as part of the PQR were complete. The fact sheets included all required elements. However, some additional detail should be provided regarding TBELs vs. WQBELs, pollutants of concern, and effluent limit calculations.

Overall, the administrative record is well organized.

#### *Areas for Improvement*

Fact sheets and the administrative records should include some additional detail regarding TBELs vs. WQBELs, pollutants of concerns, and the calculations used to derive limits.

USVI DPNR should ensure that the complete application, including any supplemental information, is included in the administrative record.

#### *Action Items*

##### Essential

- USVI DPNR must ensure that the complete application, including any supplemental information, is included in the administrative record (40 CFR 124.9(b)(1)).

## IV. NATIONAL TOPIC AREA FINDINGS

National topic areas are aspects of the NPDES permit program that warrant review based on the specific requirements applicable to the selected topic areas. These topic areas have been determined to be important on a national scale. National topic areas are reviewed for all PQRs. The national topic areas are: Permit Controls for Nutrients in Non-TMDL Waters, Effectiveness of POTW NPDES Permits with Food Processor Contributions, and Small Municipal Separate Storm Sewer System (MS4) Permit Requirements.

### A. Permit Controls for Nutrients in Non-TMDL Waters

#### *Background*

Nutrient pollution is an ongoing environmental challenge; however, nationally permits often lack nutrient limits. It is vital that permitting authorities actively consider nutrient pollution in their permitting decisions. Of the permits that do have limits, many are derived from wasteload allocations in TMDLs, since state criteria are often challenging to interpret. For this section, waters that are not protected by a TMDL are considered. These waters may already be impaired by nutrient pollution or may be vulnerable to nutrient pollution due to their hydrology and environmental conditions. For the purposes of this program area, ammonia is considered as a toxic pollutant, not a nutrient.

Federal regulations at 40 CFR 122.44(d)(1) require permit limits to be developed for any pollutant that causes, has the reasonable potential to cause, or contributes to an impairment of water quality standards, whether those standards are narrative or numeric. The USVI has had numeric standards for total phosphorous in place for several years. USVI DPNR is currently promulgating a numeric standard for total nitrogen in marine waters. To assess how nutrients are addressed in the USVI TPDES program, EPA Region 2 reviewed three permits as well as current and proposed water quality standards. Freshwater surface streams within the islands tend to be intermittent ephemeral streams. Numeric nutrient criteria have not been established for freshwaters. There are no nutrient TMDLs for freshwaters.

#### *Program Strengths*

USVI DPNR established a numeric standard for total phosphorous in marine waters of 50 µg/L many years ago. In general, USVI DPNR tends to apply water quality standards as WQBELs at the end-of-pipe. USVI DPNR includes the numeric standard of 50 µg/L for phosphorous as an end-of-pipe limit at several wastewater treatment plants.

#### *Areas for Improvement*

USVI DPNR includes the numeric standard of 50 µg/L for phosphorous as an end-of-pipe limit at several ocean dischargers, mainly the POTWs. However, these facilities are not consistently meeting these limits. The Virgin Islands Waste Management Authority (VIWMA) is working on modeling using CORMIX to demonstrate the mixing zones at the ocean discharges. These facilities do not discharge to waterbodies listed as impaired for phosphorous. For the

waterbodies that are on the 2018 303(d) list for phosphorous, DPNR includes the phosphorous standard as an end-of-pipe limit.

USVI DPNR is about to finalize a numeric standard of 207 µg/l for total nitrogen in marine waters. POTW permits have not always included monitoring for total nitrogen, which will make it difficult to assess reasonable potential and include site-specific limits for total nitrogen. Going forward, USVI DPNR should include monitoring requirements and limits for total nitrogen based on the new standard.

### *Action Items*

#### Essential

- USVI DPNR must include numeric effluent limitations for total nitrogen in waterbodies with the reasonable potential to exceed the WQS (40 CFR 122.44(d)).

#### Recommended

- USVI DPNR should continue modeling work to understand the mixing dynamics at the wastewater treatment facilities, in order to establish meaningful limits for ocean dischargers, which may include mixing zones, where appropriate.

## **B. POTW NPDES Permits with Food Processor Contributions**

EPA Region 2 administers the pretreatment program because USVI DPNR is not authorized to do so. Therefore, EPA HQ will complete the review of the effectiveness of POTW NPDES permits with food processor contributions. The review is pending, and a summary will be provided upon completion as an addendum.

## **C. Small Municipal Separate Storm Sewer System (MS4) Permit Requirements**

### *Background*

Polluted stormwater runoff is commonly transported through municipal separate storm sewer systems (MS4s), from which it is often discharged untreated into local waterbodies. To prevent harmful pollutants from being washed or dumped into an MS4, operators of MS4s must obtain an NPDES permit and develop a stormwater management program. The MS4 program not only refers to municipally owned storm sewer systems, but can also include local jurisdictions,

universities, local sewer districts, prisons, hospitals, military bases, and Territorial transportation departments. Hotels and cruise ships, sometimes called “floating hotels,” are not considered under the MS4 program because they do not contribute to the permanent population.

The 1990 Phase I regulation requires medium and large cities or certain counties with populations of 100,000 or more to obtain a NPDES permit for their stormwater discharges. Phase II, issued in 1999, required regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized area that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges.

Generally, Phase I MS4s are covered by individual permits and Phase II MS4s are covered by a general permit. Each regulated MS4 is required to develop and implement a stormwater management program (SWMP) to reduce the contamination of stormwater runoff and prohibit illicit discharges. The United States Census Bureau defines an urbanized area as a municipality of 50,000 persons or a municipality which contains 1,000 persons per square mile. An urbanized cluster is defined as a municipality which contains at least 2,500 but less than 50,000 persons.

As of the 2010 Census, there are three urbanized clusters, as defined by the US Census Bureau, in the USVI: Christiansted, St. Croix; Charlotte Amalie – Tutu, St. Thomas; and Cruz Bay, St. John.<sup>17</sup> EPA regulations do not require that urbanized clusters be permitted under the MS4 program – only urbanized areas (40 CFR 122.32(a)).

The federal regulations for the stormwater program provide that the permitting authority may determine that a discharge contributes “to a violation of a water quality standard or is a significant contributor to a violation of pollutants to waters of the United States.” Such a determination, using residual designation authority, would allow USVI DPNR to issue an MS4 permit and address any impairments cause by stormwater runoff from a specific source not covered by any of the Territory’s current general or individual stormwater programs. However, currently, the USVI does not meet the population trigger for the residual designation authority.

## **V. REGIONAL TOPIC AREA FINDINGS**

### **A. Hurricane Recovery**

#### *Background*

TPDES-permitted facilities throughout the USVI were significantly damaged by strong winds and torrential rain during Hurricanes Irma and Maria in 2017. There is extensive recovery work currently in the USVI, particularly for roadway rehabilitation. TPDES-permitted industrial facilities, wastewater treatment plants, and hotels experienced damaged equipment and loss of

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<sup>17</sup> Qualifying Urban Areas for the 2010 Census. 77 Fed. Reg. 18651 (March 27, 2012). Available at: <https://www.federalregister.gov/documents/2012/03/27/2012-6903/qualifying-urban-areas-for-the-2010-census>

power. VIWMA experienced damages and loss of power at all eight municipal wastewater treatment plants and at numerous pump stations that are part of its collection system.

After Hurricanes Irma and Maria, USVI DPNR and EPA were asked by other federal agencies responding to the disaster, such as the Federal Emergency Management Agency (FEMA), to provide data regarding the locations and facility characteristics of NPDES-permitted facilities so they could be assessed for damage. Providing this information was a challenge given the St. Thomas DPNR office was destroyed, and the other DPNR office did not have electricity, resulting in staff having to work offsite. The St. Thomas staff have moved to a new location, but several paper records that were damaged could not be easily replaced.

#### *Program Strengths*

USVI DPNR has overcome tremendous challenges in the wake of Hurricanes Irma and Maria. In the immediate aftermath of the storm, staff and management were dealing with a destroyed office, limited availability of government vehicles and other resources, limited availability of resources such as gasoline, electricity, or a functioning cell phone network, as well as personal devastation such as damaged homes, vehicles, travel/commuting difficulties, etc. Considering all these challenges, USVI DPNR has been able to continually administer and manage the NPDES program effectively and make consistent improvements to the program overall.

#### *Areas for Improvement*

EPA is encouraging NPDES staff at USVI DPNR to build resilience in the record keeping and filing, so that EPA can provide this information, if necessary, to other agencies such as FEMA after a disaster. Protecting file records from disasters is essential to maintain core functions of a permit program. EPA recommends that DPNR make use of a cloud-based system for storing files and keeping current information about permitted facilities. Administrative records could be set up in electronic cloud-based files. DPNR already has a list of permitted facilities and locations developed after Hurricane Maria. The list should be updated and kept in a location in the cloud and shared with EPA NPDES staff, such that it can be easily retrieved if there is a power or internet outage in the USVI.

#### *Action Items*

##### Recommended

- USVI DPNR should transition to online, cloud-based document storage to ensure files will remain undamaged and accessible in the event of an emergency.

## B. Condominiums, Hotels, and Apartments General Permit

### *Background*

Since early 2018, USVI DPNR and EPA have been working closely together to draft the Virgin Islands Condominiums, Hotels, and Apartments General Permit (VICHAGP). To be eligible for coverage under the VICHAGP, the facility must meet the following criteria:

- Be a hotel, apartment complex, or condominium (SIC Codes 7011, 6531, or 6513) in the USVI Territory;
- Discharge to Class B receiving water, as defined in the USVI WQS; and
- Be classified as a minor discharger by USVI DPNR.

The permit will include effluent limitations and control measures for three types of discharges:

- Discharges of wastewater from a secondary treatment system to surface waters;
- Discharge of wastewater from a secondary treatment system to irrigation and/or land application; and
- Discharges of drinking water purification concentrate to surface waters or to irrigation and/or land application.

Based on initial estimates, the VICHAGP has the potential to replace approximately 43 individual TPDES permits. As the entire TPDES universe is approximately 88 individual permits, the VICHAGP has the potential to capture approximately 45-50% of the individual permits.

Development of the VICHAGP began with an analysis of the effluent limitations and conditions in the current hotel, condominium, and apartment individual permits to determine if a general permit was feasible. This analysis showed that a general permit is feasible and helped identify the appropriate discharge types to be covered by the permit. This analysis also showed that the individual permits were similar enough that they can likely be moved to a general permit without causing backsliding.

The draft effluent limits for the VICHAGP are water quality standards at end-of-pipe. Some effluent limitations for the discharges to land application were developed based on EPA's 2012 Guidelines for Water Reuse<sup>18</sup>.

USVI DPNR and EPA continue to work closely to develop and draft the VICHAGP. As of October 2019, USVI DPNR has completed an initial draft of the permit, a draft Notice of Intent (NOI) form, a draft Notice of Termination form, and a draft Annual Report form and provided them to EPA for review and comment. USVI DPNR hopes to issue the final VICHAGP in 2022.

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<sup>18</sup> Available online at <https://www.epa.gov/sites/production/files/2019-08/documents/2012-guidelines-water-reuse.pdf>.



*Program Strengths*

EPA commends USVI DPNR for their commitment to innovation and improvement. The VICHAGP will improve the efficiency of the TPDES program and reduce the overall staff workload as approximately 45-50% of the individual permits will receive coverage under the general permit. The general permit will also reduce the burden on the permittees as only an NOI will be required to request coverage and will create a more predictable, consistent, and transparent process.

The VICHAGP has the potential to be a model general permit for other NPDES programs interested in developing permits. EPA is unaware of any other general permits nationwide for discharges from condominiums, hotels, or apartments or similar categories.

*Areas for Improvement*

The biggest challenge regarding the VICHAGP is ensuring that the permit is sufficiently stringent and rigid to ensure protection of the receiving water while also being flexible enough to address multiple types of discharges from a variety of similar facilities. Additionally, this is a large, complex permit to draft, public notice, finalize, and implement – all while USVI DPNR is extremely short-staffed.

EPA is committed to assisting USVI DPNR in the development and issuance of this permit.

*Action Items*

Recommended

- USVI DPNR should develop and issue the Virgin Islands Condominium, Hotels, and Apartment General Permit to further improve the efficiency, transparency, and consistency of the TPDES program.

## VI. 2013 USVI PQR ACTION ITEMS REVIEW

The tables below provide a summary of the main findings from the USVI 2013 PQR and provides a review of the status of the USVI’s effort in addressing the action items identified in that report. As mentioned previously, during the 2012-2017 PQR cycle, EPA referred to action items that address deficiencies or noncompliance with respect to federal regulations as Category 1 action items. EPA is now referring to those action items as Essential. In addition, EPA consolidated the action items identified in the 2013 PQR as Category 2 and Category 3 into a single category called Recommended.

**Table 1. 2013 USVI PQR – Essential Action Items Status Update**

Program Area	Action Item	Status Update
Technology-Based Effluent Limitations	USVI DPNR must establish short- and long-term effluent limitations in order to be consistent with EPA regulations at 40 CFR 122.45(d).	<b>Resolved.</b> USVI DPNR has implemented a permit template that has resolved this issue.
	USVI DPNR must establish, when applicable, secondary treatment standards in order to be in accordance with EPA regulations at 40 CFR 133.102 and 40 CFR 133.105.	<b>Resolved.</b> USVI DPNR has implemented a permit template that has resolved this issue.
	USVI DPNR must include a discussion of the calculations used to develop effluent limitations based on ELGs, or a discussion of the applicability of ELGs, in the fact sheet for major facilities in order to be in accordance with EPA regulations at 40 CFR 124.56.	<b>Resolved.</b> USVI DPNR has implemented a fact sheet template that has resolved this issue. However, additional detail is required to fully comply with federal regulations and is reflected in a 2019 PQR action item.
	USVI DPNR must include in the fact sheet a discussion of the basis for the TBELs established in a major permit in order to be in accordance with EPA regulations at 40 CFR 124.56.	<b>Resolved.</b> USVI DPNR has implemented a fact sheet template that has resolved this issue. However, additional detail is required to fully comply with federal regulations and is reflected in a 2019 PQR action item.

## NPDES Program and Permit Quality Review

Water Quality-Based Effluent Limitations	USVI DPNR must include in the fact sheet or administrative record a discussion of the reasonable potential analysis for pollutants present in the effluent and for WET in order to be in accordance EPA regulations at 40 CFR 124.56.	<b>Resolved.</b> USVI DPNR has implemented a fact sheet template that has resolved this issue and has included supporting information in the administrative record. However, additional detail is required to fully comply with federal regulations and is reflected in a 2019 PQR action item.
	USVI DPNR must establish maximum daily and average monthly effluent limitations for all dischargers other than POTWs in order to be in accordance with EPA regulations at 40 CFR 122.45(d).	<b>Resolved.</b> USVI DPNR has implemented a permit template that has resolved this issue.
	USVI DPNR must establish, when applicable, effluent limitations for enterococci in order to be in accordance with 12 VIRR 184 and EPA regulations at 40 CFR 131.41.	<b>Resolved.</b> USVI DPNR has implemented a permit template that has resolved this issue.
	USVI DPNR must include a discussion of the development of mixing zones in the fact sheet or administrative record in order to be in accordance with EPA regulations at 40 CFR 124.56 and clearly identify where the effluent limitations apply in the permit.	<b>Resolved.</b> USVI DPNR has implemented a fact sheet template that has resolved this issue and has included supporting information in the administrative record. However, additional detail is required to fully comply with federal regulations and is reflected in a 2019 PQR action item.
Monitoring and Reporting	USVI DPNR must clearly identify the location of the receiving water, outfall, and internal monitoring locations for all TPDES permits in order to be consistent with EPA regulations at 40 CFR 122.56.	<b>Resolved.</b> USVI DPNR has implemented a permit and fact sheet template that has resolved this issue.
Special and Standard Conditions	USVI DPNR must establish the standard conditions applicable to specified categories of NPDES permits in order to be in accordance with 40 CFR 122.42.	<b>Ongoing.</b> USVI DPNR has implemented a permit and fact sheet template that has made progressing in

NPDES Program and Permit Quality Review

		resolving this issue. However, some permits still do not include the appropriate conditions.
Administrative Process	USVI DPNR must ensure that a permit is not administratively extended unless the appropriate renewal application was received 180 days before the expiration date of the previous permit in order to be in accordance with federal regulations at 40 CFR 122.6 and 122.21.	<b>Resolved.</b> This was a one-time issue found in the 2013 PQR.
Administrative Record	USVI DPNR must create fact sheets, which include all information required by 40 CFR 124.56, for all major permits when they are developed in order to be in accordance with federal regulations at 40 CFR 124.8.	<b>Resolved.</b> USVI DPNR has implemented a fact sheet template that has resolved this issue.
	USVI DPNR must include in the administrative record a description of the permitted facility or activity in order to be consistent with EPA regulations at 40 CFR 124.8 and documentation of the public notice in accordance with 40 CFR 124.10.	<b>Resolved.</b> USVI DPNR has implemented a permit and fact sheet template that has resolved this issue.
Stormwater	USVI DPNR must, at reissuance of the MSGP, address any requirements of 40 CFR Part 450 which are not adequately addressed in the current USVI Multi Sector General Permit, which was issued before those provisions were adopted, in order to be consistent with federal regulations.	<b>Resolved.</b> The USVI reissued the MSGP in 2017 which addresses the requirements set forth in 40 CFR Part 450.
Rum Distilleries	USVI DPNR must include in the administrative record for Cruzan Rum documentation of a narrative or numeric	<b>In progress.</b> USVI DPNR has made progress documenting reasonable potential and water

## NPDES Program and Permit Quality Review

	<p>analysis of reasonable potential to cause or contribute to an exceedance of water quality standards for the periods when the treatment system is shut down and the facility is discharging in order to be in accordance with federal regulations at 40 CFR 124.8 and 124.56.</p>	<p>quality-based effluent limits. EPA continues to work with DPNR on including more comprehensive documentation in the Administrative Record for water quality-based permit requirements.</p>
	<p>USVI DPNR must ensure that all conditions or references to compliance schedules in permits are consistent with the EPA regulations at 40 CFR 122.47.</p>	<p><b>Resolved.</b> USVI DPNR has implemented a permit template that has resolved this issue.</p>
	<p>USVI DPNR must ensure that the Diageo facility obtains TPDES permit coverage for any discharges of storm water from the facility in order to be in accordance with federal regulations at 40 CFR 122.26.</p>	<p><b>Resolved.</b> USVI DPNR resolved this upon reissuance of the Diageo permit.</p>

**Table 2. 2013 USVI PQR – Recommended Action Items Status Update**

Program Area	Action Item	Status Update
Basic Facility Information and Permit Application	USVI DPNR must issue (sign and date) a permit prior to the effective date of the permit.	<b>Resolved.</b> This was a one-time issue found in the 2013 PQR.
Technology-Based Effluent Limitations	USVI DPNR should include a discussion of the calculations used to develop effluent limitations based on ELGs, or a discussion of the applicability of ELGs, in the administrative record for minor facilities as discussed in the EPA’s 2010 NPDES Permit Writers’ Manual.	<b>Resolved.</b> USVI DPNR includes notes in the administrative record providing this information.
	USVI DPNR must include in the administrative record a discussion of the basis for the TBELs established in a minor permit as discussed in the EPA’s 2010 NPDES Permit Writers’ Manual.	<b>Resolved.</b> USVI DPNR includes notes in the administrative record providing this information.
Water Quality-Based Effluent Limitations	USVI DPNR should include a discussion of the receiving water impairments or identify if a TMDL has been developed in the fact sheet or administrative record.	<b>Resolved.</b> USVI DPNR has implemented a fact sheet template that has resolved this issue.
Administrative Process	USVI DPNR should identify in ICIS permits that do not discharge to waters regulated by the federal NPDES program.	<b>Ongoing.</b> This is not a priority due to resource constraints.
Administrative Record	USVI DPNR should include all elements of the administrative record described in Section 11.2.1 of the 2010 EPA Permit Writers’ Manual.	<b>Resolved.</b>

## NPDES Program and Permit Quality Review

	USVI DPNR should make improvements to its standard fact sheet and permits to include a more robust discussion and documentation of the basis of permit conditions such as the development of effluent limitations and mixing zones and to include a discussion of the existing impairments in the receiving waterbody and the current status of TMDL development.	<b>Resolved.</b> USVI DPNR has implemented a permit and fact sheet template that has resolved this issue.
	USVI DPNR should include the EPA major/minor discharger ranking sheet in the administrative record.	<b>Ongoing.</b>
	USVI DPNR should formalize guidance for filing hard copy and/or electronic files.	<b>Ongoing.</b>
Pesticide General Permit	USVI DPNR should follow up on the status of the VI DOH application and verify that no unauthorized discharges are occurring.	<b>Ongoing.</b>
	USVI DPNR should conduct a targeted outreach campaign to ensure that entities that are likely to be covered by the permit are aware of the requirements.	<b>Ongoing.</b>
Pretreatment	The USVI DPNR should consider undertaking its own evaluation of whether there are any SIUs or CIUs within the territory.	<b>Ongoing.</b>
	EPA Region 2 should develop a procedure to ensure notification when indirect industrial discharges are reported on a permit application and when changes at a facility may warrant pretreatment program development.	<b>Ongoing.</b> A review framework for these indirect dischargers will be developed and will be used to determine if a pretreatment program is necessary.

NPDES Program and Permit Quality Review

		Once an evaluation/review framework is established, it can be done annually.
Stormwater	The EPA recommends that the USVI make NOIs under the USVI MSGP publicly available and/or include language in the future USVI MSGP permit that requires the permittee to make the NOI and SWMP available to the public upon request.	<b>Ongoing.</b> This is not a priority due to resource constraints.
Coral Reefs	USVI DPNR could benefit from having a written policy regarding when an endangered species review is required for an individual permit.	<b>Resolved.</b>
	USVI DPNR could benefit from conducting an analysis of the location of listed coral species in relation to TPDES permitted discharges and determine what the cumulative impact may be.	<b>Ongoing.</b> USVI DPNR is developing improved maps of species and outfall locations.
MS4s	USVI DPNR should evaluate its impaired waters listing to determine if there are waters for which municipal stormwater is a significant contributor to an exceedance of water quality standards.	<b>Ongoing.</b> While no official evaluation is completed, the 305(b) report includes a note indicating that the contributor is most often stormwater. USVI DPNR intends to start developing a review process for areas with high urban stormwater flow.
	USVI DPNR should review the Residual Designation Authority at 40 CFR 122.26(a)(v).	<b>Ongoing.</b> This is not a priority due to resource constraints.
	USVI DPNR should investigate all options to protect against stormwater impacts from MS4s even if the “urbanized areas” definition is not met (e.g., encouraging	<b>Ongoing.</b> This is not a priority due to resource constraints.



## NPDES Program and Permit Quality Review

	and promoting green infrastructure practices in new or re-development projects).	
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## VII. 2019 USVI PQR ACTION ITEMS

This section provides a summary of the main findings of the PQR and provides proposed action items to improve the USVI TPDES permit program, as discussed throughout sections III, IV, and V of this report.

The proposed action items are divided into two categories to identify the priority that should be placed on each Item and facilitate discussions between the Region and the Territory.

- Essential Actions** - Proposed “Essential” action items address noncompliance with respect to a federal regulation. The permitting authority is expected to address these action items in order to come into compliance with federal regulations. As discussed earlier in the report, prior PQR reports identified these action items as Category 1. Essential Actions are listed in Table 3 below.
- Recommended Actions** - Proposed “Recommended” action items are recommendations to increase the effectiveness of the territory’s or Region’s NPDES permit program. Prior reports identified these action items as Category 2 and 3. Recommended Actions are listed in Table 4 below.

**Table 3. 2019 USVI PQR – Essential Action Items**

Topic	Action Item
TBELs for Non-POTW Dischargers	USVI DPNR must ensure that the calculations used to develop ELG-based TBELs are included in the fact sheets (40 CFR 124.56).
	USVI DPNR must provide a basis for case-by-case TBELs (i.e., when a federally promulgated ELG does not apply) in the fact sheets (40 CFR 124.56).
Final Effluent Limitations	USVI DPNR must identify both the TBEL and WQBEL in the record and demonstrate that the most stringent limit was established in the permit (40 CFR 124.8 and 124.56).
	USVI DPNR must ensure that fact sheets include the basis for the permit limit including references to applicable statutory or regulatory provisions (i.e., not "carried over") (40 CFR 124.8).
Documentation of Effluent Limitations Development	USVI DPNR must include documentation of the reasonable potential analysis and its results in the fact sheet for all permits (both major and minor) (40 CFR 124.56).
	USVI DPNR must include documentation of the development of TBELs, including the calculations and assumptions used in that development, in the fact sheet (40 CFR 124.56).

## NPDES Program and Permit Quality Review

	USVI DPNR must include, in the fact sheet, a comparison of the TBEL and the WQBEL when both effluent limitations are calculated (40 CFR 124.56).
	USVI DPNR must ensure that fact sheets include the basis for the permit limit including references to applicable statutory or regulatory provisions (40 CFR 124.8).
	USVI DPNR must include, in the administrative record or fact sheet, a description of how pollutants of concern are identified (40 CFR 124.8).
	USVI DPNR must include the calculations used to develop WQBELs in the fact sheet (40 CFR 124.56).
Administrative Record and Fact Sheet	USVI DPNR must ensure that the complete application, including any supplemental information, is included in the administrative record (40 CFR 124.9(b)(1)).
Nutrients	USVI DPNR must include numeric effluent limitations for total nitrogen in waterbodies with the reasonable potential to exceed the WQS (40 CFR 122.44(d)).

**Table 4. 2019 USVI PQR – Recommended Action Items**

Topic	Action(s)
Reasonable Potential	USVI DPNR should include the reasonable potential analyses in the administrative record, either through use of the Reasonable Potential Tool or written documentation of water quality-based permit decisions.
	USVI DPNR should partner with EPA Region 2 to update or revise the US Virgin Islands Reasonable Potential Tool.
Establishing Monitoring and Reporting Requirements	USVI DPNR should develop a written policy regarding the development of permit conditions for monitoring locations and frequency, sample types, or reporting frequency.
Administrative Process	USVI DPNR should consider limiting the number of times the pre-public notice draft permit is provided to the permittee for comment prior to going to public notice.
Nutrients	USVI DPNR should continue modeling work to understand the mixing dynamics at the wastewater treatment facilities, in order to establish meaningful limits for ocean dischargers, which may include mixing zones, where appropriate.
Hurricane Recovery	USVI DPNR should transition to online, cloud-based document storage to ensure files will remain undamaged and accessible in the event of an emergency.
VICHAGP	USVI DPNR should develop and issue the Virgin Islands Condominium, Hotels, and Apartment General Permit to further improve the efficiency, transparency, and consistency of the TPDES program.

## VIII. 2019 USVI PQR FILES REVIEWED

SPDES Number	Permit Name	Permit Issuance Date	Permit Effective Date	Permit Expiration Date	Facility Location	Topics for Review
VI0000060	Virgin Islands Water and Power Authority – Randolph Hurley Power Plant	7/31/2015	8/1/2015	7/31/2020	St. Thomas	Core review
VI0020044	Virgin Islands Waste Management Authority – Pedrito A. Francois (Red Point) Wastewater Treatment Facility	4/20/2015	5/1/2015	4/30/2020	St. Thomas	Core review
VI0020133	Virgin Islands Waste Management Authority – Vessup Publicly Owned Treatment Works	9/30/2016	10/1/2016	9/30/2021	St. Thomas	Core review
VI0039811	Virgin Islands Waste Management Authority – Brassview Publicly Owned Treatment Works	9/30/2016	10/1/2016	9/30/2021	St. Thomas	Core review
VI0039829	DiamondRock Frenchman’s Owners, Inc.	7/1/2018	7/1/2018	1/30/2023	St. Thomas	Core review
VI0040878	The Reef Associates, Inc.	10/25/2018	11/1/2018	4/30/2023	St. Croix	Core review
VI0050202	St. Croix Financial Center, Inc. (D/B/A Green Cay Marina)	11/30/2018	12/1/2018	11/30/2023	St. Croix	Core review
VI0080012	Bolongo Bay Beach Resort	3/25/2019	4/1/2019	9/30/2024	St. Thomas	Core review
VI0080021	Dvergsten Company	3/25/2019	4/1/2019	3/31/2024	St. Thomas	Core review
Pending	Virgin Islands Hotel, Condominium, and Apartment General Permit (VICHAGP)	Pending	Pending	Pending	St. Thomas, St. Croix & St. John	VICHAGP focus area