

MEMORANDUM

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TO Puerto Rico Electric Power Authority

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SUBJECT White Paper on Environmental Compliance Issues at Puerto Rico Electric Power Authority
Transmission and Distribution Facilities and Other Non-Generation Facilities

INTRODUCTION

Puerto Rico's electric power transmission and distribution ("T&D") system and non-generation facilities consist of mechanical workshops, electrical substations, telecommunications facilities, regional, commercial and technical offices, and other facilities that are located across Puerto Rico. This white paper is intended to provide a high-level overview of environmental compliance issues and programs affecting the Puerto Rico Electric Power Authority's ("PREPA") non-generation facilities. This white paper reflects the status of environmental issues at PREPA's non-generation facilities to the best of our knowledge at the time of drafting. References to folder names in this white paper refer to folders that are located in the "Environmental and Permitting" folder in the T&D section of the data room. Supplements to this white paper may be provided should additional relevant information become available.

This white paper discusses environmental requirements and compliance at PREPA's non-generation facilities under various federal and state laws and regulations, as well as under the 1999 consent decree between PREPA and the United States. The environmental compliance programs covered include those related to: polychlorinated biphenyls regulated under the Toxic Substances Control Act; asbestos abatement; lead mitigation; hazardous waste regulated under the Resource Conservation and Recovery Act; underground storage tanks; used oil; biomedical waste; Emergency Planning and Community Right-to-Know Act reporting; spill prevention, control, and countermeasure planning; underground injection control facilities; special use permits for telecommunications stations; emergency generators; recycling; noise pollution; light pollution; waste tire disposal; pesticide permits under the Clean Water Act; prior PREPA due diligence; and environmental considerations related to hurricane recovery. The white paper also highlights various permits held by PREPA. For information regarding the transferability of these permits, we recommend consulting the terms of the permit and requirements of the appropriate statute and regulations.

This white paper may not be construed as giving legal advice and any statement made within the document may not be used against PREPA, the Puerto Rico Public-Private Partnerships Authority, the Government of Puerto Rico's Central Office of Recovery, Reconstruction, any other agency or instrumentality of the Government of Puerto Rico, Hogan Lovells US LLP and Hogan Lovells International LLP, and/or the authors. Each Private Party is encouraged to seek legal advice regarding the topics in this white paper. In the event that there are inconsistencies between this white paper and the Partnership Contract, the provisions of the Partnership Contract language will control.

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DISCUSSION

I. 1999 Consent Decree

A. Background and Overview of Consent Decree Provisions

On October 27, 1993, the United States of America (“United States”), through the United States Department of Justice (“DOJ”) and the United States Environmental Protection Agency (“EPA”), filed a complaint against PREPA in the United States District Court for the District of Puerto Rico (the “court”) (Civil Action No. 93-2527 CCC). The complaint alleged environmental violations by PREPA under multiple federal environmental statutes, including those relating to air, water, hazardous substances, and waste at the Palo Seco, San Juan, Aguirre, and Costa Sur baseload generating stations and the Monacillos Transmission Center.

On March 19, 1999, the court entered a consent decree in the case (“1999 Consent Decree”), which resolved the claims alleged in the complaint. The 1999 Consent Decree required PREPA to implement detailed compliance programs, including:

- Ten different Clean Air Act (“CAA”) compliance programs related to PREPA’s operation and maintenance of its baseload oil-fired power units;
- A Clean Water Act (“CWA”) compliance program;
- An Oil Pollution Prevention compliance program;
- An Emergency Planning and Community Right-to-Know Act compliance program (“EPCRA”);
- A Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) Section 103 and EPCRA Section 304 compliance program;
- An Underground Storage Tank compliance program;
- An Environmental Review Contractor program;
- An Independent Air Compliance Auditor program; and
- Programs to implement additional environmental projects, including a Land Acquisition Project and a Fire Department Hazmat Training Program.

On September 9, 2004, the court entered a Consent Decree modification (“2004 Modification”). The 2004 Modification established additional air emissions and fuel-related requirements for PREPA’s generating facilities, imposed civil penalties, and required PREPA to pay additional funds into the Environmental Review Contractor Program and Land Acquisition Project fund. The Consent Decree has not been modified since the 2004 Modification. Both the 1999 Consent Decree and the 2004 Modification (together, “Consent Decree”) are in the 1999 Consent Decree Folder in the data room.

While the Consent Decree programs primarily apply to PREPA’s four baseload generating plants (San Juan, Palo Seco, Aguirre, Costa Sur), certain programs also apply to the Monacillos Transmission Center, a non-generation facility. Under the Consent Decree, PREPA was required to submit a Spill Prevention, Control, and Countermeasure (“SPCC”) plan for the Monacillos Transmission Center. PREPA submitted an SPCC plan for the Monacillos Transmission Center, which was approved by EPA in 2003. The Monacillos Transmission Center was also subject to the Consent Decree’s Underground Storage Tank Compliance Program. In compliance with the Consent Decree, PREPA certified to EPA that all underground storage tanks (“USTs”) at the Monacillos Transmission Center had been permanently closed on site or removed, thus completing the Consent Decree’s requirements for that program for the facility. The EPCRA and CERCLA programs also

generally applied to the Monacillos Transmission Center. PREPA also considers these programs to have been completed.

Should PREPA sell or transfer some or all of the assets covered by the terms of the Consent Decree, PREPA is required to provide a copy of the Consent Decree to the Private Party at least 30 days prior to the conveyance and is required to condition such conveyance upon agreement by the purchaser or transferee to be subject to the obligations of the Consent Decree and the jurisdiction of the court. PREPA must also provide 30 days' advance notice to DOJ and EPA. Private Parties acquiring assets subject to the Consent Decree would be approved by the court and must have the technical and financial wherewithal to complete the obligations they are undertaking pursuant to the Consent Decree.

B. Renegotiation of the Consent Decree and Expected Substance of Draft Modified Consent Decree

PREPA has successfully implemented many of the compliance programs required by the Consent Decree, including the programs applicable to the Monacillos Transmission Center. Accordingly, PREPA has sought the United States' agreement that PREPA has fully implemented those programs and that they can be terminated. PREPA documented its completion of those programs in a request to EPA for partial termination. PREPA's 2014 request for partial termination is included in the 1999 Consent Decree Folder in the data room.

PREPA's requests for partial termination spurred negotiations with the United States regarding the Consent Decree to eliminate provisions PREPA has already completed and to streamline remaining Consent Decree provisions. Based on the current status of the negotiations, PREPA expects that a draft Modified Consent Decree would retain only Clean Air Act programs, and that the scope of those programs would be significantly reduced and simplified. The only non-Clean Air Act program that PREPA expects to be retained in a draft Modified Consent Decree is the Land Acquisition Project. Because the Clean Air Act programs apply only to PREPA's generation facilities, the draft Modified Consent Decree is not expected to contain requirements applicable to PREPA's non-generation facilities. The Land Acquisition Project is not directly associated with either generation or non-generation facilities, and is an additional environmental project designed to acquire and restore land in the Las Cucharillas marsh area.

C. Status of Negotiations with the United States, Next Steps, and Procedure for Approval

The United States and PREPA have exchanged proposals for the draft Modified Consent Decree and are close to reaching agreement with very few issues remaining.

PREPA anticipates that an in-person meeting with the United States to negotiate and resolve these remaining issues will likely occur sometime in the near future. Once agreement is reached on the remaining issues, PREPA and the United States are expected to begin discussions with the intervenor in the case, Comunidades Unidas Contra la Contaminacion ("CUCCo"), regarding the proposed modifications to the Consent Decree. Such negotiations may result in additional changes to the draft Modified Consent Decree.

After all these discussions are completed, the United States is expected to lodge the Modified Consent Decree with the court pending public notice and comment. In accordance with DOJ policy,¹ the United States would publish in the *Federal Register* a notice of the lodging of the

¹ 28 C.F.R. § 50.7.

Modified Consent Decree, which publication would initiate a 30-day public comment period. Before the United States can seek entry of the Modified Consent Decree, DOJ must consider any written comments it receives related to the proposed settlement and determine whether the proposed settlement is in the public interest in light of those comments.² When the original 1999 Consent Decree was filed, five entities submitted public comments, the most substantive of which were submitted by CUCCo and the United States Fish and Wildlife Service. As an intervenor, CUCCo may submit objections to the court regarding various provisions in the Modified Consent Decree.

After the public comment period, should the United States continue to view the Modified Consent Decree as in the public interest, it would seek the court's approval of the settlement. If the public comments cause it to think changes to the Modified Consent Decree are warranted, the United States and PREPA would renegotiate the effected provisions of the Modified Consent Decree and lodge the renegotiated Modified Consent Decree with the court and seek its entry.

Following the procedures identified above, the court will make a decision on whether to approve the Modified Consent Decree. It is possible that a hearing could be scheduled if the court determines that fairness requires it; however, such a hearing is within the court's discretion and is not required. The court did not require such a hearing when the 1999 Consent Decree was originally approved.

Note that the 1999 Consent Decree can only be modified by the written agreement of both the United States and PREPA (or their successors or assigns) and approval of the court.

II. Toxic Substances Control Act ("TSCA") and Regulation of Toxic Substances

A. Polychlorinated Biphenyl ("PCB") Program

PREPA's transformers and other electrical equipment are regulated under TSCA if they contain oil with more than 49 parts per million ("ppm") of PCBs.³ The regulations contain various requirements governing storage, disposal, prohibitions against spills and discharges, marking, and recordkeeping concerning PCBs and PCB-containing equipment, including transformers. Transformers with less than 50 ppm of PCBs are considered non-PCB Transformers under the regulations; transformers with greater than or equal to 50 ppm but less than 500 ppm are considered PCB-contaminated; and transformers with 500 ppm or more are considered PCB Transformers.⁴

In 1991, EPA filed a complaint against PREPA for various violations of the PCB regulations, including leaks and discharges, improper storage practices, and marking and recordkeeping noncompliance. PREPA entered into a Consent Agreement and Order with EPA, wherein PREPA agreed to properly label, store, handle, and dispose of PCBs, and to implement (and report on) a 10-year program to sample and test all of the oil-filled transformers in PREPA's system to determine if the transformers have PCB content of 50 ppm or more. PREPA also initiated a program to dispose of transformers with a PCB content of 50 ppm or more.

PREPA has more than 120,000 transformers and spent 10 years sampling the oil content in its transformers. Based on the sampling, transformers have been labeled to demarcate PCB content. In 2000, PREPA completed the required sampling and testing program. In a March 17, 2005 letter, EPA acknowledged that PREPA had complied with the Consent Agreement requirements regarding

² 28 C.F.R. § 50.7(b).

³ See 40 C.F.R. Part 761.

⁴ See 40 C.F.R. § 761.3.

its 10-year testing program and stated “[t]o our knowledge, this systematic PCB analysis of all PREPA-owned transformers in the PREPA electrical distribution network is unprecedented; no other major electric utility in the U.S. has undertaken such a program of testing all of their transformers for PCB content.” This documentation is included in the TSCA and PCBs Folder in the data room.

PREPA continues to implement its program to dispose of transformers with a PCB content of 50 ppm or greater. As EPA recognized in its March 17, 2005 letter, this disposal program was acknowledged in the Consent Agreement/Order, but was not made a condition or requirement of the Consent Agreement/Order. PREPA has completed the removal and disposal of the vast majority of PCB transformers with concentrations of 500 ppm or more, although it is possible that some still exist at PREPA substations and transmission centers. PREPA has also disposed of many transformers with PCB concentrations between 50 and 499 ppm. PREPA updates the estimated number of these units awaiting disposal. At the time of drafting, PREPA estimates that it has less than approximately 250 PCB-contaminated transformers that require disposal. Transformers that contain PCB concentration of 50 ppm or more are shipped to the mainland United States for disposal, primarily to TCI of Alabama, a company that provides services to dispose of PCB containing equipment.

The TSCA and PCBs Folder in the data room contains a log that contains the testing data for PREPA’s transformers, including their PCB concentrations and serial numbers. Decommissioning and disposal information is also provided in the log, where available.

In the past, PREPA has had spills related to transformers with greater than 49 ppm of PCBs. In the TSCA and PCBs Folder in the data room, there is a log book that identifies transformer spills that occurred in the 1999-2014 date range. The log book generally identifies whether the spill was a non-PCB spill or a PCB spill. The majority of the spills are non-PCB spills, but PCB spills have occurred.

Many of PREPA’s more detailed records related to spills have been lost; however, PREPA does have some records of recent transformer spills as follows:

- A July 13, 2011 oil spill at the Humacao Technical Center Substation resulted from an oil leak from a transformer at the substation. Approximately 300 square feet within the grounds of the substation were affected by about 10 gallons of mineral oil. PREPA repaired the oil leak in the transformer and hired a contractor to clean up the spill. The contractor cleaned up the affected land area, generating nine (9) drums of soil.
- A July 10, 2017 mineral oil spill in Cidra resulted when a truck hauling electrical equipment and a transformer crashed and exploded, spilling 26 gallons of mineral oil. The mineral oil was <2ppm PCBs. On July 11, 2017, PREPA personnel and a contractor cleaned up the spill, removing 20 drums of affected soil.
- A November 2, 2018 oil spill occurred from a transformer with serial number 1G7124(2), installed in the Sabana Llana Transmission Center. PCB testing of the transformer in 1988 showed that it contained 3 ppm PCBs. The amount of spilled oil was estimated at 2,000-4,000 gallons. The areas affected by the spill were the transformer’s base concrete and soil and crushed rock adjacent to the transformer. To date, the cost for cleaning and non-hazardous waste disposal has been approximately \$60,000. Currently, about 60 cubic meters of soil are awaiting disposal, and these soil wastes are stacked at the facility.

- On February 14, 2018, PREPA received notice from the Puerto Rico Environmental Quality Board ("PREQB") of mineral oil spills at three electrical distribution transformers in San Juan after PREQB had received reports of vandalism regarding the transformers. PREQB's notice required PREPA to remove the three transformers, clean the areas affected by the mineral oil spills, perform land remediation, perform sampling, disposal, and report back to PREQB. On June 1, 2018, PREPA submitted its report informing PREQB that PREPA could not, after a diligent search, find the subject transformers, concluded they had been stolen, and requested that it not be fined. PREPA hired Environics Engineering to clean the affected sites, and the clean-up work has been completed. PREQB has not engaged in further communications with PREPA regarding this matter and no penalties have been assessed. PREPA considers the matter to be closed.

Available documentation related to these spills is located in the TSCA and PCBs Folder in the data room.

In addition, in September 2018, PREQB sent PREPA a letter regarding an inspection of the Fajardo Technical Office transformer yard that occurred following Hurricane Maria. The inspection revealed a large number of stored transformers. To the best of PREPA's knowledge, following Hurricane Maria, the transformers had been removed from various municipalities (Fajardo, Ceiba, and Luquillo) to which the Fajardo Technical District provides services (Fajardo, Ceiba, and Luquillo) in response to the emergency, and were then stored at the Fajardo transformer yard pending their disposal. PREQB required PREPA to dispose of the stored transformers. On November 26, 2018, PREPA caused the transformers to be disposed of in accordance with applicable regulations. PREQB has not issued a notice of violation ("NOV") or penalties in connection with this issue, and PREPA understands the cleanup to be complete and the matter resolved.

B. Asbestos Abatement

PREPA encapsulates or removes asbestos-containing materials from its power plants and other facilities, where required. This process is conducted on an ongoing basis as necessary in accordance with the current regulatory requirements. For PREPA's non-generation facilities, PREPA hires a contractor to perform asbestos handling work. When construction, renovation, or demolition must occur at a specific facility, sampling for asbestos is performed, and contractors are hired to perform the asbestos handling work. Each contractor must obtain an asbestos handling permit from PREQB, report to PREQB, and prepare and submit to PREQB a final report at the end of its work, with a copy to PREPA. Available documentation related to asbestos-handling activities is located in the Asbestos Folder in the data room. PREPA is aware that certain non-generation facilities have asbestos containing materials in them, including, among others, the Monacillos Transmission Center and certain substations.

Various standards and requirements must be followed in handling, transporting, and disposing of asbestos, including Rule 422 of the Puerto Rico Regulations for the Control of Atmospheric Pollution ("PRRCAP") ("Asbestos Containing Material Management"), as well as various federal requirements including the 40 C.F.R. Part 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants for asbestos. PRRCAP Rule 422 requires that all personnel engaged in working on the handling, removal, and demolishing of asbestos-containing materials must be authorized, trained, certified, and registered with PREQB. Federal and state requirements also impose worker occupational safety requirements for asbestos activities.

C. Lead Mitigation

PREQB's Regulation for the Control of Lead-Based Paint Mitigation Activities applies to PREPA activities. PREPA hires a contractor to perform lead-based paint mitigation control activities for demolitions, renovations, and surface preparations at its power plants and other non-generation facilities where lead paint is identified through sampling and analysis. Lead-based paint is defined as paint or any other coating of surfaces containing lead equal to 5,000 parts per million or more or more than 1.0 mg/cm² using XRF. Lead-based paint mitigation permits are required from PREQB to perform the activities. Contractors performing lead-based mitigation activities must be certified by PREQB. After completion of the lead-based paint mitigation activities, the contractor submits a final report and disposal manifest to PREQB. Available documentation related to PREPA's lead-based paint mitigation activities, including lead-based paint mitigation permits and reports, is included in the Lead Mitigation Program Folder in the data room. In addition, at the times of sales and rentals, PREPA also performs lead testing.

III. Resource Conservation and Recovery Act and Waste-Related Issues

PREPA's waste-related programs aim to ensure that PREPA's generation, storage, and accumulation of solid waste comply with EPA and PREQB requirements. PREPA's non-generation facilities produce various categories of hazardous and non-hazardous waste. In addition, regulations related to the storage of used oil and the use of underground storage tanks also apply to PREPA's facilities. A high-level overview of these programs is provided below.

A. Generation of Hazardous Waste

Certain PREPA facilities are regulated generators of hazardous waste under the Resource Conservation and Recovery Act ("RCRA"). The RCRA Folder in the data room contains EPA Envirofacts RCRA Facility Information printouts for various PREPA facilities, including five (5) regional offices, the Neos building (PREPA's executive office building in Santurce), a battery farm, 26 technical operations offices, and a mechanical shop. Each of these facilities has a unique RCRA EPA identification number, which is required for generators of hazardous waste. There is a spreadsheet in the RCRA Folder in the data room listing the facility RCRA ID numbers and addresses for each facility.

According to the Envirofacts sheets, most of these facilities are conditionally exempt small quantity generators (also known as very small quantity generators), while a few are small quantity generators, including the Monacillos Technical Operations Office and the Ponce Technical Operations Office. None of these non-generation facilities is a large quantity generator, or a RCRA-permitted facility. Small quantity generators must comply with various RCRA requirements, including temporal and mass-based quantity and accumulation limits, waste identification and determination requirements, recordkeeping requirements, inspections of accumulation areas, container management and labeling requirements, manifest requirements, pre-transport requirements, preparedness and prevention requirements, and emergency procedures, among other things.⁵ Very small quantity generators must comply with significantly more limited requirements, which include mass-based quantity and accumulation limits, the need to make hazardous waste determinations, and the requirement to dispose of hazardous waste only at certain authorized facilities.

A subcategory of hazardous waste is universal waste. Many of PREPA's non-generation facilities are small quantity handlers of universal waste, primarily for lamps (e.g., light bulbs), which

⁵ See 40 C.F.R. § 262.16.

typically contain mercury. Through the universal waste program, EPA has promulgated streamlined management requirements for certain hazardous wastes, including batteries, lamps, and mercury-containing equipment.⁶ The universal waste regulations also contain various management requirements, including labeling requirements, temporal storage limits, training requirements, requirements to respond to releases, requirements related to exports, and requirements related to transporting waste and where universal waste may be sent, among other things.⁷ Universal wastes are not required to be shipped with a manifest.⁸ In addition to the general universal waste requirements, there are also tailored management requirements applicable to each category of universal waste, e.g., batteries, lamps, and other mercury-containing equipment.

The Monacillos Transmission Center was the subject of a March 2012 EPA RCRA inspection. PREPA submitted documentation and made corrections in response to various recommendations that arose out of the March inspection related to recordkeeping, labeling of containers and waste materials, having an emergency plan, and handling of wastes, drums, paints, and aerosols. Documentation regarding this inspection is in the RCRA Folder in the data room. To PREPA's knowledge, neither a NOV nor penalties were issued following this inspection.

On February 5, 2016, EPA conducted a RCRA inspection at the Monacillos Transmission Center, noting various compliance issues, including issues related to recordkeeping, labeling, storage of fluorescent lamps, and not disposing of cans of paint, solvent, and coating components. On February 13, 2016, PREPA responded to the issues raised by EPA describing corrective actions taken by PREPA and providing records, manifests, and photographs showing changes made in response to the inspection, including a service order for the disposition of the cans of unknown content and the cans of paints and solvents. Neither a penalty nor a NOV has been issued. Documentation related to the 2016 inspection is included in the RCRA Folder in the data room.

On July 20, 2016, EPA conducted an inspection at the Rio Piedras Mechanical Workshop at the San Juan Regional Center. On August 19, 2016, PREPA provided EPA with the requested documentation and notified EPA that it had disposed of spent lead acid batteries via a contractor, but did not currently have on file copies of the manifests used to dispose of the batteries. Documentation related to the Rio Piedras inspection is in the RCRA Folder in the data room. Thus far, EPA has not issued a NOV in connection with this inspection.

B. Underground Storage Tanks at PREPA's Technical Districts and Irrigation District

PREPA has 37 USTs at 19 facilities primarily located at technical district mechanical workshops. An inventory list of these facilities is located in the Underground Storage Tanks Folder in the data room. The facilities are regulated under RCRA.⁹ PREQB implements the UST program, and has issued Regulations for the Control of Underground Storage Tanks ("UST Regulations"). In 2015, PREQB issued revised UST Regulations, and EPA issued revisions to the federal UST regulations.¹⁰ On June 27, 2018, PREQB further revised its UST Regulations in response to EPA's 2015 amendments.¹¹ Among other things, the UST Regulations contain requirements for operation and

⁶ See 40 C.F.R. § 273.1.

⁷ See 40 C.F.R. Part 273.

⁸ See 40 C.F.R. §§ 273.19; 273.39.

⁹ See 42 U.S.C. §§ 6991, *et seq.*

¹⁰ See *Revising Underground Storage Tank Regulations—Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training; Final Rule*, 80 Fed. Reg. 41,566 (July 15, 2015).

¹¹ See *id.*

maintenance, tank design and installation, leak detection, spill and overfill control, corrective action, financial assurance, and tank closure.

Under the UST Regulations, a permit is required to install, operate, or close a UST. UST owners, such as PREPA, must register with PREQB and obtain an operation permit in order to operate a UST.¹² As a part of the operation permit application, an operator must include an operation plan. PREPA prepared applications and operation plans for each of the USTs at its technical district workshops. Currently, PREQB has approved operation permits for five (5) facilities (i.e., Caguas, Mayaguez, Aguadilla, San Sebastian, and Lajas workshops, covering nine (9) USTs), while the permit applications for the remaining USTs are pending PREQB approval. PREPA's remaining operation permit applications are in the Underground Storage Tanks Folder in the data room. Operation permits (and the associated plans) are renewed every three years.

Under the UST Regulations, PREPA must comply with operation and maintenance requirements, and also perform periodic testing and monthly inspections of its USTs. PREPA must also ensure that spills and overflows do not occur, and must adopt and implement a methodology to detect releases. PREPA must notify PREQB if a spill, overflow, release, or suspected release occurs, and must contain and clean up the release. Certain reporting and corrective actions must also take place.

On August 23, 2001, a gasoline spill (approximately 700-800 gallons) occurred at the Humacao automotive mechanical workshop. An emergency cleanup was conducted. Subsequently, PREPA hired a contractor to characterize and evaluate the impact to soil and groundwater resulting from the spill and to take samples around the UST. On December 19, 2001, PREPA informed PREQB that while soil samples showed the presence of hydrocarbons above the applicable limits, the groundwater testing did not show evidence of hydrocarbons. In 2003, PREPA received PREQB approval of its remediation plan. To PREPA's knowledge, this cleanup and remediation were subsequently performed and completed. PREPA has not received any recent follow-up communications from PREQB regarding this matter. Documentation related to the Humacao UST spill and its cleanup are included in the Underground Storage Tanks Folder in the data room.

In addition to the above, owners/operators must also obtain Closure Permits from PREQB before closing a UST. As a part of the closure process, the owner/operator must complete sampling to identify contamination, and if contamination is found, take corrective action. PREPA does not have any current Closure Permits. PREPA has, however, closed USTs in the past and is planning to close the UST at the Lajas irrigation station in the near future. PREPA's contractor is preparing a closure plan, but has not yet submitted a closure request to PREQB.

Under the UST Regulations, PREPA must also meet certain financial responsibility requirements for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases. PREPA is currently in compliance with the financial responsibility requirements (\$1,000,000 per incident and a \$1,000,000 annual aggregate amount), and documentation of this compliance is located in the Underground Storage Tanks Folder in the data room.

¹² Prior to the operation permitting requirement under the current regulations, UST facilities had to be registered with PREQB and obtain registration certifications. Facilities that were properly registered at the time PREQB's 2015 UST Regulations took effect qualified for a one-year extension of their certificates of registration. PREPA's USTs received such certificate extensions until October 30, 2016. Documentation of PREPA's certificates of registration are in the Underground Storage Tanks Folder in the data room.

As part of the new regulatory requirements, UST operators have to take courses and exams, and obtain certifications as Class A, B, and C operators, with re-certifications every three (3) years. Operation Permit renewal applications must include proof of up-to-date operator certification and training for every person involved in the operation of the UST. PREPA continues to certify its operators to account for personnel turnover. PREPA must also maintain a list of designated Class A, B, and C Operators and of records verifying that training and retraining, as applicable, have been completed.

PREPA has received several NOV's related to USTs in recent years:

- On August 7, 2014, PREPA received a letter from PREQB related to a compliance inspection at the Canóvanas mechanical workshop. PREQB requested information regarding the condition of various equipment, results of the last annual integrity test performed on the underground pressurized piping, and evidence of installation of automatic leak detectors in the piping. By letter dated August 19, 2014, PREPA provided PREQB with the requested information. No NOV or penalty was issued, and this case is closed.
- On January 17, 2014, PREQB conducted an inspection at the Bayamón mechanical workshop. On November 12, 2014, PREQB issued a NOV to PREPA regarding the Bayamón mechanical workshop, requesting information regarding ownership, the condition of various equipment, results of the last annual integrity test performed on the underground pressurized piping, and evidence of installation of automatic leak detectors in the piping. On December 10, 2014, PREPA provided the requested documentation and explained that it was in compliance with the regulations. As such, PREPA indicated its understanding that the case would be closed. PREPA received no further response or penalty from PREQB, and considers this case to be closed.
- On February 8, 2018, PREPA received a NOV from PREQB for the Manati transportation workshop related to noncompliance with PREQB's regulations regarding periodic operation and maintenance walkthrough inspections, operator training requirements, and requirements related to Class A, B, and C operators. On March 5, 2018, PREPA submitted a response contesting the NOV and outlining its compliance with the regulations, including conducting the required inspections. PREPA also provided various documentation and certifications for PREPA employees related to the training and certification requirements. PREPA is awaiting PREQB's response.
- On February 12, 2018, PREPA received a NOV from PREQB for the Caguas mechanical workshop related to noncompliance with PREQB's regulations regarding tank integrity tests and periodic operation and maintenance walkthrough inspections. The NOV included a penalty for the identified violations of \$2,000. By email dated February 20, 2018, PREPA sent PREQB documentation related to the periodic inspections and integrity testing it had performed. On March 8, 2018, PREPA submitted a formal response explaining its compliance with the regulations, showing the periodic inspections and the required integrity tests. PREQB dropped its request that PREPA pay a penalty.
- On April 24, 2018, PREPA received a NOV from PREQB related to the USTs at the Utuado workshop. The NOV concerns a failure to conduct leak detection testing, and identified a penalty for the identified violations of \$1,000. PREPA submitted the testing results on June 22, 2018, and on November 16, 2018, PREQB issued an Administrative Order directing compliance, which PREPA was notified of in January 2019. The Administrative Order cites noncompliance with two regulations related to failure to conduct annual leak detection testing

and failure to make leak detection reports available. PREQB proposed fines totaling \$25,000, and ordered PREPA to provide the annual leak detection report and to make leak detection reports available. On January 23, 2019, PREPA contested the Administrative Order, asking for it to be dropped, asserting that PREPA had already provided PREQB with the annual leak detection test, and that the testing delays were caused by Hurricane Maria. PREQB has agreed to drop the Administrative Order, and PREPA has negotiated penalties of \$1,000.

- On January 22, 2019, PREPA received a NOV for the UST at the Humacao workshop related to noncompliance with PREQB requirements regarding periodic testing of spill prevention equipment, monitoring, testing of various equipment (lines, suction piping, and tanks), testing of leak detectors for tanks and sump containers, and operator training requirements for Class C operators, and proposing penalties of \$4,500. PREPA is preparing an answer to the NOV and plans to contest the proposed penalty.

Documentation related to these NOVs is located in the Underground Storage Tanks Folder in the data room.

C. Used Oil

PREQB's Regulation for the Management of Non-Hazardous Solid Waste contains provisions for the management of used oil. The PREQB used oil regulations govern the generation, collection, storage, transportation, and disposal of used oil. PREPA's facilities generate, store, and collect oil, but PREPA does not transport used oil for disposal. PREPA files annual reports with PREQB documenting that it is not engaged in transportation activities. These reports from 2015-2018 are in the Used Oil Program Folder in the data room. PREPA uses a contractor to transport used oil for disposal (such as to recycling plants).

Generators and facilities that have used oil collection centers must obtain a used oil generator identification number from PREQB before beginning operation. A list of 33 facilities with used oil generator identification numbers is located in the Used Oil Program Folder in the data room. These facilities include many of PREPA's mechanical workshops and several of PREPA's generation plants. Permits are required from PREQB for various activities related to used oil, including for entities that build or operate installations for handling used oil, including used oil collection centers that store more than 220 gallons of used oil (as do many of PREPA's facilities).

PREPA has various permits from PREQB that provide "General Permission for Used Oil Storage Installations." These include storage permits for Used Oil Collection Centers operated by PREPA. Many of PREPA's mechanical workshops and generating facilities are required to obtain these storage permits. The permits are located in the Used Oil Program Folder in the data room.

The permits issued by PREQB and the used oil regulations require PREPA, among other things, to take necessary measures to avoid the improper discharge or disposal of used oil; comply with requirements to submit SPCC plans; keep tanks in good condition; label tanks with the phrase "Used Oil;" comply with operation and maintenance requirements; and notify PREQB in the event of incidents of noncompliance, such as spills. The regulations also require the clean-up and containment of spills, and proper handling and disposal of oil-contaminated materials. As a part of the used oil transportation process, used oil manifests are also created and filled out by various parties in the chain of custody. PREPA submits the manifests along with its reports to PREQB under this program.

D. Biomedical Wastes

PREQB has issued regulations governing the generation, handling, transportation, and disposition of biomedical waste. PREPA has biomedical waste generator identification numbers for six (6) of its facilities that have medical dispensaries and provide first aid services.¹³ These facilities include four (4) PREPA generation facilities (San Juan, Palo Seco, Aguirre, Costa Sur), as well as the Monacillos and Neos Buildings. The expiration date for the biomedical waste generator identification numbers is January 18, 2021. PREPA also maintains a Plan for the Management of Regulated Biomedical Waste for its facilities, which Plan was updated at the end of 2017 and is located in the Regulated Medical Waste Folder in the data room, and performs training annually for PREPA employees. PREPA also hires a contractor to collect the biomedical waste from each facility for disposal, and the contractor produces a transportation manifest and provides a copy to PREPA.

IV. Emergency Planning and Community Right-to-Know Act

Various PREPA non-generation facilities must file Tier II reports under EPCRA. Facilities that file these reports include mechanical shops, the Neos Building, and an irrigation station. These reports are located in the EPCRA Reporting Folder in the data room. PREPA also evaluates Safety Data Sheets for products used in its operations and participates in local emergency planning committee meetings.

V. Spill Prevention, Control, and Countermeasure (“SPCC”) Program

Under Section 311 of the CWA, EPA has issued oil pollution prevention regulations setting forth requirements for prevention of, preparedness for, and response to oil discharges.¹⁴ To prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil, the regulations require facilities to develop and implement SPCC plans, and establish procedures and equipment requirements. PREPA has prepared SPCC plans for its generating stations, transmission and distribution substations, technical districts, and certain other non-generation facilities. PREPA’s SPCC plans are located in the SPCC Plans Folder in the data room. These plans are updated every five (5) years. PREPA’s program also includes overhauls to dikes and fuel tanks.

To meet its obligations under the CWA’s SPCC program requirements and the 1999 Consent Decree, PREPA continues to implement corrective measures at its facilities. Pursuant to the terms of the 1999 Consent Decree, PREPA was required to submit SPCC plans for several of its generation plants, as well as the Monacillos Transmission Center, and to implement a Spill Prevention Maintenance and Construction Program (“SPMCP”). In 2003, PREPA submitted an updated version of the SPCC plans for the subject facilities, including the Monacillos Transmission Center, which version EPA approved. As of December 2009, PREPA completed all compliance projects under the SPMCP of the 1999 Consent Decree, in accordance with the established scope of work, and submitted its final report for the program.

PREPA was required to adopt and implement additional SPCC plans in response to an amendment to the SPCC regulations in July 2002 that applied to PREPA’s oil-filled equipment at its electrical transmission and distribution substations. These requirements generally became effective on November 10, 2011. The regulations, as amended, require the containment of leaks from oil-filled

¹³ PREPA permanently closed a medical dispensary at a seventh location at Ponce in 2016, in part due to fiscal considerations.

¹⁴ 33 U.S.C. § 1321; 40 C.F.R. Part 112.

electrical equipment in PREPA distribution substations.¹⁵ Alternative requirements that involve monitoring and inspection and the development of a contingency plan are available to certain qualified oil-filled equipment.¹⁶ PREPA has a program to comply with these SPCC requirements. In 2008, PREPA commenced preparation of SPCC plans for its substations to comply with the regulations, and the first SPCC plans for these substation facilities were completed by 2010. Updated plans for the substation facilities were completed in 2015, and the next updates are required to be completed in 2020. PREPA has also implemented monitoring and inspection requirements under the regulations, and installed spill response material at its substations. In addition, although PREPA has completed the construction of secondary containment at many substations located adjacent to water bodies, installation of secondary containment infrastructure remains ongoing.

PREPA has SPCC plans for its technical districts/distribution offices, commercial offices, and telecommunications and irrigation facilities in place. PREPA is behind schedule on updating its plans (which are required to be updated every five (5) years). In the meantime, PREPA complies with its existing, unrevised plans.

VI. Underground Injection Control Facilities

PREPA's facilities include generating stations, regional, commercial and technical offices, warehouses, workshops, electrical substations and others that are located in different parts of Puerto Rico. Currently, PREPA has underground injection control ("UIC") systems for the disposal of sanitary water at many of these facilities. These sanitary facilities are regulated under PREQB's Underground Injection Control Regulation. This program primarily consists of the construction, operation, and permitting of septic systems at certain sites, and the closing of septic systems at other sites. An inventory of PREPA's UIC facilities is located in the Underground Injection Control Facilities Folder in the data room.

Given the large number of PREPA UIC facilities, PREPA has been developing compliance plans in a step-by-step fashion. For UIC facilities for which PREPA wishes to cease underground injection activities instead of continuing to operate (and attaining the requisite permit), the regulation allows PREPA to develop an alternate compliance plan for closing the UIC facility. Such plans include plugging procedures and the alternate methods to be used for the disposal or storage of injection fluids.

In general, as a first option, PREPA is developing alternate compliance plans for UIC facilities that contemplate the closing of septic systems where sanitary discharges can be connected to the facilities of the Puerto Rico Aqueduct and Sewer Authority ("PRASA"). These alternate compliance plans consist of a detailed description of the UIC facility and a sampling plan that must be approved by PREQB prior to proceeding with the closure activities. After conducting sampling in connection with the UIC facility and determining that the results are in compliance with PREQB requirements, closure activities of the UIC facility can begin. For sites where it is not possible to connect to an existing PRASA line, the second option is to build above-ground retention tanks that require permits from PREQB for their use. When this option is also not feasible, PREPA must make necessary adjustments to bring the UIC facility into compliance with the regulations and obtain the corresponding permit.

¹⁵ See 40 C.F.R. §112.7(c).

¹⁶ See 40 C.F.R. §112.7(k).

Due to the large number of PREPA UIC facilities and the cost involved to carry out the work necessary to achieve compliance with the regulations, PREPA presented a two-phase compliance plan to PREQB. The first phase includes the preparation and implementation of compliance plans for PREPA's generating stations. Once this first phase is completed, PREPA expects to move to the second phase which would cover other PREPA facilities, such as regional, commercial, and technical offices; warehouses; mechanical shops; telecommunications facilities; and substations.

While PREPA's efforts have largely been focused on completing the first phase of its compliance plan (i.e., connecting the UIC facilities at its major generating stations to PRASA lines and obtaining PREQB approval to close those facilities), PREPA has attained compliance status or moved forward with the execution of alternate compliance plans for some non-generation facilities. For the Martín Peña Substation, PREQB approved of an alternate compliance plan for the site, and subsequently approved of the closure of the UIC facility after reviewing sampling results for the site. A project for final closure is pending.

PREPA has also obtained several permits at non-generation facilities in compliance with the UIC Regulation. The UIC facilities at the Utuado Technical District Office and Monte del Estado Santa Ana Telecommunications Site have received the required PREQB permits. The Monte del Estado permit and Utuado permit have expired, but PREPA's renewal applications are pending before PREQB.

With respect to Utuado, on September 30, 2014, PREQB issued a NOV alleging that PREPA lacked a UIC permit for the Utuado facility and requesting that PREPA submit a permit application. On October 3, 2014, PREPA responded to the NOV, explaining that it already had a permit for the Utuado UIC facility, and provided a copy of the permit. Accordingly, PREPA requested that PREQB drop the case. No penalties were issued and the case is closed.

VII. Special Use Permits for Telecommunication Stations

PREPA has special use permits from various state and federal agencies to locate and operate forest-based telecommunications towers. PREPA has permits issued by the Puerto Rico Department of Natural and Environmental Resources for the following facilities: Monte Del Estado in the Maricao Forest, Cerro La Santa in the Carite Forest; and Cerro Luna in Guanica Forest. PREPA also has a special use permit from the U.S. Forest Service that covers 14.52 acres for telecommunications facilities in the El Yunque Caribbean National Forest. PREPA also has a permit from the U.S. Army for facilities at Camp Santiago. The terms of these land use permits include rental agreements and provide for the payment of annual rent. These facilities are required to have a fire prevention certificate from the Puerto Rico Fire Department. PREPA's permits and the fire prevention certificates are located in the Forest and Land Use Permits Folder in the data room.

VIII. Emergency Generators

PREPA's non-generation facilities house a number of emergency generators. PREPA has secured General Permits for Commercial/Industrial Emergency Generators from PREQB to cover these emergency generators, which permits must be renewed every five (5) years. PREPA's emergency generator permits for the San Juan, Mayaguez, Arecibo, Bayamón, Caguas, Carolina, and Ponce Regions are located in the Emergency Generator Permits Folder in the data room.

On July 22, 2014, PREQB notified PREPA that the emergency generator at the Guayama Technical Office was operating in violation of its general permit requirement that the emergency generator have adequate gas dispersion chimney ventilation, and that a fire pump was installed without the required construction and operation permits, as required by the Puerto Rico Regulations

for the Control of Atmospheric Pollution. On September 18, 2014, PREPA responded to PREQB by agreeing to modify the existing chimney at the emergency generator as soon as possible and informed PREQB that, on September 14, 2014, PREPA had filed for the required construction permit for the fire pump with PREQB, and requested that the case be closed. On November 13, 2014, PREPA also obtained the necessary operation permit for the fire pump. This permit is in the Emergency Generator Permits Folder in the data room. This case was closed without a penalty being issued.

IX. Corporate Recycling Program

PREPA's Recycling Program allows it to comply with the Puerto Rico Government's efforts to achieve the goals established in Law No. 70 of September 18, 1992, as amended, known as the Law of Reduction, Reuse, and Recycling of Solid Waste in Puerto Rico. PREPA's Recycling Program includes all of PREPA's recycling-related activities. PREPA maintains a Corporate Recycling Plan, which has been certified by the Puerto Rico Solid Waste Authority ("SWA"). PREPA must submit a revised plan every 18 months. PREPA submitted its current revised plan in December 2018, and the most recent certificate of compliance from SWA was issued on January 15, 2019. This certificate is located in the Recycling Program Folder in the data room.

PREPA's program uses recycling as the first option to dispose of paper, tires, cardboard, oils, ink cartridges, batteries, lighting, beams, computers, electronic equipment, and electrical equipment contaminated with PCBs. As part of the program PREPA prepares quarterly reports to SWA. These reports include information about recycling activities carried out during the year, implemented programs, the level of participation, and the amount of materials recovered. The quarterly reports also include information and manifests related to the recycling and disposal of various types of materials, including tires, used oil, and other categories. PREPA's quarterly reports for the last several years are included in the Recycling Program Folder in the data room. PREPA is in compliance with the current 35% recycling requirement.

X. Noise Pollution Control Regulation

PREPA must respond to noise complaints from citizens by performing noise studies where required. There have not been any complaints or noise studies performed for the past several years.

There had been an administrative order and proceeding regarding noise violations at Substation 2401 in Canóvanas, but the administrative order in this case was dismissed in 2012. Documentation is included in the Noise Control Folder in the data room.

XI. Light Pollution Control Regulation

Puerto Rico's Light Pollution Control and Prevention Program Law (Law No. 218) was adopted on August 9, 2008, and subsequently amended in 2014. PREQB has issued regulations to implement this program, which regulations were most recently amended on August 9, 2016. The law and regulations establish various standards for lighting, and adopt a transition period to comply with the law's requirements. For existing public luminaries (mostly outdoor) a twenty-year (20-year) compliance period began on January 1, 2015, except for certain luminaries that were given only a ten-year (10-year) compliance period (classes 1, 5, 6, 7 and 8) from that date. Classes 1, 5, 6, 7, and 8, generally encompass lighting located in special environmental and undeveloped areas, including dark tracts, such as areas dedicated to parks conservation areas, etc.; a special Vieques zone to protect Mosquito Bay; a special zone to protect La Parguera Bioluminescent Bay; a special zone to protect Laguna Grande; and a zone for beaches used by sea turtles and areas for egg-

laying and nesting. In August 2017, PREPA established a procedure for lighting changes applicable to classes 5 through 8, which is included in the Light Pollution Folder in the data room.

PREPA had begun the process of acquiring replacement lighting for the special environmental and undeveloped areas, but Hurricanes Irma and Maria affected PREPA's compliance schedule. As a part of the hurricane recovery effort, PREPA has replaced damaged lights that are subject to the regulation with lights that are compliant with the regulations. After this recovery effort is complete, PREPA would identify any non-compliant lighting fixtures that remain. This process is ongoing.

PREPA also expects to receive turtle friendly light fixtures in March 2019. PREPA will coordinate with PREQB regarding their installation.

XII. Waste Tire Regulation

PREQB has issued Regulations for the Proper Handling of Tires, including disposal of discarded tires. Certain PREPA non-generation facilities have obtained a registration number as a generator of discarded tires. These registrations are located in the Waste Tire Generator Folder in the data room. In accordance with the regulations, PREPA prepares a manifest to track the disposal of tires. PREPA also reports on discarded tires as a part of its quarterly recycling reports to the SWA.

XIII. Clean Water Act Pesticide General Permits Issued for PREPA's Irrigation Systems and Requirements Under the Federal Insecticide, Fungicide, and Rodenticide Act

The Costa Sur, Isabela, and Valle de Lajas Irrigation Districts are classified as "operators" of a point source discharge of pollutants resulting from the application of pesticides. These irrigation districts are a part of a division under PREPA's generation division. The districts are eligible for permit coverage and authorized to discharge to waters of the United States in accordance with the requirements of the 2016 Pesticide General Permit ("PGP") for Discharges from the Application of Pesticides. The 2016 PGP is issued under the CWA's National Pollutant Discharge Elimination System program, and expires on October 31, 2021. PREPA's Notices of Intent to be covered under the PGP, the PGPs, PREPA's Pesticide Discharge Management Plans, and PREPA's annual reports for the last few years are located in the Pesticide Permits Folder in the data room.

The 2016 PGP requires all operators to control discharges as necessary to meet applicable numeric and narrative state water quality standards; requires operators to develop a Pesticide Discharge Management Plan; requires operators to report spills and adverse incidents resulting from a discharge from a pesticide application; and requires operators to submit an annual report, among other things.¹⁷

The PGP does not negate the requirements under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA") and its implementing regulations to use registered pesticides consistent with the pesticide product's labeling. Pesticide applications in violation of certain FIFRA requirements could also be a violation of the permit and therefore a violation of the CWA (e.g., exceeding label application rates).

¹⁷ More information about the 2016 PGP is available on EPA's website: <https://www.epa.gov/npdes/pesticide-permitting-2016-pgp>.

XIV. Prior PREPA Due Diligence

PREPA conducts an environmental due diligence assessment when it is considering the purchase or sale of real property. This assessment evaluates issues such as the presence of lead and asbestos, among other things. However, the fact that such an assessment was conducted does not mean that PREPA actually bought or sold the property. Due diligence reports previously completed by PREPA are in the PREPA Due Diligence Reports Folder in the data room.

XV. Additional Environmental Compliance

As a condition of expected federal funding PREPA anticipates receiving from the Federal Emergency Management Agency (“FEMA”), additional environmental requirements are likely to apply to the planning, contracting, and reconstruction of T&D facilities. The National Environmental Policy Act requires federal agencies to consider the environmental impact of proposed actions prior to making decisions or taking actions that may “significantly affect the quality of the human environment,”¹⁸ including those related to endangered species, and Environmental and Historical Preservation (“EHP”) compliance reviews are conducted for all applicable projects that receive FEMA funding.¹⁹ Under the Guide for Permanent Work in Puerto Rico, FEMA compliance reviews will proceed as soon as scopes of work have been established and agreed upon.²⁰ If PREPA, or its contractors conducting T&D reconstruction, do not comply with EHP-related conditions, FEMA may de-obligate the funding for any non-compliant work.

¹⁸ 42 U.S.C. § 4321 et seq.

¹⁹ See FEMA Directive 108-1 Environmental Planning and Historic Preservation Responsibilities and Program Requirements.

²⁰ See Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work (FEMA-4339-DR-PR) (April 2018).