

Environmental and Social Monitoring Fourth Report

Project Number: 48368-001
January 2019

MYA: Myingyan Natural Gas Power Project Part 2

Prepared by Environ Myanmar Co Ltd.

The environment and social monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "Terms of Use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.



Photo 1: View of the Myingyan CCGT Plant as of August 2018.



Photo 2: Completed administration building

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 3: View of the two gas turbines



Photo 4: River water storage reservoir

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 5: A faulty agitator in the sludge thickener tank resulted in an overflow of water sludge mixture into the recycle water tank.



Photo 6: The water sludge mixture overflowed onto the gravel layer surrounding the recycle water tank and an adjacent internal drain

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 7: The excess sludge water mixture overflowed into adjacent chemical feed storage areas (up to one inch of water on the floor).



Photo 8: Insufficient containment at the chemical store (for water treatment chemicals) based on the volume of chemicals stored. Floor was inundated with approximately 1 inch of water.

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 9: Sanitary wastewater treatment plant. All sanitary wastewater from the site is routed to the plant from April 2018 onwards



Photo 10: Two (2) fire water storage tanks of 1200 m³ capacity each

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 11: The site has installed four (4) automated external defibrillators (AEDs) onsite.



Photo 12: Plant Control Room with Continuous Operations Monitoring System within the main administration building

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 13: The toilet at the JEM Office had a broken pipe leading from the sink into the cess pit. Inset: The pipe was replaced a day later.



Photo 14: Food waste (in plastic bags) were left on the ground and in two uncovered skips at the JEM office and warehouse area. This issue was rectified a day later.

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 15: Empty chemical drums stored on bare ground at the JEM Office and warehouse area



Photo 16: Dented drums with no labels at the JEM Office and Warehouse area

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 17: MOGE gas receiving station



Photo 18: Secured entrance leading to the river water supply pumping station

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 19: Overview of the river water supply pipeline and pumping station



Photo 20: River water supply pumps

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 21: Entrance into the municipal waste disposal site



Photo 22: The potential location under consideration for construction of a sludge disposal area.

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 23: Tha Pyay Thar Village: School building that had major infrastructure upgrades, a Sembcorp/PCo CDP Project



Photo 24: Tha Pyay Thar Village: Class in session at the primary school

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 25: Tha Pyay Thar Village: Solar-powered water treatment facility, a Sembcorp/PCo CDP Project



Photo 26: Tha Pyay Thar Village: Potable water produced from the solar-powered water treatment facility, a Sembcorp/PCo CDP Project

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 27: Tha Pyay Thar Village: New toilets built at the primary school, a Sembcorp/PCo CDP Project



Photo 28: Nyaung Kan Village: Teachers' newly constructed living quarters, a Sembcorp/PCo CDP Project

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 29: Nyaung Kan Village: Teachers' former kitchen



Photo 30: Nyaung Kan Village: Teachers' newly constructed kitchen, a Sembcorp/PCo CDP Project

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 31: Nyaung Kan Village: Solar-powered water treatment facility, a Sembcorp/PCo CDP Project



Photo 32: Nyaung Kan Village: New toilets built at the primary school, a Sembcorp/PCo CDP Project

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 33: Nyaung Kan Village: 500-gallon underground tank for fire protection, a Sembcorp/PCo CDP Project



Photo 34: Nyaung Kan Village: A family in the village

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 35: Sa Khar Village: Deteriorating conditions at the GAD Office (January 2018 site visit)



Photo 36: Sa Khar Village: Village Head and the Rebuilt GAD Office, a Sembcorp/PCo CDP Project

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 37: Sa Khar Village: Lists of registered voters at the GAD Office



Photo 38: Sa Khar Village: a Sembcorp/PCo suggestion box outside the GAD Office

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018





Photo 39: Sa Khar Village: Fence around the primary school, a Sembcorp/PCo CDP project



Photo 40: Sa Khar Village: Inside a classroom at the primary school

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 41: Sa Khar Village: New toilets built at the primary school, a Sembcorp/PCo CDP Project



Photo 42: Sa Khar Village: Sembcorp SVP of Strategic Communications & Sustainability with students at the primary school

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 43: Sa Khar Village: Buddhists students at the primary school



Photo 44: Ayeyarwady River at the beginning of the elevated river water supply pipeline

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 45: Households near the elevated river water supply pipeline



Photo 46: Seasonally flooded farm land near the elevated river water supply pipeline

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 47: Seasonal flooding along the buried river water supply pipeline and power poles, facing towards the Myingyan power plant



Photo 48: Replanted crops along the buried river water supply pipeline

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON



Photo 49: Replanted crops along the buried river water supply pipeline



Photo 50: Field prepared for planting new crops along the buried river water supply pipeline

Title: Fourth Lenders' IESC Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: November 2018
Project: 331000018

RAMBOLL ENVIRON