

# NFEnergía LLC

San Juan Micro-Fuel Handling Facility

Resource Report 1 General Project Description

> Docket No. CP21-\_\_\_-000

September 15, 2021

# NFEnergía LLC SAN JUAN MICRO-FUEL HANDLING FACILITY RESOURCE REPORT 1—GENERAL PROJECT DESCRIPTION

Minimum Filing Requirements for Environmental Reports:	Addressed in Section:
1. Describe and provide location maps of all jurisdictional facilities, including all aboveground facilities associated with the project (such as meter stations, pig launchers/receivers, valves) to be constructed, modified, abandoned, replaced, or removed, including related construction and operational support activities and areas such as maintenance bases, staging areas, communications towers, power lines, and new access roads (roads to be built or modified). As relevant, the report must describe the length and diameter of the pipeline, the types of aboveground facilities that would be installed, and associated land requirements. It must also identify other companies that must construct jurisdictional facilities related to the project, where the facilities would be located, and where they are in the Federal Energy Regulatory Commission's approval process.	Section 1.2, Appendix 1A
<ul> <li>2. Identify and describe all non-jurisdictional facilities, including auxiliary facilities that will be built in association with the project, including facilities to be built by other companies.</li> <li>(i) Provide the following information:</li> </ul>	Section 1.9
<ul> <li>(A) a brief description of each facility, including as appropriate: ownership, land requirements, gas consumption, megawatt size, construction status, and an update of the latest status of federal, state, and local permits/approvals;</li> <li>(B) the length and diameter of any interconnecting pipeline;</li> <li>(C) current 1:24,000/1:25,000 scale topographic maps showing the location of the facilities:</li> </ul>	
<ul> <li>(D) correspondence with the appropriate State Historic Preservation Officer or duly authorized Tribal Historic Preservation Officer for tribal lands regarding whether properties eligible for listing on the National Register of Historic Places would be affected;</li> <li>(E) correspondence with the United States Fish and Wildlife Service (and National Marine Fisheries Service, if appropriate) regarding potential impacts of the proposed facility on federally listed threatened and endangered species; and</li> </ul>	
(F) for facilities within a designated coastal zone management area, a consistency determination or evidence that the owner has requested a consistency determination from the state's coastal zone management program.	
<ul> <li>(ii) Address each of the following factors and indicate which ones, if any, appear to indicate the need for the Commission to do an environmental review of project-related non-jurisdictional facilities.</li> <li>(A) whether or not the regulated activity comprises "merely a link" in a corridor type project (e.g., a transportation or utility transmission project).</li> </ul>	
<ul> <li>(B) whether there are aspects of the non-jurisdictional facility in the immediate vicinity of the regulated activity which uniquely determine the location and configuration of the regulated activity.</li> <li>(C) the extent to which the entire project will be within the Commission's jurisdiction.</li> </ul>	
(D) the extent of cumulative federal control and responsibility.	
<ul> <li>3. Provide the following maps and photos:</li> <li>(i) Current, original United States Geological Survey 7.5-minute series topographic maps or maps of equivalent detail, covering at least a 0.5-mile-wide corridor centered on the pipeline, with integer mileposts identified, showing the location of rights-of-way, new access roads, other linear construction areas, compressor stations, and pipe storage areas. Show nonlinear construction areas on maps at a scale of 1:3,600 or larger keyed graphically and by milepost to the right-of-way maps.</li> </ul>	Appendix 1A
(ii) Original aerial images or photographs or photo-based alignment sheets based on these sources, not more than 1 year old (unless older ones accurately depict current land use and development) and with a scale of 1:6,000 or larger, showing the proposed pipeline route and location of major aboveground facilities, covering at least a 0.5-mile-wide corridor, and including mileposts. Older images/photographs/alignment sheets should be modified to show any residences not depicted in the original. Alternative formats (e.g., blue-line prints of acceptable resolution) need prior approval by the environmental staff of the Office of Energy Projects.	
(iii) In addition to the copy required under 18 Code of Federal Regulations ("CFR") §157.6(a)(2) of this chapter, applicant should send two additional copies of topographic maps and aerial images/photographs directly to the environmental staff of the Office of Energy Projects.	

Minimum Filing Requirements for Environmental Reports:	Addressed in Section:
4. When new or additional compression is proposed, include large scale (1:3,600 or greater) plot plans of each compressor station. The plot plan should reference a readily identifiable point(s) on the United States Geological Survey maps required in paragraph (c)(3) of this section. The maps and plot plans must identify the location of the nearest noise-sensitive areas (schools, hospitals, or residences) within 1 mile of the compressor station, existing and proposed compressor and auxiliary buildings, access roads, and the limits of areas that would be permanently disturbed.	Appendix 1A
5.	Not Applicable
<ul> <li>(i) Identify facilities to be abandoned, and state how they would be abandoned, how the site would be restored, who would own the site or right-of-way after abandonment, and who would be responsible for any facilities abandoned in place.</li> <li>(ii) When the right-of-way or the easement would be abandoned, identify whether landowners were given the opportunity to request that the facilities on their property, including foundations and below ground components, be removed. Identify any landowners whose preferences the company does not intend to honor, and the reasons therefore.</li> </ul>	
6. Describe and identify by milepost, proposed construction and restoration methods to be used in areas of rugged topography, residential areas, active croplands, sites where the pipeline would be located parallel to and under roads, and sites where explosives are likely to be used.	Not Applicable (see Section 1.4)
7. Unless provided in response to Resource Report 5, describe estimated workforce requirements, including the number of pipeline construction spreads, average workforce requirements for each construction spread and meter or compressor station, estimated duration of construction from initial clearing to final restoration, and number of personnel to be hired to operate the proposed MFH Facility.	Not Applicable (operation workforce see Section 1.5)
8. Describe reasonably foreseeable plans for future expansion of facilities, including additional land requirements and the compatibility of those plans with the current proposal.	Section 1.6
9. Describe all authorizations required to complete the proposed action and the status of applications for such authorizations. Identify environmental mitigation requirements specified in any permit or proposed in any permit application to the extent not specified elsewhere in this section.	Section 1.7
10. Provide the names and mailing addresses of all affected landowners specified in 18 CFR §157.6(d) and certify that all affected landowners will be notified as required in 18 CFR §157.6(d).	Section 1.8, Appendix 1D (Privileged & Confidential)

# NFEnergía LLC SAN JUAN MICRO-FUEL HANDLING FACILITY RESOURCE REPORT 1—GENERAL PROJECT DESCRIPTION

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# ACRONYMS AND ABBREVIATIONS

BOG	boil-off gas
CCTV	closed-circuit television
CFR	Code of Federal Regulations
DCS	Distributed Control System
FERC	Federal Energy Regulatory Commission
FSU	floating storage unit
GCU	gas combustion unit
gpm	gallons per minute
LNG	liquefied natural gas
m <sup>3</sup>	cubic meters
MFH Facility	San Juan Micro-Fuel Handling Facility
MMscfd	million standard cubic feet per day
NFEnergía	NFEnergía LLC
NFPA	National Fire Protection Association
OGPe	Oficina de Gerencia de Permisos (Permits Management Office)
Port Authority	Autoridad de los Puertos de Puerto Rico (Puerto Rico Port Authority)
PREPA	Puerto Rico Electric Power Authority
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency

#### NFEnergía LLC SAN JUAN MICRO-FUEL HANDLING FACILITY RESOURCE REPORT 1—GENERAL PROJECT DESCRIPTION

# 1.0 INTRODUCTION

NFEnergía LLC ("NFEnergía") is seeking authorization from the Federal Energy Regulatory Commission ("FERC") under Section 3 of the Natural Gas Act to continue operating the San Juan Micro-Fuel Handling Facility ("MFH Facility"), a liquefied natural gas ("LNG") import and regasification facility. The MFH Facility is located on approximately 6.1 paved and fenced acres of an industrial area at Wharves A and B of the Puerto de San Juan ("Port of San Juan"). Puerto Rico, which is situated among existing industrial uses in the north of Puerto Rico where it can supply power generation sources serving nearby load centers using minimal additional infrastructure. To operate the MFH Facility, "pocket-sized" LNG vessels (also called "shuttle vessels") bring LNG into the San Juan Harbor where the LNG is transferred from the shuttle vessel to a non-jurisdictional floating storage unit ("FSU") vessel that is semi-permanently moored adjacent to the MFH Facility site. The FSU transfers LNG onshore where certain quantities remain liquefied and are transloaded onto trucks for over-the-road delivery to end users and certain quantities are regasified and made available to Units 5 and 6 of the adjacent San Juan Power Plant via a 75-foot long, 10-inch diameter segment of power plant piping. The MFH Facility has a regasification capacity of 130 million standard cubic feet per day ("MMscfd") and a truck loading capacity of 87.52 MMscfd.

NFEnergía initially developed the MFH Facility to serve its commercial customers via a truck loading operation for distribution of LNG for regasification and use at behind-the-fence power generation facilities across Puerto Rico—typically multinational companies with manufacturing operations. In July 2018, Puerto Rico Electric Power Authority ("PREPA") issued a request for proposals to retrofit Units 5 and 6 of the San Juan Power Plant to enable dual-fuel capability and to supply PREPA with natural gas. NFEnergía participated in that competitive process and was chosen as the successful bidder. PREPA and NFEnergía entered into a contract to effectuate the award in March 2019 and the MFH Facility began operating in March 2020 and became fully operational in May 2020.

FERC's National Environmental Policy Act review process requires that an applicant submit an Environmental Report consisting of up to 13 individual resource reports. This resource report is consistent with and meets or exceeds all applicable FERC filing requirements. A checklist showing the status of FERC's filing requirements for Resource Report 1 (18 Code of Federal Regulations ["CFR"] § 380.12) is included before the table of contents.

Resource Report 1 provides a description of the MFH Facility and its purpose and need. This resource report also includes a description of the land requirements, and applicable regulatory approvals and coordination.

# 1.1 Purpose and Need

The purpose of this application is to obtain the authorization needed to enable the MFH Facility to achieve the following: to continue to meet existing demand for imported natural gas for delivery to Puerto Rico commercial and utility customers; to continue to meet fuel supply obligations for gas-fired electric generation that, based on fuel diversity and energy supply issues in Puerto Rico, improves grid stability; to continue to enable electric generation and other fuel

uses that support improvements in public health and air quality in the San Juan region and that reduce sulfur dioxide emissions in particular; and to continue to support the efforts of PREPA to reduce electricity rates for its customers. Specifically, the MFH Facility is needed to enable the continued import, processing and distribution of natural gas to meet the essential needs of the traditionally underserved market in Puerto Rico.

The continued operation of the MFH Facility and its import, processing, and distribution infrastructure is needed for several reasons. First, the MFH Facility supports Puerto Rico's existing demand for natural gas for utility and commercial customers and enables that demand to continue to be met.

Second, continued operation of the MFH Facility is needed to support grid stability. Puerto Rico continues to face critical grid reliability concerns following major seismic events and natural disasters, which have historically resulted in considerable damage to public and private infrastructure. PREPA has expressed its concerns regarding these impacts on Puerto Rico's ability to generate and provide electrical power to Puerto Rico, which conditions it considers to "threaten lives, public health and safety."<sup>1</sup> PREPA's Costa Sur generation facility and the Eco Eléctrica, LLC generation facility were specifically impacted by recent natural disasters, necessitating greater generation reliance on Puerto Rico's remaining facilities. Prominent among these is PREPA's San Juan Power Plant, which is powered in part by the MFH Facility. PREPA considered the San Juan Power Plant "absolutely essential" to keep in operation to maintain the levels of baseload power for the grid that have been available since the MFH Facility commenced operations.<sup>2</sup> The MFH Facility's continued, secure and direct supply of fuel for Units 5 and 6 of the San Juan Power Plant next door to the MFH Facility and for other distributed facilities across Puerto Rico via its truck loading service, are necessary to support a stable grid baseload capacity and energy use. The greater resiliency of the power grid supplied by natural gas displaces the need for local emergency generators, many of which run on imported diesel and could create and exacerbate significant sulfur dioxide exceedances following a natural disaster. Additionally, natural gas is needed to help balance out the variability that can come from renewable energy sources because natural gas plants can be fired on an on-demand basis as a source of fuel. As renewable energy resources continue to be added to the electric grid in Puerto Rico, continued use of natural gas-fired generation is needed to ensure a stable power grid and to increase the resilience of the power system.

Third, the continued operation of the MFH Facility is a vital component to maintaining the strength of Puerto Rico's fuel diversity and energy supply. Fuel oil and diesel, each of which generate far greater emissions and are much more carbon intensive than natural gas, continue to provide the vast majority of Puerto Rico's energy needs and are bound to Puerto Rico's aging and often unreliable infrastructure.<sup>3</sup> When Units 5 and 6 of the San Juan Power Plant exclusively burned diesel, PREPA had to limit dispatch of those resources to manage emissions constraints.

<sup>&</sup>lt;sup>1</sup> See Request for Approval of Request for Proposals for Temporary Emergency Generation, Government of Puerto Rico Public Service Regulatory Board, Puerto Rico Energy Bureau, March 3, 2020, available at: <u>http://energia.pr.gov/wpcontent/uploads/2020/03/Resolution-and-Order-NEPR-AP-2020-0001.pdf</u>.

<sup>&</sup>lt;sup>2</sup> See Comments and Statement of Support of PREPA to the FERC dated July 17, 2020 (Attachment D to the Answer of New Fortress Energy LLC to the Order to Show Cause [FERC Docket No. CP20-466-000]).

<sup>&</sup>lt;sup>3</sup> As of Fiscal Year 2019, 40% of generation in Puerto Rico was oil-fired (as compared to a national average in the U.S. of 4%). 2020 Fiscal Plan for the Puerto Rico Oversight, Management and Stability Act at 14, available at: <u>https://bpb.opendns.com/b/https/drive.google.com/file/d/1ayjLxr74cKpFo4B2sAToSj-OeJOYvFO5/view?usp=sharing</u>.

The MFH Facility and the fuel it provides to PREPA have enabled Units 5 and 6 to run more efficiently and cleanly on natural gas, supporting PREPA in its efforts to achieve significantly reduced air emissions per unit of output. Continued operation of the MFH Facility also provides distributed end users with the option to use cleaner burning natural gas via the MFH Facility's truck loading operations and provides a secure, reliable source of fuel to power local businesses. The MFH Facility is needed to continue to secure these benefits.

Fourth, continued operation of the MFH Facility is needed to support PREPA's efforts to achieve regional emissions reductions. Portions of San Juan do not satisfy the United States Environmental Protection Agency's ("USEPA") National Ambient Air Quality Standards for public health based on sulfur dioxide emissions (i.e., those areas are in non-attainment under the Clean Air Act). Combustion of diesel fuel, both at the San Juan Power Plant and at NFEnergía's customers' distributed facilities, exacerbates these non-attainment conditions. The MFH Facility allows both Units 5 and 6 of the San Juan Power Plant and NFEnergía's trucking customers in the region to use natural gas, and by doing so, it displaces the use of diesel as the alternative fuel source. This results in beneficial reductions in air emissions and facilitates Puerto Rico's efforts to meet USEPA's National Ambient Air Quality Standards. Disrupting the supply of LNG to the MFH Facility, and in turn to its customers, would reverse these air quality and public health improvements.<sup>4</sup>

Finally, the MFH Facility's continued operation supports lower fuel costs to NFEnergía's customers. PREPA's continued use of natural gas supplied by the MFH Facility to power Units 5 and 6 of the San Juan Power Plant will ensure the continuation of dramatically lower power costs for residents and businesses in Puerto Rico. Natural gas is historically substantially cheaper than diesel<sup>5</sup> and, after taking heat rates into consideration, burning natural gas instead of diesel provides even greater reductions in the cost per electric output. PREPA estimated that converting Units 5 and 6 to use natural gas would result in "significant projected fuel cost savings of \$500 million over the next five years,"<sup>6</sup> which will yield fuel cost savings for its electricity consumers. The MFH Facility's operation also ensures continued delivery of natural gas throughout Puerto Rico, which supply is needed for NFEnergía's customers to take advantage of lower operational costs when compared with historically high cost power sources, such as diesel. Further, an increase in the number and type of fuel suppliers in Puerto Rico is necessary to reduce the likelihood of supply chain disruptions and to stimulate competition, thus lowering costs.

# **1.2 Project Location and Description of Facilities**

NFEnergía proposes to continue to operate its MFH Facility at Wharves A and B of the Port of San Juan, Puerto Rico. An overview map of the MFH Facility is shown on figure 1-1 in

<sup>&</sup>lt;sup>4</sup> See Comments and Statement of Support of PREPA to the FERC dated July 17, 2020 (Attachment D to the Answer of New Fortress Energy LLC to the Order to Show Cause (FERC Docket No. CP20-466-000)) (stating that "PREPA can make maximum use of San Juan Units 5 and 6, given the controlling annual emissions limits and the greater emissions that result from the combustion of diesel fuel, only if natural gas continues to be available").

<sup>&</sup>lt;sup>5</sup> Puerto Rico Integrated Resource Plan, Submitted by Siemens Industry, pg. 7-1 (Rev.2; June 6, 2019); available at <u>https://aeepr.com/es-pr/QuienesSomos/Ley57/Plan%20Integrado%20de%20Recursos/IRP2019%20-%20Ex%201.00%20-%20Main%20Report%20%20ReV2%2006072019.pdf</u> (stating that "natural gas has been significantly less expensive since 2009 compared to premium liquid fuels such as diesel and residual fuel oil").

<sup>&</sup>lt;sup>6</sup> 2019 Fiscal Plan for the PREPA, certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019; available at https://aeepr.com/es-pr/Documents/Exhibit 1 - 2019 Fiscal\_Plan\_for\_PREPA\_Certified\_FOMB on\_June\_27\_2019.pdf.

appendix 1A. The MFH Facility site is depicted on topographic and aerial maps in appendix 1A, figures 1-2 and 1-3, respectively. An as-built MFH Facility General Arrangement Plan/plot plan is provided in figure 1-4 of appendix 1A.

The MFH Facility is located in the Puerto Nuevo section of an industrial port area known as the Port of San Juan, at two wharves along the southern-most area of the Bahía de San Juan ("San Juan Bay") and adjacent to PREPA's San Juan Power Plant. The Port of San Juan is the general name used to refer to the various passenger and cargo facilities located around San Juan Bay.

# 1.2.1 MFH Facility

This section discusses the onshore components of the MFH Facility from the entry point to the wharves. Specifically, this includes the LNG offloading equipment, vaporization equipment, and truck loading facilities. It also includes on-site electrical distribution facilities to supply power to process equipment from PREPA, an operations building, site lighting, site security cameras, two 463 horsepower emergency diesel generators, security fencing, a guard station to support inspection and documentation of all personnel entering and exiting the MFH Facility, and other related equipment.

# 1.2.1.1 MFH Facility Component Listing

# Vaporization System

The MFH Facility contains two vaporization packages composed of one gas-fired water bath vaporizer each. The MFH Facility has two 60,000-standard-cubic-feet-per-hour natural gasfed heaters to supply the gas-fired vaporizers, which heat the LNG to the point of vaporization. Each vaporizer has a capacity of 65 MMscfd, for a total of 130 MMscfd for the MFH Facility. Both of the vaporization packages can operate simultaneously. An ambient air vaporizer provides the required fuel gas flow for the gas-fired heater during start-up.

# Truck Loading System

The MFH Facility has the capability to load LNG into trucks for delivery to end users across Puerto Rico. The MFH Facility includes four LNG truck stations or loading bays/lanes, each with its own truck scale. The truck loading system is served by two transfer pumps, each of which supports two 3-inch-diameter connections. Each connection can load one truck at a rate of 200 gallons per minute ("gpm"), for a total of 400 gpm per transfer pump and an overall truck loading capacity of 800 gpm.

Unladen LNG trucks enter the MFH Facility from the west, are directed past a turn-around to make a left turn into the LNG truck loading area, and are assigned to one of the LNG truck loading lanes for loading operations. The trucks are then loaded through the 3-inch-diameter connections. The truck loading system is designed to load up to 10,600-gallon tanks, with a 10,500-gallon average. Once the trucks are loaded and the weights confirmed, they exit the MFH Facility to the west (i.e., return via the entrance route). The MFH Facility is capable of loading about 100 trucks per day.

#### 1.2.1.2 MFH Facility Support Systems

#### Vapor Handling System

Vapors may be generated from the FSU, from truck loading, and during start-up, shutdown, and cool down. The FSU does not send vapor ashore during emergency scenarios (onshore or offshore). The MFH Facility receives vapor from the FSU at the shore-side through one 8-inch-diameter LNG unloading hose. These vapors are handled by the boil-off gas ("BOG") compressor. Any vapor generated from the truck loading activity flows through the truck vapor hoses into the skid vapor line, and is handled by the BOG compressor. Any vapors generated during start-up, shutdown, or cool down of the MFH Facility are directed to flare, referred to as the gas combustion unit ("GCU") for combustion.

#### **Compressed Air/Instrument Air**

Compressed air is required for plant and instrument air. The air compressor system consists of two 100 percent electric motor-driven main air compressors and one utility air receiver. The utility air receiver sends utility air to various users and to the instrument air system. The instrument air system consists of two 100 percent instrument air dryers and one instrument air receiver. The dry air is then sent to all instrument air users. A portion of the instrument air is used for plant/utility air functions.

#### Nitrogen

Nitrogen is stored on-site at the MFH Facility and distributed for purge operations on an intermittent basis. The MFH Facility includes one liquid nitrogen storage tank and two nitrogen ambient air vaporizers, one operating and one spare.

#### Utility and Potable Water System

Demineralized water is brought to the MFH Facility in trucks and stored in the Demineralized Water Makeup Tank and Glycol Makeup Tank<sup>7</sup>. The demineralized water is used to maintain the required level in the water bath of the gas-fired vaporizers, where it is mixed with small amounts of a corrosion inhibitor. The water is then used in the gas-fired vaporizers.

Potable water is currently supplied to the MFH Facility by temporary tanker truck for use in the guard booth and operations building. NFEnergía installed a new 2-inch-diameter potable water line that is connected to the existing 10-inch water line that runs along Highway PR-28. This connection was approved by the Oficina de Gerencia de Permisos ("OGPe" [Permits Management Office]) on February 25, 2019, and will provide permanent potable water to the MFH Facility. In addition, the Autoridad de los Puertos de Puerto Rico ("Port Authority" [Puerto Rico Port Authority]) supply system supports existing fire hydrants along the south side of the MFH Facility.

<sup>&</sup>lt;sup>7</sup> The MFH Facility does not use glycol; the tank name was preserved for consistency with the engineering drawings.

# **Containment System**

The MFH Facility complies with applicable provisions in Chapter 13 of National Fire Protection Association ("NFPA") Standard 59A (NFPA 59A-2006) for spill containment systems. Any releases of LNG will be contained within the MFH Facility by the graded surfaces that drain into an LNG collection trench that runs the length of the MFH Facility, and discharged into the impoundment structure. The impoundment structure has been sized to contain at least 100 percent of the volume of the largest LNG suction drum at the MFH Facility and includes a sump with a pump to remove stormwater runoff. The pump has a capacity to remove collected stormwater runoff at a rate that complies with NFPA 59A-2006, including 25 percent of the 10-year, 1-hour event. This is equal to 620 gpm. All runoff is collected in the MFH Facility stormwater system.

#### **Stormwater and Wastewater Systems**

The existing stormwater system supports the operation of the MFH Facility. Stormwater is conveyed to the Port Authority's existing stormwater system. The LNG collection trench is designed to collect LNG spills and prevent them from entering the stormwater system. In the impoundment basin, temperature sensors determine whether any liquid present is water or LNG to ensure that no cryogenic liquid is directed to the stormwater system.

All sanitary waste from the guard booth and operations building is collected in a holding tank on the east side of the MFH Facility. A sanitary waste collection contractor removes the contents as necessary and disposes of them as per the contractor's permit at an authorized disposal site.

# **Communication System**

The MFH Facility's communication system includes a telephone exchange, a public address and general alarm system, a computer network and email system, a plant telecommunication network, a telemetry system for data transfer to/from the MFH Facility, and manned and automated closed-circuit television ("CCTV") systems with selective move and zoom functions. Emergency shutdown capability from shore is available via a ship-to-shore link. The link includes three types of communications between the MFH Facility control room and the FSU control room: fiber optic, pneumatic, and electrical. Portable radio and cell phone communications between control rooms are also used for ship-to-shore communications. Additionally, a fiber optic cable is installed to provide connection between the PREPA San Juan Power Plant and the MFH Facility control room as part of the communications for gas send-out operations, and plant telephones have access to the PREPA San Juan Power Plant's main directory and operations personnel.

# Hazard Detection and Response

The MFH Facility includes two separate hazard detection and control systems to ensure the safety of personnel, the public, and property: the fire protection system, which protects the operations building, and the hazard detection system, which protects the rest of the MFH Facility.

The fire protection system is an independent, continuous monitoring system that includes gas detectors and indoor smoke and heat detectors, as well as water sprinklers for fire suppression inside the operations building.

The hazard detection system is an independent, continuous monitoring system that includes gas detectors, low temperature detectors, and flame detectors, as well as automatic self-contained extinguishing systems (i.e., clean agents and dry chemical fire extinguishers) and a firewater system with a series of monitors, hydrants, and hoses that distribute water to equipment, when necessary, to cool adjacent equipment and minimize impacts from an incident. The hazard detection system also includes beacons and horns to alert plant personnel of an emergency.

Firewater for fire suppression is supplied to the MFH Facility through a municipal connection to the city of San Juan through an existing 8-inch-diameter water main and additional piping to the pump house at the marine berth. Firewater for exposure cooling is pulled from San Juan Bay via one electric-driven water pump located at the marine berth. An emergency diesel generator provides power to the electric-driven firewater pump in case of loss of permanent electrical power.

Portable, fixed, and wheeled dry chemical extinguishers are strategically located around the MFH Facility and provide a means to extinguish hydrocarbon fires.

The MFH Facility is located within 2 miles of the nearest fire station. NFEnergía is coordinating with local fire response agencies to finalize emergency response and cost sharing arrangements.

#### Flare, Relief, and Blowdown System

The MFH Facility contains one flare, referred to as the GCU, which is a completely enclosed ground flare designed to combust the vapor return from the vapor header during startup, shutdown, and cool down. The pilot light is fueled by propane and the GCU is 45 feet tall and 11 feet in diameter.

The MFH Facility also contains relief valves that protect the piping systems from operating beyond design limits. All pressure and process vessels include relief valves to protect from overpressure events. These relief valves discharge to the atmosphere.

#### Process Control System

The MFH Facility Distributed Control System ("DCS") allows operations to be managed from the control room located in the operations building. The DCS monitors and controls the unloading, vaporization, and LNG truck loading processes during start-up, shutdown, normal operation, abnormal operation or process upsets, and emergency shutdown conditions.

The DCS facilitates:

- sufficient online event monitoring and control capabilities to ensure continuous, safe, reliable and efficient operation;
- alerting operators in a timely manner of any abnormal conditions requiring manual intervention;
- bringing the plant or equipment back to a safe state for any abnormal conditions; and
- tools to support maintenance and engineering activities.

The DCS consists of field instrumentation and a number of sub-systems located throughout the MFH Facility. The DCS provides MFH Facility personnel with user-friendly information displays for monitoring, processing, and automatic and manual control of ongoing operations.

# **Electrical Systems**

Power to the MFH Facility is provided by PREPA via a utility stepdown transformer. A 4160-volt feed is provided from the substation through its local switchgear, adjacent to the site entrance, to the switchgear located in the electrical building. The electrical building houses the centralized power equipment for the MFH Facility.

The transformer provides power to the main facility switchboard, which is rated at 5,000 amps, per transloading facility requirements. Non-fused disconnects are locally provided at skids for pumps and motors. One diesel-fueled generator serves as standby power for the operations building, including the DCS, security, access control, CCTV, and alarm systems. A second diesel-fueled generator serves as standby power for the firewater system and LNG truck loading operations. Both diesel-fueled generators contain a double-wall, sub-base fuel tank with the capacity to run for 20 hours at 25 percent of rated load.

# Lighting System

The MFH Facility lighting system is in compliance with 33 CFR § 127.109 as part of the United States Coast Guard ("USCG") requirements. Outdoor lighting is provided by 35-foot-tall LED light poles with four luminaires. Additional lighting is provided by pipe rack flood lighting or stanchion-mounted, LED area luminaires controlled by time clock/photo cell. The luminaires are approximately 24 feet tall.

The lighting levels are based on Occupational Safety and Health Administration requirements and Illumination Engineers Society specific task recommendations. Luminaires installed in classified areas meet the class and division requirements of the area, in accordance with NFPA 70.

In addition to normal lighting, battery-powered and/or uninterruptible power supplysupported lighting is provided to give immediate light following a power failure for building egress requirements and personnel safety.

# Buildings

Buildings required for the operation of the MFH Facility include the following:

- operations building/control room/maintenance shop;
- gate guard booth and restroom;
- fire pump house;
- gas chromatograph shelter; and
- electrical building.

Loads, analysis, design, and construction were conducted in accordance with all statutory and regulatory requirements.

#### Access Roads

The MFH Facility is located near the junction of State Roads PR-165, PR-22, and PR-24. State Road PR-28 crosses beneath that junction and runs northeast to the MFH Facility before turning southeast towards Puerto Nuevo Norte. The MFH Facility is accessed via a single driveway entrance from State Road PR-28.

# 1.2.2 Marine Facilities and Transit Routes

The marine facilities include Wharves A and B and the FSU. The transit routes include the access channel to the MFH Facility and related vessel transit lanes taken by shuttle vessels through the Caribbean Sea and into San Juan Bay.

#### 1.2.2.1 Wharves

Wharves A and B encompass approximately 6.1 acres, with the upland area being paved to the water's edge. A concrete slab is located along the water's edge on an existing system of piles, a small portion of which extends over water. New fendering and mooring systems were installed during construction and are fully operational to allow the FSU to moor directly to Wharves A and B and the shuttle vessels to use the double-banking system for offloading to the FSU. The over-water portions of Wharves A and B are supported by reinforced steel and fiberglass piles.

# 1.2.2.2 Semi-Permanently Moored FSU

An FSU is semi-permanently moored at Wharf B at the MFH Facility; however, the FSU may be moved to protect the crew, vessel, and cargo during extreme weather conditions, to accommodate vessel calls to an adjoining berth, for transit to points offshore for the purpose of loading cargoes, or for deployment to other locations outside the United States for the loading of cargo. In addition, the FSU may rotate out of service periodically and be replaced with another, equivalent vessel. The current FSU, the INEOS Independence, has a bulk storage capacity of 27,500 cubic meters ("m<sup>3</sup>") of LNG. The FSU is regularly re-supplied by ship-to-ship transfers from the shuttle vessels.

During offloading of LNG from the shuttle vessels to the FSU, the FSU must exchange ballast water, including water withdrawals from San Juan Bay through sea chests and discharges directly into San Juan Bay. The FSU typically intakes approximately the same amount of water as it discharges each day—just under 3.6 million gallons per day for all water needs. Of that, about 750,000 gallons per day is withdrawn and also discharged for ballast water. The FSU holds a current Vessel General Permit authorized by the USEPA. Additional details about water intakes and discharges, including ballast water and cooling water, can be found in Resource Reports 2 and 3.

# 1.2.2.3 Access Channel

The MFH Facility is accessed by the shuttle vessels via the main shipping channel into San Juan Bay, the Anegado Channel that runs southeast through the bay, the Army Terminal Channel that branches off of the Anegado Channel straight south to the Army Terminal Pier, and the Puerto Nuevo Channel that runs along the shoreline directly adjacent to Wharves A and B at the MFH Facility (see figure 1-5 in appendix 1A for the vessel transit routes and access channel).

No facility-specific dredging by NFEnergía is required to keep the MFH Facility accessible by shuttle vessels or other support vessels during operations; however, periodic maintenance dredging is conducted in the shipping channel and other various channels in the Port by the United States Army Corps of Engineers ("USACE") and the Port Authority. This dredging occurred before NFEnergía developed the MFH Facility and will continue periodically in the future.

# 1.2.2.4 Shuttle Vessels

The shuttle vessels use existing shipping channels to transit to the MFH Facility and use the double-banked, ship-to-ship transfer method, which is similar to the methods used for offshore lightering. One escort tug may support the transit of a shuttle vessel from the pilot station just over 3 nautical miles offshore from the Convention on the International Regulations for Preventing Collisions at Sea, 1972 demarcation line at the coastline to the MFH Facility. A second tug may join along the breakwater at Punta del Morro and a USCG escort vessel may join the shuttle vessels during each transit to the MFH Facility. Based on current operations, the shuttle vessels call at the port to resupply the FSU up to 120 times per year. Shuttle vessels have an average capacity of approximately 30,000 m<sup>3</sup> and regularly resupply the FSU. Transferring LNG from the shuttle vessels are in port for less than 24 hours. As noted above, NFEnergía uses two shuttle vessels; however, only one shuttle vessel at a time may call on the MFH Facility to unload.

The shuttle vessels that call on the MFH Facility are required to adhere to domestic and international regulations and standards and maritime treaties and codes, including the International Convention for the Prevention of Pollution from Ships Annexes I, II, III, V, and VI to which the United States is a signatory, International Convention for the Safety of Life at Sea, and International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk. Additionally, the shuttle vessels each hold a current USEPA Vessel General Permit to operate within United States waters.

As with the FSU, delivery and unloading of LNG from the shuttle vessels requires the exchange of ballast water in similar amounts as described above for the FSU. Water use and discharge from the shuttle vessels, with the exception of ballast water, is managed under International Convention for the Prevention of Pollution from Ships, Annex II. The shuttle vessels also adhere to 33 CFR Part 151, Subpart D for ballast water exchange. Additional details about water intakes and discharges, including ballast water and cooling water, can be found in Resource Reports 2 and 3. While at the MFH Facility, the shuttle vessels manage sanitary and bilge discharges through direct pump-off and treatment, as authorized via the Vessel General Permits.

# 1.2.2.5 Vessel Transit

As required by the Commonwealth of Puerto Rico, all shuttle vessels arriving at, or departing from the MFH Facility are piloted by a local maritime pilot licensed by the Puerto Rico Pilotage Commission for transit through the shipping fairway between the pilot station about 3 nautical miles offshore from the Convention on the International Regulations for Preventing Collisions at Sea, 1972 demarcation line and the MFH Facility. The San Juan Bay Pilots follow protocols as directed by the USCG. The shuttle vessels that call on the MFH Facility are constructed and operated in accordance with international standards and United States safety

standards found in 46 CFR Part 154. All operators of the shuttle vessels are required to have the proper certificates that authorize the transport of LNG. United States-flagged ships must also have a USCG certificate of inspection and must be valid and endorsed. Foreign-flagged vessels must have a valid Certificate of Compliance issued by the USCG, which states the vessel complies with USCG regulations and has been satisfactorily inspected by a USCG Marine Safety Office.

# 1.3 Land Requirements and Use

The MFH Facility site is 6.1 acres of industrial area, including the permanent footprint and access points. The FSU is semi-permanently moored in San Juan Bay adjacent to the MFH Facility site. Shuttle vessels traverse San Juan Bay using existing navigation channels as described in section 1.2.2.3. Operation of the MFH Facility does not require any facility-specific maintenance dredging in San Juan Bay along the navigation channels or in the berthing area of the FSU or shuttle vessels. Periodic maintenance dredging has been and will continue to be conducted in the shipping channel and other various channels in the Port by the USACE and the Port Authority. This dredging encompasses all of the wharves and other navigation channels in San Juan Harbor and occurs without regard to what products are being imported or exported from the harbor.

# 1.3.1 Land Ownership, Existing Land Use, and Zoning

The Port Authority owns the MFH Facility site. NFEnergía has executed a long-term lease of the entire 6.1-acre site with the Port Authority for a period of 20 years. The onshore portion of the MFH Facility encompasses 6.1 acres of paved industrial land and concrete over-water decking. The FSU and shuttle vessels moor at Wharf B and, combined, typically occupy under 110,000 square feet of San Juan Bay immediately adjacent to the MFH Facility.

The waterway used by LNG shuttle vessel marine traffic transiting to and from the MFH Facility site is the main shipping channel into San Juan Bay. After the shuttle vessels enter the bay, they use the Anegado Channel that runs southeast through the bay, the Army Terminal Channel that branches off of the Anegado Channel straight south to the Army Terminal Pier, and the Puerto Nuevo Channel that runs along the shoreline directly adjacent to Wharves A and B at the MFH Facility. These channels are all maintained by the USACE. The Port Authority maintains the area between the main Puerto Nuevo Channel and the wharves along that channel.

# 1.3.2 Existing Land Use and Zoning

The MFH Facility is located on an entirely paved area with a land use categorization of heavy industrial. The Mapa de Calificación de Suelo Municipio Autónomo de San Juan (Zoning Map for the Municipality of San Juan) shows the MFH Facility site is located on urban land in a heavy industrial use (I-2, "industrial pesado") district of San Juan. Resource Report 8 contains additional information on land use and zoning.

The MFH Facility is also located within the Coastal Zone Boundary, as defined by the Coastal Zone Management Act. Under that act, each participating state or territory is required to develop and implement a state-specific coastal zone management program, as approved by the National Oceanic and Atmospheric Administration. The Puerto Rico Coastal Zone Management Program was adopted by the government of Puerto Rico in 1978 and is approved by the National Oceanic and Atmospheric Administration (Departamento de Recursos Naturales y Ambientales,

2021). This program requires a federal consistency review for actions taken or authorized by federal or state agencies that may affect an approved state coastal zone; therefore, NFEnergía has submitted a request for consistency review to the Puerto Rico Planning Board.

Puerto Rico has also implemented the San Juan Bay Estuary Program that is administered by the Office of the Coastal Zone and Climate Change Program within the Departamento de Recursos Naturales y Ambientales (Department of Natural and Environmental Resources). The purpose of the San Juan Bay Estuary Program is to restore and conserve the quality of the waters of San Juan Bay ecosystem while supporting sustainable social and economic development. As part of the San Juan Bay Estuary Program, Puerto Rico developed a Comprehensive Conservation and Management Plan (referred to as the Estuary Management Plan) beginning in 1993 and has been working to implement the Estuary Management Plan since then (San Juan Bay Estuary Program Office, 2000).

# **1.4** Summary of Construction Methods and Restoration

Although this is an application to continue to operate the MFH Facility, and not to construct it (as the MFH Facility already exists), NFEnergía nevertheless provides certain information about the previously completed construction for context. The MFH Facility was constructed between August 2018 and April 2020 and became fully operational in May 2020. Construction of the MFH Facility required both in-water and onshore work but was completed with minimal equipment and construction-related traffic, as the existing roadway system was predominately used to access the site. Temporary parking for construction workers was located in the open area adjacent to the site. Potable water was provided in bottles and non-potable water was brought in by tank trucks, as necessary. Portable sanitary facilities were provided on-site for construction workers. Minimal grading was required at the site. Half of the material removed was redistributed on-site and the other half was disposed of off-site in accordance with applicable regulations. NFEnergía constructed the MFH Facility in accordance with applicable requirements of the USCG's *Waterfront Facilities Handling Liquefied Natural Gas* under 33 CFR Part 127.

To construct the onshore components at the MFH Facility, improvements were first made to on-site drainage infrastructure, pavement, utilities, and lighting. Existing construction foundations and heavily worn pavements were removed, at which point erosion and sedimentation control methods were implemented and structural foundations were installed. Existing structures on the site were removed in accordance with permits from the OGPe. NFEnergía then installed additional LNG loading equipment, a large truck and International Organization for Standardization tank loading facility, a regasification component, additional mooring and fendering systems, an emergency shutdown system, additional firefighting and safety equipment, communications equipment, a new operations building, a new security booth, and other ancillary equipment. Following construction of the specific components noted above, including the new buildings, a security fence was installed with cameras and intrusion detectors.

Construction also included in-water work to make repairs to Wharf B. The existing over-water concrete was demolished, followed by the repair and encasing of 85 concrete piles. Of the 85 piles, 21 were encased with steel beyond the mudline as needed to meet seismic capacity requirements and 63 were encased with fiberglass up to 10 feet below the mean high water line. One pile was missing at the time of construction and was completely replaced and encased with steel. The over-water concrete slab was replaced on the stabilized piles.

General non-hazardous construction debris (e.g., wood scraps, packaging materials, spent product containers) was collected in an on-site dumpster and removed from the site by a licensed disposal contractor for disposal at a licensed facility. Unused liquids—such as paint, hydraulic fluid, and solvents—were segregated, sealed in containers, and disposed of in an appropriate manner. Materials suitable for recycling (e.g., metal) were collected, segregated from other construction debris, and transported to a recycling center.

At the time of construction, the site was industrial in nature; therefore, no clearing of vegetation was required. The following best management practices were implemented during construction to minimize impacts on the surrounding resources:

- a Construction Management Plan that included measures such as spraying water to control the suspension of dust during construction and the transit of heavy equipment;
- turbidity barriers during in-water construction;
- vibratory hammers, rather than impact hammers, during pile installation for the majority of the piles;
- flat barges below the deck during demolition activities to prevent debris from entering the water;
- a Stormwater Pollution Prevention Plan to control surface water runoffs; and
- a Waste Management Plan that outlined requirements for disposal and special handling of particular waste streams.

No vegetation or other sensitive environmental resources were present on-site at the time of construction; as such, no restoration was required. The site was industrial prior to construction and the entire site remains industrial. A complete permit list, inclusive of all past permitting to construct and operate the MFH Facility, is provided in appendix 1B.

# **1.5** Operation and Maintenance

The MFH Facility cannot load trucks or make gas available to PREPA without the FSU present. The FSU transfers LNG to the MFH Facility by use of two to three non-permanent, flexible 8-inch diameter cryogenic hoses that extend from the vessel.<sup>8</sup> The LNG is pumped through the flexible cryogenic hoses with cargo transfer pumps located on the vessel.<sup>9</sup> LNG exits the flexible cryogenic hoses at a liquid header in the MFH Facility. From the liquid header, the MFH Facility can distribute LNG in two ways: (1) routing to a truck rack for loading into trucks; and (2) routing to vaporizers for regasification and delivery to Units 5 and 6 of PREPA's adjacent San Juan Power Plant via 75 feet of power plant piping.

<sup>&</sup>lt;sup>8</sup> One or two hoses are utilized in liquid service, depending on the desired flow rate, and the third hose is used to maintain the BOG vapor on the marine vessel.

<sup>&</sup>lt;sup>9</sup> The flexible cryogenic hoses have a pressure of 150 psig and include automatic valves that will close and break away from the vessel in the unlikely event that the vessel drifts out of position.

When the MFH Facility is operating its truck loading facilities, LNG is routed to a truck-loading rack with four bays for loading into International Organization for Standardization containers and/or over-the-road trucks or tankers for delivery to various commercial and industrial end users in Puerto Rico. The piping from the header at the MFH Facility to the truck-loading rack consists of 4-inch diameter, vacuum jacketed, stainless steel piping. The unloading process from the FSU to the truck-loading rack requires a pressure vessel to maintain and balance pressures and flow of LNG from the berthed vessel and the send-out pumps to the truck loading racks and the vaporization system. This vessel does not function as storage and is not designed to hold LNG except during the vessel unloading process. Due to the nature of its operations, the MFH Facility does not have any onshore storage for LNG.

When the MFH Facility is providing natural gas vapor to PREPA's abutting San Juan Power Plant, LNG is routed from the onshore liquid header to vaporizers for regasification. As with the truck loading operations, the piping system includes a pressure vessel that provides a buffer between the FSU and the send-out pump. The pressure vessel does not function as storage. Four LNG withdrawal lines connect the pressure vessel to a single high-pressure send-out pump, which is fully submerged in LNG and contained within pump cans. LNG from the pump then flows to two regasification units. Natural gas exits each regasification unit via a 10-inch diameter, seamless stainless steel process pipe that connects to a metering skid. Natural gas flows directly from the metering skid to the San Juan Power Plant via a nominal 10-inch diameter, American Society for Testing Materials A106 Grade B seamless carbon steel pipe at a length of 75 feet. The carbon steel pipe that runs from the NFEnergía metering skid to the San Juan Power Plant metering skid is designed in compliance with American Society of Mechanical Engineers Code B31.1 for Power Piping. NFEnergía's portion of the pipe terminates at the wall that separates the MFH Facility from the power plant and connects with power plant piping owned by PREPA.

NFEnergía employs its *Emergency Response Plan, San Juan—Puerto Rico, Micro-Fuel Handling Facility*, dated March 30, 2020 (Resource Report 11, appendix 11C) to manage hazards that may arise from the handling of LNG, and its *Emergency Response Plan, San Juan—Puerto Rico, Micro Fuel Handling Facility*, dated April 2, 2020 (Resource Report 1, appendix 1C) for responses to spills of other materials that could occur during operations.

To support operations, NFEnergía employs 21 individuals at the MFH Facility and 57 employees were hired from a pool of local contractor workers to perform various services at specific intervals, for a total of 78 employees. NFEnergía will continue to require approximately the same number of employees for ongoing operation of the MFH Facility.

# **1.6 Future Plans and Abandonment**

NFEnergía has no existing or reasonably foreseeable plans to expand or abandon the MFH Facility. NFEnergía will employ proper operation and maintenance techniques that will allow the MFH Facility to operate for at least the duration of its design life and NFEnergía constructed the MFH Facility in a manner that will allow the same.

# **1.7** Permits, Approvals, and Consultations

Operation and maintenance of the MFH Facility will be conducted in accordance with applicable permits and approvals. These permits and approvals are summarized in table 1-1,

along with the schedule and status for each. A complete permit list, inclusive of all past permitting to construct and operate the MFH Facility, is provided in appendix 1B.

Agency	Permit/Approval/Consultation	Submittal Date (Anticipated)	Approval Date (Anticipated)
Federal			
Federal Energy Regulatory Commission	Section 3 of the Natural Gas Act— Order granting Section 3 authorization	(September 15, 2021)	(To be determined.)
United States Department of Energy	Order to Import under Section 3 of the Natural Gas Act	Order No. 4167: March 9, 2018 Order no. 4500: January 17, 2020	Order No. 4167: March 26, 2018 Order No. 4500: March 26, 2020
United States Coast Guard	Letter of Recommendation	May 22, 2018	September 26, 2018
	Facility Security Plan approval	July 19, 2019	May 13, 2020
United States Fish and Wildlife Service	Consultation under Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Gold Eagle Protection Act	Informal consultation initiated June 30, 2021	(To be determined.)
United States Environmental Protection Agency	Vessel General Permit under the Vessel Incidental Discharge Act	INEOS Independence <sup>a</sup> : January 21, 2020 Coral Encanto <sup>a</sup> : July 9, 2020 Coral Anthelia <sup>a</sup> : March 3, 2020	INEOS Independence <sup>a</sup> : January 21, 2020 Coral Encanto <sup>a</sup> : July 9, 2020 Coral Anthelia <sup>a</sup> : March 3, 2020
National Marine Fisheries Service	Consultation under Section 7 of the Endangered Species Act	Informal consultation initiated August 2, 2021	(To be determined.)
National Marine Fisheries Service	Magnuson-Stevens Fishery Conservation and Management Act consultation on Essential Fish Habitat	Consultation initiated July 2, 2021	(To be determined.)
National Marine Fisheries Service	Marine Mammal Protection Act—Issuance of Incidental Harassment Authorization	Not anticipated to be needed	Not applicable
Puerto Rico			
La Oficina de Gerencia de Permisos (Permits Management Office)	Environmental Assessment Determination	May 17, 2018	July 20, 2018
	Unique Permit (Fire Prevention Certificate, Sanitary License)	March 6, 2020	May 20, 2020
Junta de Calidad Ambiental de Puerto Rico (Puerto Rico Environmental Quality Board)	General Consolidated Permit	February 21, 2019	February 27, 2019
Puerto Rico El Departamento de Recursos Naturales y Ambientales (Department of Natural and Environmental Resources)	Operating Air Permit	November 6, 2020	December 8, 2020
Puerto Rico State Historic Preservation Office	Section 106 of the National Historic Preservation Act	Via Nationwide Permit Pre-Construction	March 25, 2019

Table 1-1: Environmental Permits, Approvals, and Consultations for MFH Facility Operation.

Agency	Permit/Approval/Consultation	Submittal Date (Anticipated)	Approval Date (Anticipated)
		Notification: September 6, 2018	
Puerto Rico Planning Board	Coastal Zone Management Consistency Determination	August 10, 2021	(To be determined.)
<sup>a</sup> The current non-jurisdictional FSU a out of service periodically and be re	nd shuttle vessels are included here. How placed with other, equivalent vessels whic	ever, the FSU and shu h will have Vessel Ger	ttle vessel may rotate neral Permits.

#### 1.8 Affected Landowners

The names and addresses of landowners required to be notified regarding operation of the MFH Facility can be found in appendix 1D (which is being filed under a separate cover and marked "CONTAINS PRIVILEGED AND CONFIDENTIAL INFORMATION – DO NOT RELEASE" and "CUI//PRIV"). NFEnergía certifies that these landowners have been or will be notified as required by 18 CFR § 153.3.

# 1.9 Non-jurisdictional Facilities

FERC's regulations require that applicants identify all non-jurisdictional facilities, including auxiliary facilities that will be built in association with the project and facilities to be built by other companies. Although this application is limited solely to a request for a certificate to operate, and although the MFH Facility and all non-jurisdictional facilities have already been constructed, NFEnergía provides the following information regarding these non-jurisdictional facilities, comprising the FSU and shuttle vessels (discussed in sections 1.2.2 and 1.5) and water and communications lines.

Under certain circumstances, non-jurisdictional facilities may be subject to FERC's environmental review under the National Environmental Policy Act. FERC requires applicants to evaluate four factors to determine the need for FERC to do an environmental review of related non-jurisdictional facilities, which include:

- 1. whether or not the regulated activity comprises "merely a link" in a corridor type project (such as a transportation or utility transmission project);
- 2. whether there are aspects of the non-jurisdictional facility in the immediate vicinity of the regulated activity that affect the location and configuration of the regulated activity;
- 3. the extent to which the entire regulated activity will be within FERC's jurisdiction; and
- 4. the extent of cumulative federal control and responsibility.

In consideration of these four factors, environmental impacts of the FSU, the shuttle vessels, and the MFH Facility's utility lines, in each case as a result of MFH Facility operations, are analyzed in this Environmental Report.

# 1.9.1 FSU and Shuttle Vessels

LNG imported from overseas markets is transported in shuttle vessels specially designed and built for that task. NFEnergía has approval for and expects that its MFH Facility will be visited by shuttle vessels up to 120 times per year. These shuttle vessels are loaded with LNG at foreign LNG facilities, transit international waters, enter U.S. waters, and then deliver LNG to the MFH Facility through the FSU (discussed in section 1.2.2.3). Shuttle vessels are under the ownership and control of third parties, not NFEnergía, and would not be regulated by FERC. The third-party owners and operators of the shuttle vessels calling at the MFH Facility must comply with United States regulatory requirements and port requirements governing shuttle vessels, in addition to NFEnergía's MFH Facility regulations and requirements in order to be granted access to the Port and to NFEnergía's MFH Facility.

Although NFEnergía currently uses the Coral Encanto and Coral Anthelia as shuttle vessels, NFEnergía is not limited to only using these vessels and may substitute other similarly sized shuttle vessels in the future. Neither the exact origins for the LNG cargo nor the specific routes across the Caribbean Sea that would be taken by the shuttle vessels are predetermined, outside of the waterway within 3 nautical miles of the MFH Facility. The analysis in this report approximates vessel transit corridors within the Exclusive Economic Zone for purposes of impact assessment.

# 1.9.2 Utility Lines

Electrical power for the MFH Facility is provided by a PREPA 13.8kV substation connected to the power grid and located adjacent to the MFH Facility. NFEnergía has connected the MFH Facility to the PREPA's San Juan Power Plant Unit 5 and 6 emergency bus bar so that it can serve as a secondary power source. The emergency bus bar is a special connection inside the PREPA San Juan Power Plant that pulls power, at 4160-volt, directly from the generating units. It is used for backup purposes to maintain a more reliable source of power. It uses an automatic transfer switch, which is a specialized piece of equipment that allows its user to instantaneously switch from grid to emergency bus bar in the event of a power disruption. NFEnergía has installed the automatic transfer switch and is working with PREPA to finalize the necessary steps to incorporate this into the power structure for the facility.

NFEnergía installed a new 2-inch-diameter potable water line with a new meter that is connected to the existing 10-inch water line that runs along Highway PR-28. This connection was approved by the OGPe on February 25, 2019. The disposal of wastewater occurs through private holding tanks and is then trucked off-site to an approved disposal facility.

NFEnergía installed a telecommunications system that includes a telephone exchange, a public address and general alarm system, a computer network and email system, a plant telecommunication network, a telemetry system for data transfer to/from the MFH Facility, and manned and automated CCTV systems with selective move and zoom functions. This installation was approved by the Puerto Rico Telecommunications Bureau on January 10, 2019.

For each of these utility lines, this report considers any environmental impacts associated with the lines' operations.

# 1.10 References

- Departamento de Recursos Naturales y Ambientales (DRNA [Department of Natural and Environmental Resources]). 2021. Office of the Coastal Zone Management and Climate Change Program, About Us. Available online: <u>https://www.drna.pr.gov/oficinas/pmzc/</u>. Accessed: July 2, 2021.
- Request for Approval of Request for Proposals for Temporary Emergency Generation, Government of Puerto Rico Public Service Regulatory Board, Puerto Rico Energy Bureau. March 3, 2020. Available online at: http://energia.pr.gov/wpcontent/uploads/2020/03/Resolution-and-Order-NEPR-AP-2020-0001.pdf.
- San Juan Bay Estuary Program Office. 2020. Comprehensive Conservation and Management Plan for the San Juan Bay Estuary. Available online: <u>https://estuario.org/comprehensiveconservation-and-management-plan-ccmp-for-the-san-juan-bay-estuary/</u>. Accessed: July 2, 2021.

APPENDIX 1A FIGURES







# FIGURE 1-4 FACILITY GENERAL ARRANGEMENT

(filed under separate cover as Critical Energy Infrastructure Information)



# APPENDIX 1B CONSTRUCTION AND OPERATIONS PERMIT LIST

Agency	Permit/Approval/Consultation	Approval Date (Anticipated)
Federal		
Federal Energy Regulatory Commission	Section 3 of the Natural Gas Act—Order granting Section 3 authorization	(TBD)
United States Department of Energy	Order to Import under Section 3 of the Natural Gas Act	Order No. 4167: March 26, 2018
		Order No. 4500: March 26, 2020
	Blanket Authorization Order to Import LNG for a 2 year term	February 13, 2020
United States Coast Guard	Letter of Recommendation	September 26, 2018
	Facility Security Plan Approval	May 13, 2020
	Approval of Operations Manual and Facility Security Plan	May 13, 2020
	Letter of Intent to request Letter of Recommendation	December 12, 2017
	Follow-on Waterway Suitability Assessment	May 22, 2018
	Issuance of Final Rule adjusting an existing moving safety zone in San Juan Harbor	March 19, 2020
United States Fish and Wildlife Service	Consultation under Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Gold Eagle	For Prior Wharf Work: September 25, 2018
	Protection Act	For the Application: TBD
United States Environmental Protection Agency	Vessel General Permit under the Vessel Incidental Discharge Act	INEOS Independence: January 21, 2020
		Coral Encanto: July 9, 2020
		Coral Anthelia: March 3, 2020
National Marine Fisheries Service	Consultation under Section 7 of the Endangered Species Act	For Prior Wharf Work: December 13, 2018
		For the Current Application: (TBD)
National Marine Fisheries Service	Magnuson-Stevens Fishery Conservation and Management Act consultation on Essential Fish Habitat	(TBD)
National Marine Fisheries Service	Marine Mammal Protection Act—Issuance of Incidental Harassment Authorization	Not applicable
United States Customs and Border Patrol	Letter of recommendation per compliance with the Jones Act	April 3, 2018
	Grant of parole for 29 day rule	May 31, 2018
United States Army Corps and Engineers	Nationwide Permit 3 Authorization for Berth and Pier Repair Project	March 6, 2019
	Self-Certification Statement of Compliance	August 10, 2020
Puerto Rico		
La Oficina de Gerencia de Permisos (Permits	Environmental Assessment Determination	July 20, 2018
Management Onice)	Unique Permit (Fire Prevention Certificate, Sanitary License)	May 20, 2020
	Non-Substantial Variation Permit for Pier Repair Work	September 27, 2018
	Phase 1 Construction Permit	February 8, 2019
	Phase 2 Construction Permit	March 8, 2019
	Construction Permit for Berth Repair	March 12, 2019
	Pre-Consult from earthworks permit and tree cutting mitigation	March 19, 2019
	General Consolidated Permit for Pier Repair Works	March 26, 2019

Agency	Permit/Approval/Consultation	Approval Date (Anticipated)
	Non-Substantial Variation for environmental document approval regarding the approval of the electrical building and all the additional equipment changes	June 18, 2020
	EA Compliance Approval for MFH Facility	July 20, 2018
	Issuance of Construction Permit for Piers A & B	February 8, 2019
	Issuance of Single Incidental Operational Permit	July 15, 2019
	Categorical Exclusion for Demolition	July 6, 2018
	Approval of Amended Non-Substantial Variation to EA	January 11, 2019
	Submission of Environmental Assessment for MFH Facility	May 7, 2018
Governor of Puerto Rico	Notice of designation as a Critical Infrastructure Project	May 4, 2018
Junta de Calidad Ambiental de Puerto Rico	General Consolidated Permit	February 27, 2019
(Puerto Rico Environmental Quality Review	General Permit for Handling Materials with Asbestos Content	July 16, 2018
board)	Construction Permit for Air Emissions	February 25, 2019
	Modification of Construction Permit	October 4, 2019
Puerto Rico El Departamento de Recursos	Operating Air Permit	December 8, 2020
Naturales y Ambientales (Department of Natural	Modification to Construction Permit	October 30, 2020
and Environmental Resources)	Authorization the use of Natural Gas in Unit 5 and 6	October 3, 2019
Puerto Rico State Historic Preservation Office	Section 106 of the National Historic Preservation Act	For the Application: March 25, 2019
Puerto Rico Planning Board	Coastal Zone Management Consistency Determination	For Prior Wharf Work: March 21, 2019
		For the Current Application: (TBD)
	Strategic Project Certification	May 4, 2018
Puerto Rico Aqueducts and Sewers Authority	Potable Water and Sanitary Works Endorsement	February 25, 2019
Puerto Rico Electric Power Authority	Electrical Plans Endorsement	February 4, 2019
	Fuel Sale and Purchase Agreement	March 5, 2019
	Evaluation and Selection Report identifying Preferred Bidder for the award of the Fuel Sale and Purchase Agreement.	October 25, 2018
Negociado de Telecomunicaciones División de Secretaría (Telecommunications Bureau Secretariat Division)	Telecommunication Works Endorsement	January 10, 2019
Puerto Rico Tribunal de Apelaciones Panel II (Puerto Rico Court of Appeals Panel II)	Ruling Confirmation of PREPA's decision of the Fuel Sale and Purchase Agreement	April 26, 2019
Departamento De Transportacion Y Obras Publicas (Department Of Transportation And	Authorization for Natural Gas Importation, Storage and Distribution	May 31, 2019
Public Works)	Construction Endorsement for the natural gas pipeline construction to PREPA	November 15, 2019
	Amendment to the Authorization for Natural Gas Importation, Storage and Distribution	January 22, 2020
	Resolution and Order Dismissing Opposition	May 31, 2019
San Juan Municipality		
Municipality of San Juan	Demolition Permit	August 24, 2018

# APPENDIX 1C OPERATIONS SPILL PLAN/EMERGENCY RESPONSE PLAN

Redacted version filed here as CUI//Public

Unredacted version filed under separate cover as CUI//CEII/PRIV



# **Emergency Response Plan**

San Juan – Puerto Nuevo MICRO FUEL HANDLING FACILITY

> New Fortress Energy LLC NFE-LNG-ERP-004

Road PR-28 KM 4.9, San Juan, Puerto Rico 00922	DRNA
Plan Preparation Date: April 2, 2020	1110
	AUG 1 2 2020
Reviewed/Amended on:	000000
	CORREO
Reviewed/Amended on:	



# Micro Fuel Handling Facility EMERGENCY RESPONSE PLAN

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EMERGENCY PHONE LIST			
Organization	Phone Number		
National Response Center Department of Natural and Environmental Resources (DNER) – Operations Center	(800) 424-8802 (787) 767-8181		
Puerto Rico Emergency Services (Fire/Police/Ambulance)	911		
San Juan Fire Station	(787) 722-1120		
Puerto Nuevo Fire Station	(787) 783-2331		
Cataño Fire Station	(787) 788-2330		
Cuartel General Police Puerto Rico	(787) 788-0030		
Puerto Rico Emergency Management Admin – Zone 1 – San Juan	(787) 294-0277		
	Office (787) 723-2260 Security (787) 729-8725		
Port Authority	(787) 729-8715		
San Juan Micro Fuel Handing Facility – Terminal Manager			
San Juan Micro Fuel Handling Facility – Main Control Room	(787) 425-0012		
New Fortress Energy, LP – VP HSEQ	Office (786) 453-4356		
New Fortress Energy, LP – Head of Marine and Terminal Operations	Office (786) 577-9396		

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SPILL CLEAN-UP VENDORS			
Name	Title/Services	Phone Number	
Carlos Negron - Altol Env.	Main Contact – Services	787-835-4242	

In case of accident requiring immediate medical attention:

EMERGENCY SERVICES CONTACT LIST			
Name	Location	Contact Information	Comments
Department of Natural and Environmental Resources	Ave. Ponce de León 1308, Carretera Estatal 8838, Sector El Cinco, Río Piedras, PR 00921	+ 1-787-767-8181	Environmental Issues
Emergency Services	RD #1 Km. Km 24.5 Puerto Rico, Cll Santa Isabel, San Juan	9-1-1	Fire, Police, and Emergency Services
San Juan PD Marine Unit	Calle Aboy, Santurce, San Juan, PR, 00907, Puerto Rico	+1 787-977-3594	Marine Police Unit
Hospital Metropolitano	1785 Puerto Rico 21, San Juan, 00921, Puerto Rico	+1 787-782-9999	Emergency Medical Services
Hospital Hermanos Meléndez	Km 11.7 PR-2, Bayamón, 00959, Puerto Rico	+1 787-620-8181	Emergency Medical Services
First Response Emergency Services, Inc.	789 Cll Juan José Osuna, San Juan, 00923, Puerto Rico	787-281-6096 info@frems.com	Emergency Medical Services and Transport

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Cuerpo De Emergencias Medicas - Oficina Central	Cll San Martin, Guaynabo, 00966, Puerto Rico	+1 787-775-0550	Emergency Medical Services and Transport
San Juan Fire Rescue Ems	San Juan, 00927, Puerto Rico	+1 787-480-2222	Emergency Medical Services and Transport
NOTE: Always monitor an	d transmit emergencies on (	Channel 16 VHF	I



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- B. Facility Inspection Checklists
- C. Record of Discharge Prevention Briefings and Training

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# INTRODUCTION

# Purpose

This Emergency Response Plan (the "Plan") describes the measures to be implemented by NFEnergíaLLC ("NFE") at its Micro Fuel Handling Facility (the "MFH Facility" or "Facility") located at San Juan, PR to guard against accidental discharges from its tanks referenced herein, and to prepare the Facility to respond in a safe, effective, and timely manner to mitigate the impacts of any such accidental discharge that may occur.

This Plan is used as a reference for diesel and sanitary sewage storage information, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response.

This Plan provides guidance on key actions that the Facility must perform:

- Complete monthly and annual site inspections as outlined in the Inspection, Tests, and Records section of this Plan (Section 3.5 using the inspection checklists included in Appendix B).
- Conduct periodic employee training as outlined in the Personnel, Training, and Spill Prevention Procedures section of this Plan (Section 3.6) and document them on the log included in Appendix C.
- Amend the Plan within thirty (30) days of a change in facility design or construction that materially affects the MFH Facility's spill potential.
- Review the Plan on an annual basis. Update the Plan to reflect any "administrative changes" that are applicable, such as personnel changes or revisions to contact information, such as phone numbers. Administrative changes must be documented in the Plan review log, per Section 1.3.3 of this Plan.
- This Plan is dated April 2, 2020. The next plan review is therefore scheduled to take place on or prior to April 2 2021. The Plan Review Log (Table 1-1) should be completed for ANY and ALL changes.

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# Part 1: Plan Administration

# 1.1 Management Approval and Designated Person

NFE is committed to preventing discharges to the environment and to maintaining the highest standards for spill prevention and response through the implementation and regular review and amendment of the Plan. NFE has committed the necessary resources to implement the measures described in this Plan. This Plan has the full approval of NFE.

Carlos A. Faris is the Designated Person Accountable for spill prevention at the MFH Facility and has the authority to commit the necessary resources to implement this Plan.

Authorized Facility Representative: Carlos A. Faris

Title: Terminal Manager

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#### 1.2 Location of Plan

A complete copy of this Plan is maintained at the following Facility locations:

COPY NUMBER	LOCATION WHERE COPY IS KEPT		
Master	Terminal Manager Office		
1.	Control Room		

#### 1.3 Plan Review

#### **Changes in Facility Configuration** 1.3.1

NFE periodically reviews and evaluates this Plan for any change in the facility design, construction, operation, or maintenance that materially affects the MFH Facility 's potential for an oil discharge, including, but not limited to:

- commissioning of containers (i.e., tanks, drums);
- reconstruction, replacement, or installation of piping systems; .
- construction or demolition that might alter secondary containment structures; or changes . of product or service, revisions to standard operation, modification of testing/inspection procedures, and use of new or modified industry standards or maintenance procedures.

Amendments to the Plan made to address changes of this nature are referred to as technical amendments. The MFH Facility can complete and document non-technical amendments in Table 1-1 below. Non-technical amendments include the following:

- change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan; or
- change in the name or contact information of spill response or cleanup contractors.

NFE will make the needed revisions to the Plan as soon as possible, but no later than thirty (30) days after the change occurs. The Plan will be implemented as soon as possible following any technical amendment, but no later than thirty (30) days from the date of the amendment. The Terminal Manger is responsible for initiating and coordinating revisions to the Plan.

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# 1.3.2 Scheduled Plan Reviews

NFE reviews this Plan at least once every year. Revisions to the Plan, if needed, are made within thirty (30) days of the annual review.

#### 1.3.3 Record of Plan Reviews

Scheduled reviews and Plan amendments are recorded below in the Plan Review Log (Table 1-1). This log must be completed even if no amendment is made to the Plan as a result of the review.



# Table 1-1: Plan Review Log

Person Completing Review	Date	Activity	Comments / Amendments
Carlos Faris	04/02/20	Initial preparation of plan	Initial Plan.
		Scheduled review*	

\* The review has to be conducted by the facility.

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# Part 2: General Facility Information

The facility described in this plan is under the primary responsibility of the NFE office which is indicated as "Operator" on this page. All questions relating to this Plan or the MFH Facility should be directed to the Terminal at the Facility Operator listed below.

Name Of Facility:	San Juan Micro Fuel Handling Facility
Location Of Facility:	Road PR-28 KM 4.9, San Juan, Puerto Rico 00922
Type Of Facility:	Onshore
Date Of Initial Facility Operation:	2020
Facility Owner:	NFEnergia LLC
Facility Operator:	NFEnergia LLC

# 2.1 Facility Description

# 2.1.1 Location and Activities

The Facility is located in the Puerto Nuevo section of the Port of San Juan (*Puerto de San Juan*), a seaport facility located in the metropolitan area of San Juan, Puerto Rico. The "Port of San Juan" is the general name used to refer to the various passenger and cargo facilities located in lands around the San Juan Bay (*Bahía de San Juan*). The Facility site is located at Wharf A and Wharf B and is shown on a portion of the NOAA chart below.

The nautical chart coordinates of the Facility are:

- Latitude: 18°25'43.7" N
- Longitude: 066°06'21.2" W

The Lambert coordinates for the Facility are:

- N: 872331.09
- E: 769666.89

The Site Plan and Facility Diagram are included in Appendix A. The MFH Facility operates 8,760 hours a year. The MFH Facility is a fuel-handling terminal on San Juan Bay. To the south of the MFH Facility is:

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- The San Juan Power Plant zoned heavy industrial (I-2) according to the Municipality of San Juan Zoning Map;
- Property belonging to the Puerto Rico Industrial Development Company, zoned heavy industrial (I-2) according to the Municipality of San Juan Zoning Map and appearing to have industrial use;
- Vacant property with no identified owner, zoned low residential (R-0) and heavy industrial (I-2); and
- State road PR-2.

The adjoining properties to the east are similar to those to the south and are primarily warehouses and open-air storage facilities for containerized cargo, automobiles, and project cargo.

The property to the west belongs to the Puerto Rico Land Administration, zoned heavy industrial (I-2) according to the Municipality of Guaynabo Zoning Map, where the Cataño Oil Dock and tank farm are located. Also, to the west is the Puma oil berth, the Army Terminal Ro-Ro facility and State road PR-28.

A Site Plan is included in Appendix A.

# 2.2 Facility Storage

Table 2-1 summarizes the storage containers present at the MFH Facility.

Tank	Capacity	Normal Daily Usage	Location
Diesel Tank #1	550 Gallons	Emergency Back-up	See Appendix "A", item 21
Diesel Tank #2	550 Gallons	Emergency Back-up	See Appendix "A", item 21
Sanitary Sewage Tank	14,500 Gallons	Varies	See Appendix "A", item 34

# Table 2-1: Storage Containers

# 2.2.1 Oil Storage

Oil storage at the Facility consists of two fixed aboveground tanks, each with a capacity of 550 gallons, storing a maximum of 1,100 gallons of diesel fuel for emergency generators. The Facility

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also stores *de minimis* quantities of oil from leaking trucks or other equipment in other containers. See facility engineering diagram at Appendix A.

# 2.2.2 Sanitary Sewage Storage

Sanitary sewage storage at the Facility consists of one fixed aboveground tank, with a capacity of **14,500** gallons, storing sanitary sewage generated at the site.

# Part 3: Discharge Prevention - General Provisions

The following measures are implemented to prevent oil and sanitary sewage discharges during the handling, use, or transfer of oil and sanitary sewage products at the MFH Facility. Employees handling these products have received training in the proper implementation of these measures.

# 3.1 Facility Layout Diagram

The Site Plan in Appendix A includes the general location of the facility on a NOAA chart. The Site Plan in Appendix A presents a diagram of the MFH Facility and the location of storage tanks. The diagram also shows the location of storm water drain inlets and the direction of surface water runoff. The facility diagram in Appendix A indicates the location and content of ASTs and ancillary equipment.

# 3.2 Spill Reporting

See Section 5.0 of the Plan.

# 3.3 Potential Discharge Volumes and Direction of Flow

Table 3-1 presents expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different parts of the MFH Facility where oil or sanitary sewage is stored, used, or handled.

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
(Diesel Storage Tan	ks)			
Failure of aboveground tank	550 Gallons	Gradual to instantaneous	North	Yes

# Table 3-1: Potential Discharge Volumes and Direction of Flow

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Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
(collapse or puncture below product level)				
Tank overfill	1 gallon	.5 GPM	Same as above	Catch Basin
(Sanitary sewage Sto	rage Tank)			
Failure of aboveground tank (collapse or puncture below product level)	14,500 Gallons	Gradual to instantaneous	North	No

#### 3.4 Oil-Containing Structures

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These two units are double-walled tanks. The use of a double-walled tank minimizes the risks of any of this material leaving the containment. The MFH Facility will install secondary containment to prevent accidental discharges.

**Sorbent Material.** Spill cleanup kits that include absorbent material, booms, and other portable barriers will be available and stored within the Turbine Building. The spill kits are located within close proximity of the oil product storage and handling areas for rapid deployment should a spill occur.

#### 3.5 Inspections, Tests, and Records

#### 3.5.1 Inspections

The units are subject to monthly and annual inspections. A copy of each inspection form is included in Appendix B. The inspection form includes inspection guidance.

# 3.5.2 Records

Copies of the inspections are kept in the office of the Terminal Manager for a period of three years.

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# 3.6 Personnel, Training, and Discharge Prevention Procedures

The Terminal Manager is the MFH Facility designee and is responsible for oil discharge prevention, control, and response preparedness activities at the MFH Facility.

NFE management instructs and trains facility personnel on an annual basis in the operation and maintenance of oil pollution prevention equipment, discharge procedure protocols, applicable pollution control laws, rules and regulations, general facility operations, and the content of this Plan. Any new facility personnel will be provided with this same training prior to being involved in any operation. The training is conducted in a classroom with evaluation and tests and electronic verification of the training is kept on file. The annual training sessions are considered as discharge prevention briefings since they incorporate, when warranted, known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. The training process includes evaluations and tests.

# 3.7 Security

The Facility will have on-site electrical distribution facilities designed to supply power to process equipment, a control building, site lighting, site security cameras, and other related equipment. The power feed will be taken from the nearest supply point on the wharf.

The Facility will have a central control building that will provide communications.

On-site lighting will be included to facilitate night time operations as needed. The MFH Facility also includes two (2) 300-kW Emergency Diesel backup generators with a total diesel storage capacity of one thousand one hundred gallons (1100 Gals.)

On-site fencing is installed as part of the security for the MFH Facility. Security guards employed by the MFH Facility should inspect and document trucks as they enter and exit the MFH Facility and should conduct security and fire prevention rounds. Security cameras and intrusion detectors will be installed to monitor the MFH Facility.

The MFH Facility site and adjoining properties include the facilities to transfer fuel for the San Juan Power Plant and other bulk and containerized materials from commercial vessels typical of an industrial port facility.

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# Part 4: Discharge Prevention — Provisions for Onshore Facilities

#### 4.1 Facility Drainage

The Facility is located adjacent to San Juan Bay. While the site is relatively flat, this proximity presents a potential for runoff.

# 4.2 Storage Containers

Table 2-1 summarizes the construction, volume, and content of storage containers at the Facility.

# 4.2.1 Construction

The two 550 gallon tanks used to store diesel at the MFH Facility are part of the generation units and are constructed of double wall steel and will be within a bermed area that is capable of holding the contents of both 550-gallon oil tanks should an accidental leak occur. The design and construction of all bulk storage containers are compatible with the characteristics of the oil product they contain, and with temperature and pressure conditions.

# 4.2.2 Secondary Containment

As described earlier, most of the oil containers at the MFH Facility are the storage associated with the temporary power generators. NFE will provide secondary containment for these two units in amounts sufficient to hold the entirety of the units' contents and reasonable freeboard.

# 4.2.3 Inspections and Tests

Inspections and tests have been discussed in Section 3.5.

# 4.2.4 Overfill Prevention Systems

The 550-gallon diesel fuel tanks are provided with level gauges.

# 4.2.5 Visible Discharges

Visible discharges from any container or appurtenance — including seams, gaskets, piping, pumps, valves, rivets, and bolts — are required to be quickly corrected upon discovery.

Sanitary sewage and any oil waste is promptly removed and disposed of according to the waste disposal method described in Part 5 of this Plan.

Part 5: Discharge Response

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# 5.1 Emergency Spill Response Procedure

Always	s consider your personal safety before any actions are taken.
1	Notify the Main Control Room.
2	The facility Main Control Room or Terminal Manager or its designee will immediately evaluate the source, nature, and extent of the release event.
3	Move to a safe distance away from the release in the upwind direction and warn others in the area of the actual or potential danger.
4	If any unsafe situation is present, the area is to be evacuated immediately, and the applicable authorities are to be notified (PR Emergency Management, Fire, Police).
5	The area in the vicinity of the release event will be secured and access limited to authorized NFE personnel.
6	All ignition sources are to be shut off (engines, generators, etc.) and power turned off to equipment (emergency shut off switch) if this is a safe option.
7	Spill response materials are to be obtained to implement spill containment/cleanup activities.
8	If possible, move other nearby containers of material away from the release area.
9	If spill incident if beyond the capabilities of NFE personnel, the Main Control Room or Terminal Manager will direct personnel to isolate the area and cease any operations that may pose a hazard. The Main Control Room or Terminal Manager will call a spill response contractor for additional assistance and will evaluate whether it is required to report the spill to the NRC, PR Emergency Management, DNER, or the USCG.
10	Use appropriate equipment (gloves and goggles) for protection and absorbent materials (pads, booms, socks) to contain and cleanup spills. Refer to the SDS for the material released for additional information.
11	Place sorbent material around catch basins, along the site boundaries in the direction of flow, and other potential pathways to prevent migration of oil from the spill area.
12	Place used absorbed pads and particulate waste and associated materials in appropriate 55 gal. steel drum containers, pending off-site management. It is preferred that oil only sorbent materials are used to contain and cleanup oil releases. A preferred vendor will dispose of all debris generated from the spill cleanup. Make arrangements to replace materials used in the spill cleanup activity.
13	The Terminal Manager will file all required correspondence with regulatory agencies. All records should be filed in the appropriate section of the facility's environmental files.

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# 5.2 Spill Reporting and Disposal Plan

# 5.2.1 Facility Reporting Requirements

In the event of a discharge of oil or sanitary sewage where a threat to the environment is imminent, the Terminal Manager shall immediately notify the National Response Center (NRC). The Department of Natural and Environmental Resources should also be notified of the discharge upon the discovery of the release. The USCG should be notified of any spill that either interferes with vessel movements in San Juan Harbor has the potential to interfere with nautical traffic in the harbor.

At the conclusion of a spill event, a spill documentation form will be completed and kept on file. At a minimum, the following items will be included in the investigation of a spill:

- Location of the discharge;
- Type and quantity of spill;
- Description of physical and environmental damages;
- Action taken to prevent recurrence; and
- Date and time.

# 5.2.2 Disposal Plan

NFE intends to recover as much oil or sanitary sewage as the situation permits. Cleanup materials requiring disposal will be handled by responsible carriers and taken to permitted disposal sites. All waste will be properly handled, characterized, and disposed of appropriately. Also, any materials used during remedial activities will be recovered, decontaminated, and disposed in accordance with applicable regulations. Potential waste materials include, but are not limited to, the following items:

- Recovered product
- Contaminated soil
- Personal protective equipment
- Decontamination rinses
- Absorbents

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 Contaminated equipment and materials, including drums, tank parts, valves, and shovels

In the event of a spill, the following resources will be considered:

- Storage Drums
- Plastic Shovel
- Plastic Bags
- Initial containment kit in case of a rupture

Material that is not recoverable, such as spent oil absorbents, soils, and contaminated equipment, will be evaluated for disposal options. Representative samples of potentially hazardous wastes will be analyzed in an approved laboratory before waste handling and disposal/recovery arrangements are made. Disposal will be performed in accordance with federal, state, and local regulations, including the Resource Conservation and Recovery Act (RCRA).

# 5.2.3 Reporting Spills

An immediate verbal notification must be made to the NRC and DNER if a spill of any oil from the Facility:

- (i) Violates applicable water quality standards;
- (ii) Reaches any water body; or
- (iii) Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Spills must also be reported to DNER if they pose a risk of stormwater discharge or a risk to the soil or any water body. If the DNER is not available, then immediate notification must instead be made to Emergency Management. Within five (days) of the spill, the MFH Facility must provide a written report to DNER, including the amount spilled, its exact location, the areas affected, contingency measures, clean-up performed and whether a third party contractor was retained to perform this work.

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# 5.3 Spill Clean-Up Materials

The MFH Facility maintains spill control materials via initial containment kits that are located strategically throughout the building. An initial containment kit typically includes:

- mat pads;
- absorbent booms;
- absorbent pillows;
- absorbent socks;
- drain blockers;
- safety equipment; and
- emergency response phone list.

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Appendix A

Site Location Map and Site Plan





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> Micro Fuel Handling Facility EMERGENCY PROCEDURES

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Appendix B

Facility Inspection Checklists



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# Engine Checklist

		Lubrie	ation and Mele	tenance Sce	ica Internate	
tem	Daily	500 Hours of Oper- ation/or Every 12 Months	2000 Hours of Operation/ or Every 24 Months	3000 Hours of Oper- ation/or Every 36 Months	6000 Hours of Operation/or Every 72 Months	As Required
Check Engine Oil Level	•					
Check Coolant Level	•					
Drain Water From Fuel Filters	•			being our and		
Check Air Cleaner Dust Valve Restriction Indicator Gauge *	•					
Perform Inspection of Engine Compartment	•					
iervice Fire Extinguisher						
ervice Battery						
Change Engine Oil And Replace Oil Filter b.e						
Theck Coolant Pump Weep Hole		•				
check Open Crankcase Vent (OCV)						
heck Air Intake Hoses, Connections, and System		•				
toplace Fuel Filter Elements d						
heck Belt Tensioner and Belt Wear						
heck Cooling System						
ressure Test Cooling System						
heck Engine Speeds						
heck Engine Mounts						
heck Engine Ground Connection		.				
heck Crankshaft Vibration Damper *						
dust Engine Valve Clearance						
ush and Rafil Cooling System				-		
leading air from cooling system						
sst Thermostate						
rain Water From Fuel Filters When Alarm Sounds 1						
dd Coolant						
Roice Air Cleaner Flomente						•
esting the Exhaust Eller 0						•
aning the Exhibition Palt						•
hank Europe						•
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redice Such Surface						•
adding roal system						•
lack Air Compressors (in Equipped)						•
eck Reingerant (A/C) Compressor (If Equipped)						•
seck Rear Power Take-Off (If Equipped)						

30-2



# Micro Fuel Handling Facility EMERGENCY RESPONSE PLAN

# Tank Checklist

Use the following inspection checklist for each regular inspection of the storage tanks at the facility; check the appropriate box for each tank and, where issues are identified, describe in the comments section along with corrective action performed.

Inspection Date: Inspection Performed By:	Diesel Tank #1	Diesel Tank #2	Sanitary Wastewater Tank	Comments and Corrective Action
1. Visual Inspection: Visually inspect the area around the tank, the containment area, and the surrounding area to identify leaks	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	
2. Secondary Containment: Inspect secondary containment, interstitial spaces, and/or overspill container for water or product (spillage or excess water must be removed, properly disposed of, and documented)	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	
<u>3. Secondary</u> <u>Containment</u> <u>Surrounding:</u> Inspect the secondary containment for debris or other hazards	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	
<u>4. Secondary</u> <u>Containment</u> <u>Integrity:</u> Inspect the secondary containment for	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	



# Micro Fuel Handling Facility EMERGENCY RESPONSE PLAN

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(cracks, rusting, etc.)				
5. Drains: Check that drain plugs or valves for secondary containment are operated, in closed position, and cannot be opened accidentally	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	<ul> <li>Nothing Identified</li> <li>Issue Identified</li> </ul>	
<u>6. Tank Gauges:</u> Check tank level gauges to ensure are functioning properly and in good condition	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	
<u>7. Tank Openings</u> : Check that all tank openings are properly sealed	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	
8. Accessibility: Ensure that the tanks are easily assessable to complete assessments	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	
<u>9. Aboveground</u> <u>Inspection</u> : Inspect condition of any aboveground piping, valves, joints, etc.	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	
<u>10. Miscellaneous:</u> Are there any other conditions that have been identified that should be addressed for continued safe operation or that may affect this plan?	□ Nothing Identified □ Issue Identified	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	<ul> <li>Nothing</li> <li>Identified</li> <li>Issue</li> <li>Identified</li> </ul>	



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Appendix C

Record of Discharge Prevention Briefings and Training

4	Redacted	-CUI//Public	
NewFortre	ergy	TRAINING ATTEN	IDANCE LOG
Location of Training:		Date and Time:	
Type of Training Subject			
Pollution Prevention Equipme	ent Discharge Proc	edure Protocols General Fa	acility Operations
Applicable Pollution Control L	aws, Rules and Regulations.	General Plan Contents	Other
TITLE: MICRO FUEL HAND	LING FACILITY EMER	GENCY RESPONSE PLAN	
Key Topics / Description of	Training:		
Training Materials or References: Coordinator(s):			
PRINTED NAME	COMPANY	POSITION TITLE	SIGNATURE
Effective Date: 03/04/2020			Rev 0

	energy	NowFortrace	
	EMERGENCY RESPONSE PLAN	Micro Fuel Handling Facility	
Page:	Date:	Revision:	
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# **Training Matrix**

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Type of Training	e Name	First							and the state								No. of Concession		「日本ないないの			The second s	
	Position		Terminal Manager	Asist, Terminal Manager	Terminal Scheduler	Ops/HSE Supervisor	Senior Operator	Operator	Operator	Operator	Operator	Operator	Operator	Senior Operator	Senior Operator	Operator	Maintenance Manager	I&E Technician	Maintenance Technician	Maintenance Technician			
	NFE University				1200				No. of Concession, Name				No.										L
SAFETY, SECURITY AND EMERGENCY RESPONSE	NFE HSSE Safety Induction				00000										あたいの							Sub State	
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# APPENDIX 1D AFFECTED LANDOWNER CONTACT LIST

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