



ecology and environment, inc.

International Specialists in the Environment

BUFFALO CORPORATE CENTER

368 Pleasant View Drive

Lancaster, New York 14086

Tel: (716) 684-8060, Fax: (716) 684-0844

January 30, 2015

Shane Guan
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 427-8401

**Re: Transcontinental Gas Pipe Line Company, LLC
Rockaway Delivery Lateral Project Incidental Harassment Authorization
90-day Monitoring Report**

Dear Mr. Guan:

Transcontinental Gas Pipe Line Company, LLC (Transco) is expanding its pipeline system to meet immediate and future demands for natural gas in the New York City area. In-water construction activities required pile driving in order to install a sub-sea pipeline extending from the existing Lower New York Bay Lateral in the Atlantic Ocean to an onshore delivery point on the Rockaway Peninsula. The impacts from pile-driving activities associated with horizontal directional drilling were analyzed and were found to have the potential to result in the incidental take of seven species of marine mammals by behavioral harassment.

On May 29, 2014, NOAA Fisheries issued an Incidental Harassment Authorization (IHA) to Transco under the authority of Section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(D)) and 50 CFR 216.107. The IHA, valid from June 01, 2014 through October 31, 2014 allowed for the harassment (Level B only) of marine mammals incidental to pile driving and removal associated with the Rockaway Delivery Lateral Project, specifically:

- 196 gray seals (*Halichoerus grypus*)
- 966 harbor seals (*Phoca vitulina*)
- 98 bottlenose dolphins (*Tursiops truncatus*)
- 34 short-beaked common dolphins (*Delphinus delphis*)
- 14 harbor porpoises (*Phocoena phocoena*)

As a condition in the IHA, Transco is required to submit a monitoring report to the NOAA Fisheries Office of Protected Resources within 90 days of the conclusion of monitoring activities. On behalf of Transco, Ecology and Environment, Inc. (E & E) is pleased to submit the Monitoring Report as required by the May 29, 2014 IHA for the Rockaway Delivery Lateral Project (Project).

Mr. Shane Guan
January 30, 2015

SUMMARY OF ACTIVITIES

Actual pile driving activities for the Project were much less than the number of piles and pile driving days originally proposed in the application for the IHA. The project originally proposed to install a total of 70 piles (5 sets of temporary goal posts and up to 60 fender piles), and each pile was expected to take up to 60 seconds of continuous driving. All piles were expected to be installed during a 1-week period with less than one total day of actual pile-driving operation. Actual pile driving activities as they occurred are described below.

Pile Installation: Pile installation occurred for one day only. Six piles were installed on June 30, 2014 (three goal posts and three fender piles) within the vicinity of the horizontal directional drilling (HDD) exit pit between the hours of 1602 and 1645. The goal posts were installed using a vibratory hammer and the fender piles were installed using a crane. The fender piles were positioned on the seafloor by the crane and then sank to depth under their own weight without any further mechanical assistance.

Pile Removal: On September 12, 2014 the three fender piles were removed by a crane without the use of a vibratory hammer. On September 14, 2014 the three goal posts were removed between the hours of 1047 and 1105. The goal posts were removed by placing the vibratory hammer on top of the post, initiating the hammer to dislodge the post and then the crane was used to remove the post from the seafloor.

MITIGATION REQUIREMENTS

Transco successfully implemented the mitigation measures required in the IHA throughout the pile driving activities associated with the Project. Only a vibratory hammer was used for pile installation and removal in order to reduce in-water sound levels. All pile driving activities were conducted when lighting and weather conditions allowed the protected species observers (PSOs) to visually monitor the entire Level B harassment area. At the beginning of each pile driving sessions, soft-start procedures were implemented in the form of hammer initiation for 15 seconds at 40-60% reduced energy, followed by a one-minute waiting period. This procedure was repeated two additional times before full energy was achieved. All in-water construction activities complied with federal regulations to control the discharge of operational waste that could be generated associated with the project. All project vessels complied with U.S. Coast Guard requirements for the prevention and control of oil and fuel spills. PSOs were instructed to notify construction staff if abnormal marine mammal behavior was observed so that pile driving activities could be shut down; however, as described below in the monitoring results, no abnormal marine mammal behavior was observed.

MONITORING METHODS

Observers conducted monitoring beginning at least 30 minutes prior to the start of, during, and for 30 minutes following the above activities. Monitoring was conducted during the above activities as shown below in Table 1. Monitoring was conducted from a dedicated vessel stationed approximately 1.5 miles from the vibratory hammer within the Level B harassment area. The vessel circled the area around the hammer, so that the entire Level B harassment area was surveyed. Observers recorded the following general information:

Mr. Shane Guan
January 30, 2015

- Date and weather;
- Start time for 30 minute pre survey;
- End time for 30 minute post survey;
- Time of soft start procedures;
- Time of full power;
- Time of activity end;
- Weather;
- Location;
- Heading;
- Visibility; and
- Any observation of marine mammals.

Table 1 -Monitoring Periods

| Activity (Date) | Monitoring Start | Activity Start | Activity End | Monitoring End |
|--------------------------------|-------------------------|-----------------------|---------------------|-----------------------|
| Pile Installation (6/30/14) | 0629 | 1602 | 1645 | 1715 |
| Pile Removal (9/12/14) | 0700 | NA* | NA* | 1730 |
| Pile Removal (9/14/14) | 0615 | 1047 | 1105 | 1150 |

NA - Not applicable.

* - See below for description of exceptions.

All times are presented in 24 Hour Time.

SUMMARY OF RESULTS

Monitoring occurred over five days. No observation of marine mammals was recorded on June 30, 2014. Observations of marine mammals were made on made on September 12 and September 14, 2014 (see Table 2 attached); however, no takes were recorded for the Project. All marine mammals were observed when no vibratory activities were occurring. In addition, all marine mammals were displaying normal behavior and swimming away from the Level B harassment area.

All activities and monitoring were performed in accordance with the IHA (as described above) and as planned with the following exceptions:

- The Project originally planned for up to 70 piles, but only six were installed.
- Only three of the piles (goal posts) were installed and removed with a vibratory hammer.

In addition, the use of a pneumatic hammer was approved by NMFS on September 24, 2014 (via email correspondence) for the Project. NMFS indicated that no further consultation was needed for the pneumatic hammer and that it could operate within the scope of the IHA issued for the Project. The pneumatic hammer was used on October 31, 2014 between the hours of 0950 and 0955 and 1130 and 1135 while trying to set the hammer into position. The hammer was located above the water on the deck of the construction vessel. The hammer was then used on

Mr. Shane Guan
January 30, 2015

November 4, 2014 between the hours of 1206 and 1925 in an attempt to dislodge the HDD pipe. No observation of marine mammals was recorded on October 31 and November 4, 2014.

All pneumatic hammer activities and monitoring were performed in accordance with the IHA (as described above) and as planned with the following exceptions:

- Soft start procedures could not be implemented on the pneumatic hammer due to its operational procedures.
- On November 4, 2014 monitoring was conducted until 1707 when the Level B harassment area was no longer visible. The operation of the pneumatic hammer continued until 1925. Because the pneumatic hammer had been operating continuously throughout the day, and the noise source from this equipment occurred above the water level, the Level B harassment area was clear to continue hammer operation until the task was complete.

As described above, there were NO takes for the Project. If you have any questions regarding this correspondence or require additional information, please do not hesitate to call me at (716) 684-8060 or by e-mail at smochrie@ene.com. Thank you for your attention to this Project.

Sincerely,

ECOLOGY AND ENVIRONMENT, INC.

A handwritten signature in black ink that reads "SARA Mochrie". The name "SARA" is in all caps and "Mochrie" is in title case.

Sara Mochrie
Project Manager

Enclosure

cc (via e-mail):

Roberta Zwier, Transco
Megan Fronckowiak, E&E
Sarah Bowman, E&E

Table 2 Marine Mammal Observations

Vessel Name/Type: Sorenson Miller/110 ft. crew vessel

| Date | Time ^a | Location of Vessel (Latitude/Longitude) | Weather | Wind Speed (kts) /Direction | Beaufort Sea State | Visibility (nm) | Vessel Speed (kts) | Sound Source | Identified Species ^b | Animal Behavior/Heading | Mitigation Required |
|-----------|-------------------|---|-----------------|-----------------------------|--------------------|-----------------|--------------------|------------------------------------|---------------------------------|--|-------------------------|
| 9/12/2014 | 0905 | 40.5267500/-73.8815167 | 50% cloud cover | 10/N | 3 | 10 | 5.7 | None - Vibratory hammer not in use | 10 - Unknown dolphin | Normal behavior, swimming at surface/270 degrees | None |
| 9/12/2014 | 0930 | 40.5300000/-73.8350000 | 50% cloud cover | 10/N | 3 | 10 | 5.7 | None - Vibratory hammer not in use | 50 - Bottlenose dolphin | Normal behavior, porpoising/270 degrees | Disengaged vessel motor |
| 9/14/2014 | 0754 | 40.5583333/-73.8466667 | 25% cloud cover | 5-10/NNW | 3 | 10 | 4.6 | None - Vibratory hammer not in use | 10 - Bottlenose dolphin | Normal behavior, porpoising/135 degrees | Disengaged vessel motor |
| 9/14/2014 | 0940 | 40.5433333/-73.8533333 | 25% cloud cover | 5-10/N | 3 | 10 | 5.2 | None - Vibratory hammer not in use | 10 - Unknown dolphin | Normal behavior, porpoising/270 degrees | None |
| 9/14/2014 | 1111 | 40.5300000/-73.8633333 | 25% cloud cover | 5-10/N | 3 | 10 | 5.1 | None - Vibratory hammer not in use | 12 - Unknown dolphin | Normal behavior, porpoising/270 degrees | None |

Notes:

^a - All times are presented in 24 Hour Time.

^b - If a species is identified as unknown, it indicates that the species was too far from the visual observer to make an exact species determination.

Key:

kts = Knots

nm = Nautical mile

N = North

NNW = North-northwest