

DEADLY CARGO

EXPOSING THE SUPPLY CHAIN THAT FUELS WAR CRIMES IN MYANMAR

AMNESTY INTERNATIONAL

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GLOSSARY AND ABBREVIATIONS

AAPP	Assistance Association for Political Prisoners
Co. Ltd.	company limited
DICA	Directorate of Investment and Company Administration, Myanmar's corporate registry
EU	European Union
IDP	internally displaced people
IMO	International Maritime Organization
MMK	kyat, Myanmar's currency
MOE	Ministry of Energy
MOEE	Ministry of Energy and Electricity
MPE	Myanma Petrochemical Enterprise
MPPE	Myanma Petroleum Product Enterprise
MT	metric tons
NEPAS	National Energy Puma Aviation Services Co. Ltd.
NGO	non-governmental organization
NLD	National League for Democracy
NUG	National Unity Government
Pte. Ltd.	private limited
Puma Energy	Puma Energy Holdings Pte. Ltd.
PEAS	Puma Energy Asia Sun Co. Ltd.
SAC	State Administration Council
SRC	Singapore Refining Co. Pte. Ltd.
Tatmadaw	Myanmar's armed forces
UN GUIDING PRINCIPLES	UN Guiding Principles on Business and Human Rights
OECD GUIDANCE	OECD Guidelines for Multinational Enterprises
UN GUIDE	UN Development Programme guide on Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts

EXECUTIVE SUMMARY

At around 1am on 17 January 2022, Myanmar military fighter jets dropped two bombs on Ree Khee Bu camp in Kayah State, eastern Myanmar. The site was hosting people who were trying to escape the ongoing armed conflict. The air strike destroyed the camp's kitchen space, pockmarked the corrugated roof of the communal shed that had sleeping spaces for different families and ended the use of the site as a displacement shelter. The attack also killed a man in his 50s and two young sisters, Maria and Caroline, who were around 15 and 12. Their father, Kaw Reh, arrived at the camp the next morning: "I found the bodies of my daughters covered with cloth… I just wanted to see the bodies and sit there," he told Amnesty International. Given the absence of fighters or other military objectives in the vicinity at the time, this air strike appears to have been a direct attack on civilians and civilian objects, constituting a war crime.

The attack on Ree Khee Bu is part of a pattern of unlawful air strikes conducted by the Myanmar military. These air attacks have resulted in the death and injury of civilian women, men and children and caused the displacement of entire communities in conflict-affected areas across Myanmar. Amnesty International has documented how fighter jets have fired inaccurate rockets and dropped unguided bombs and cluster munitions, which are internationally banned as they are inherently indiscriminate. These attacks have destroyed homes, religious buildings, schools and medical facilities, among other civilian infrastructure, all while sparking widespread fear. More recently, on 16 September 2022, military attack helicopters fired on buildings used as a school and monastery in Let Yet Kone village, in central Sagaing Region. The strikes killed at least 11 civilians, most of whom were children, according to UNICEF and media reports.

The Myanmar military relies on aviation fuel to power the aircraft used in these attacks, a type of fuel that foreign and domestic companies supply, import, handle, store and distribute. For the first time since the military coup of February 2021, Amnesty International, in collaboration with Justice For Myanmar, presents a detailed account of one of the most secretive and strategic business operations in Myanmar – the supply of aviation fuel to the military.

Since 2015, the main foreign business actor involved in the supply chain of aviation fuel has been Puma Energy – a global energy company incorporated in Singapore that is based in large part out of Geneva, Switzerland, and beneficially owned by global commodity giant Trafigura.

This report shows how Puma Energy's two Myanmar affiliates – fully owned Puma Energy Asia Sun (PEAS) and joint venture National Energy Puma Aviation Services (NEPAS) – played a role in supplying aviation fuel to the Myanmar military. PEAS is responsible for handling and storing aviation fuel delivered to its Thilawa port terminal, Yangon, and NEPAS for procuring, selling, distributing aviation fuel as well as providing refuelling services at 11 Myanmar airports. Puma Energy announced on 5 October 2022 that it was selling its assets in Myanmar and exiting the country. However, at the time of publication, Puma Energy had not provided a date of its departure and continued to own PEAS and have a minority stake in NEPAS.

Other companies, including global and regional oil and gas companies Chevron, ExxonMobil, Rosneft, PetroChina and Thai Oil, as well as maritime insurers, vessel owners, shipping agents and truck distributors are also part of the supply chain, linking them to the Myanmar military responsible for air strikes amounting to war crimes. In response to Amnesty International's letters, many companies that responded stated that they sold or were involved in shipments of aviation fuel to customers in Myanmar for civilian purposes only.

Puma Energy stated that it had "not supplied, sold or distributed any fuel or products to the Myanmar Air Force (MAF) since the coup on 1st February 2021." However, Puma Energy explained in a letter to Amnesty International that it was going to leave Myanmar because it had received reports "of incidents where the MAF had been able to breach controls that were put in place to maintain the segregation of civilian supply."

In exposing the aviation fuel supply chain to Myanmar, this report has relied on a wide range of sources. It draws on Amnesty International's extensive documentation of violations of human rights and international law in Myanmar over the years and builds on previous investigations into the links between businesses and human rights abuses in the country. The report also relies on the extensive work that Justice For Myanmar has done to map the business and economic interests of the Myanmar military.

In order to document the air strikes, Amnesty International carried out on-the-ground and remote research across Myanmar in 2021 and 2022, interviewing over 120 conflict-affected people, as well as medical professionals and others with first-hand information. Other interviews include former members of the Myanmar air force, sources close to Puma Energy, industry experts and others involved in the supply chain of aviation fuel to the Myanmar military.

Amnesty International also accessed and analysed a range of other sources, including corporate documentation made public by companies; vessel tracking or Automatic Identification System data; leaked corporate documents; leaked ministerial documents; satellite imagery and geospatial data; open source photographs and videos; and logs of aircraft observations by flight spotters. Amnesty International also contacted every corporate actor named in this report; their responses are included in Annex 5 and reflected in the text.

LEGAL FRAMEWORK AND STANDARDS ON CORPORATE ACTORS AND STATES

Companies have a responsibility to respect all human rights wherever they operate. This responsibility requires companies to avoid contributing to human rights abuses through their own business activities and to address adverse impacts which they are involved in, including by remediating any actual impacts. An enterprise "contributes to" an impact if "its activities, in combination with the activities of other entities, cause the impact, or if the activities of the enterprise cause, facilitate or incentivise another entity to cause an adverse impact." The UN Guiding Principles on Business and Human Rights (UN Guiding Principles) also require businesses to seek to prevent or mitigate adverse human rights impacts directly linked to their operations or services by their business relationships, even if they have not contributed to those impacts.

To meet its corporate responsibility, a company must take proactive and ongoing steps to identify, prevent, mitigate and account for how it addresses its adverse human rights impacts by conducting human rights due diligence. Due diligence is based on the concept of proportionality: the more severe the risk, the more adapted the due diligence processes must be to the context and particularity of the risk. In conflict-affected contexts, such as Myanmar, the risk of gross human rights abuses is heightened and, therefore, due diligence by business should be heightened accordingly.

In cases where a business must cease its contribution to human rights, or in cases where a business must disengage from a business partnership, the withdrawal must be conducted "responsibly". According to the UN Guiding Principles, "responsible" withdrawal requires that companies identify, mitigate and prevent the potential and actual adverse impacts of its disengagement.

Further, under international human rights law, all states have a duty to protect against human rights abuses by all actors, including companies. States are required to take appropriate measures to prevent human rights abuses by private actors and to respond to these abuses when they occur by investigating the facts, holding the perpetrators to account and ensuring effective remedy for the harm caused.

UNLAWFUL MILITARY ATTACKS BY AIR

On 1 February 2021, the Myanmar military, led by Senior General Min Aung Hlaing, carried out a coup. In its aftermath, and the brutal crackdown on protestors that immediately followed, fighting between the Myanmar military and armed groups escalated significantly. In its operations, the Myanmar military has increasingly relied on its air force, regularly carrying out air strikes with fighter jets and attack helicopters.

In the course of this research, Amnesty International documented 16 unlawful air attacks that took place between March 2021 and August 2022 in Kayah, Kayin and Chin States as well as in Sagaing Region. The attacks killed at least 15 civilians and injured at least 36 other civilians. They also destroyed homes, religious buildings, schools, medical facilities and a camp for displaced persons.

In the vast majority of these documented cases, only civilians appear to have been present at the location of the strike at the time of the attack. In a few instances where armed group fighters were at the scene or nearby, the military's indiscriminate use of large unguided bombs and inherently inaccurate rockets in populated civilian areas still constitutes a violation of international humanitarian law and, when civilians were killed or injured as a result, a war crime. Such strikes have caused massive disruptions to people's lives, including affecting their ability to farm their lands and to move around; they have also sparked widespread fear and resulted in mass displacement, at times of entire villages.

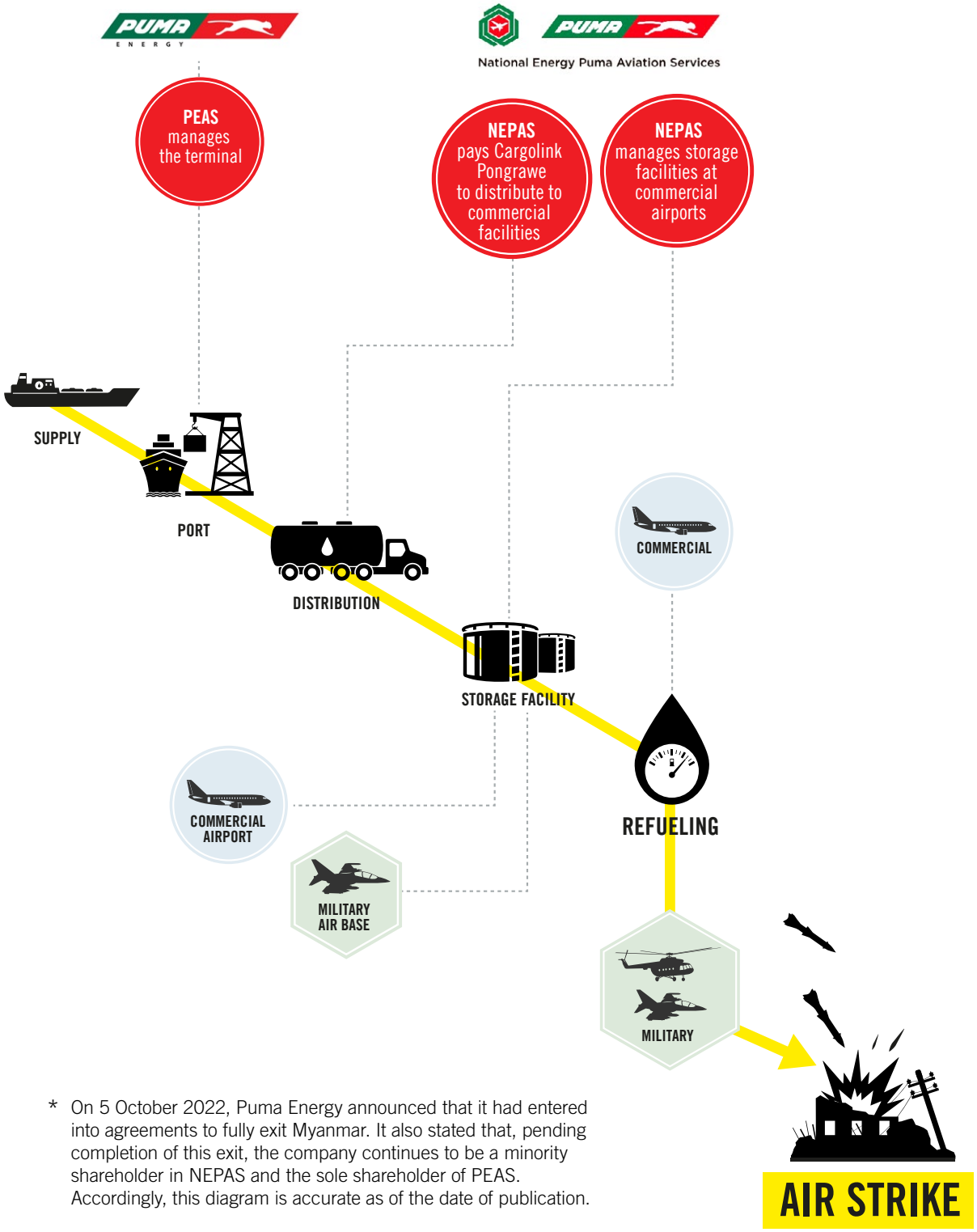
In its ongoing operations, the Myanmar military uses different air bases depending on the particular state or region that it is surveilling or attacking. Amnesty International has enough evidence to conclude that the following air bases have been used for attacks: Hmawbi air base, Yangon Region; Magway air base, Magway Region; Nansang air base, Shan State; Tada-U air base, Mandalay Region; and Taungoo air base, Bago Region.

SUPPLY CHAIN OF AVIATION FUEL TO THE MYANMAR MILITARY

Myanmar imports two types of aviation fuel, avgas and Jet A-1. The Myanmar military uses both types, although the majority of its aircraft rely on Jet A-1. This report focuses on the Jet A-1 that was imported through a port terminal in Thilawa, Yangon, managed by PEAS.

Between February 2021 and 17 September 2022, Amnesty International identified at least eight shipments of Jet A-1 offloaded at the PEAS terminal in Thilawa for a combined import volume of 66,626 metric tons (MT) in 2021 and at least 31,577 MT 2022. All imports of aviation fuel require a "consignee" or customer, who is the entity to whom the fuel is shipped, although not always the end user of the fuel. The eight shipments were consigned to either NEPAS or Asia Sun Trading Co. Ltd., part of the Asia Sun Group. This is a mid-sized Myanmar business conglomerate with companies operating in the aviation fuel business, import and export, logistics, transportation, construction and others. The Asia Sun Group has also been Puma Energy's key local partner in its Myanmar aviation fuel business.

Supply chain fuelling war crimes*



* On 5 October 2022, Puma Energy announced that it had entered into agreements to fully exit Myanmar. It also stated that, pending completion of this exit, the company continues to be a minority shareholder in NEPAS and the sole shareholder of PEAS. Accordingly, this diagram is accurate as of the date of publication.

KEY BUSINESS ACTORS

PUMA ENERGY	ASIA SUN GROUP
• Incorporated in Singapore; based partly in Switzerland • Started business operations in Myanmar in 2013 • Partnered with state-owned Myanmar Petrochemical Enterprise (MPE) and Asia Sun Group • Owner of PEAS, responsible for handling and storing aviation fuel delivered to Thilawa port terminal • Minority shareholder of NEPAS, responsible for procuring, selling, distributing aviation fuel as well as providing refuelling services at 11 Myanmar airports • On 5 October 2022, announced departure from Myanmar after admitting military was obtaining fuel it said was destined for civilian use	• Mid-sized business conglomerate • Until October 2022, Puma Energy's key business partner in Myanmar • Acted as proxy for military to import aviation fuel • Responsible for distribution of aviation fuel to military air bases • Affiliated entities involved in aviation fuel: Asia Sun Aviation, Asia Sun Trading, Asia Sun Energy, Cargo Link Petroleum Logistics

Amnesty International was able to confirm the supplier of four of these shipments: PetroChina's wholly-owned Singapore Petroleum Company (December 2021), Rosneft (December 2021), Chevron (February 2022) and Thai Oil (June 2022). In addition, findings implicate ExxonMobil in a shipment of aviation fuel to Myanmar in June 2022.

Notably, the shipments supplied by Singapore Petroleum Company and Thai Oil were delivered directly to the Myanmar military by the Asia Sun Group. Amnesty International obtained copies of two letters addressed to the Myanma Port Authority and the Customs Department, respectively, which state that Asia Sun Trading imported Jet A-1 "for use in Tatmadaw (Air Force)'s Aircrafts and Helicopter".

On arrival at the port, PEAS and shipping agents, including Wilhelmsen Ships Service (WSS) Myanmar, a subsidiary of Norwegian maritime group Wilhelmsen, handle the vessel and the fuel. The Jet A-1 is stored until it is delivered to storage facilities across the country. According to Amnesty International's research, the main distributor of Jet A-1 is a transport contractor owned by the Asia Sun Group, known as Cargo Link Petroleum Logistics, that uses tanker trucks to deliver the fuel.

Based on data obtained from December 2021 to August 2022, two separate – but related – types of transportation take place, which are managed by Cargo Link Petroleum: those involving deliveries to NEPAS storage facilities at airports and those to military air bases. Through satellite imagery analysis and open-source information, Amnesty International identified NEPAS storage facilities at ten airports and storage tanks at ten air bases. According to the data analysed, between December 2021 and early August 2022, 37,837,844 litres of Jet A-1 were delivered to NEPAS storage facilities, and 17,024,044 litres were delivered to air bases, for a total of 54,861,888 litres of Jet A-1.

There is a direct link between certain NEPAS storage facilities to which fuel was delivered and military air bases, a few of which Amnesty International has linked to war crimes.

First, Nay Pyi Taw commercial airport and military air base share the same name and air strip. Amnesty International obtained information showing that delivery of Jet A-1 was made to Nay Pyi Taw for both NEPAS and the military. This would suggest there are two separate facilities at the airport. However, an analysis of available satellite imagery from 2021 and 2022 indicates that there is only one active storage facility at Nay Pyi Taw airport, the one adjacent to the air base. This suggests that all deliveries to this airport, whether marked for civilian or military usage, went to the same storage facility, which is used by the military authorities.

Second, Mandalay has an international airport with a large NEPAS storage facility. Tada-U air base is located at the same airport and shares its airstrip. According to leaked documents, delivery of Jet A-1 was made to Mandalay airport for both NEPAS and the military. Further, according to satellite image searches, no separate storage facility adjacent to the military air base was identified and truck activity sighted in 2022 was predominantly found around the NEPAS storage facility (as opposed to the air base). It is therefore highly likely that the NEPAS storage facility is the one used for refuelling at the airport. In addition, air force defectors explained that aviation fuel is delivered to air bases including Meikhtila, MyitKyina and Nansang from Mandalay. This all links the NEPAS storage facility at Mandalay airport to military air bases, two of which (Nansang and Tada-U) Amnesty International concluded were used for air attacks and one of which (Tada-U) is directly linked to war crimes.

Another link between NEPAS and the military is Mann refinery, a military-controlled refinery that acts as a storage facility for Jet A-1. Amnesty International research shows that NEPAS paid Cargo Link Petroleum for truck deliveries of aviation fuel to and from Mann refinery. Documents show that the military then delivered Jet A-1 from storage facilities at this refinery to Meikhtila, Hmawbi, Nay Pyi Taw, Taungoo and Monywa air bases, two of which are directly linked to war crimes.

The relationship between NEPAS storage facilities and the military air bases or the Mann refinery is significant: they show that civilian and military use of aviation fuel is inextricably linked.

At military air bases, aircraft are refuelled as and when the need arises to use such aircraft for training, combat, logistics and other military operations. Of the five air bases from where military aircraft involved in attacks departed between March 2021 and August 2022, Amnesty International has been able to directly link four of them to attacks that amount to war crimes: Hmawbi, Magway, Tada-U and Taungoo.

The aviation fuel supplied, imported, stored and distributed by a number of companies featured in this report was essential to the military in carrying out air attacks. The attacks linked to these four air bases have resulted in the death and injury of civilian women, men, and children and caused the displacement of entire communities in conflict-affected areas across Myanmar. They have also destroyed homes, religious buildings, schools, medical facilities and a camp for displaced persons, all while sparking widespread fear.

RESPONSIBILITY OF PUMA ENERGY

This report shows how Puma Energy, through wholly-owned PEAS and joint venture NEPAS, contributed to war crimes committed by the Myanmar military. The company's announcement on 5 October that it is departing Myanmar does not change that.

To start with, Puma Energy has admitted to supplying aviation fuel to the military air force before the February 2021 coup. In its letter to Amnesty International, it acknowledged this fact by stating that, following the coup, Puma Energy "exercised its influence so that NEPAS terminated supply to the MAF [Myanmar Air Force]." This is highly problematic.

Amnesty International has documented the role of Myanmar military air assets in the commission of crimes under international law and other human rights violations committed by the Myanmar military between 2015 and 2021. These crimes included attacks by fighter jets and attack helicopters that killed or injured civilians as well as the transport by helicopter of soldiers that seem very likely to have been involved in a massacre of Rohingya women, men and children as well as village burning. So, even before the military coup, Puma Energy was already linked to the commission of crimes under international law by the Myanmar military.

According to the company, since February 2021, it limited its operations to the provision of aviation fuel for civilian purposes. However, Amnesty International's findings indicate that PEAS and NEPAS play a role in almost every step of the supply chain of aviation fuel to the military: acting as consignee for the import of aviation fuel; managing the PEAS terminal at Thilawa port where the majority of Jet A-1 entered the country; paying for the transport of at least a part of the fuel to NEPAS storage facilities; and managing NEPAS storage facilities, a number of which supply the Myanmar military.

The company itself acknowledged to Amnesty International that it had "become aware of reports of the military forcibly demanding fuel at selected NEPAS airport facilities. These reported incidents undermined our confidence in NEPAS's ability to maintain the controls that were put in place" by Puma Energy. This shows that, despite its efforts, Puma Energy was unable to exercise leverage against MPE and prevent the commingling of civilian and military aviation fuel. By facilitating the Myanmar military's access to aviation fuel, Puma Energy contributed to adverse human rights impacts.

In cases where companies contribute to human rights harm, as is the case of Puma Energy, they must cease the harm by responsibly withdrawing and contribute to the remediation of such harm. This should begin with consultations with representatives of the Myanmar communities that have been affected by air strikes to find appropriate measures of reparation.

RESPONSIBILITY OF ALL OTHER COMPANIES INVOLVED IN THE SUPPLY CHAIN

A number of other foreign companies featured in this report played important roles in facilitating the supply, import and distribution of Jet A-1 into and across Myanmar.

Before any sale into Myanmar, a country in conflict, suppliers must conduct human rights due diligence to understand whether the aviation fuel they sell to their customers is linked to adverse human rights impact. Each of the suppliers that Amnesty International identified – PetroChina's wholly-owned Singapore Petroleum Company, Rosneft, Chevron and Thai Oil – explained that they believed to have provided aviation fuel for civilian purposes only. A few stated that they conducted diligence to ensure that their respective customers were not on any sanctions list.

However, as the case of Thai Oil shows – where, despite assurances that the fuel would be used for civilian purposes only, the Jet A-1 was directly provided by Asia Sun Trading to the Myanmar military "for use by the Tatmadaw (Air Force)" – suppliers cannot rely on such contractual provisions. In most cases, these assurances were given by NEPAS. And yet, Puma Energy, one of its shareholders, admitted that it was aware of reports that the "military forcibly demand[ed] fuel at selected NEPAS airport facilities." This indicates that the risk of selling aviation fuel to any counterparty in Myanmar is simply too high.

After Amnesty International shared these findings with Thai Oil, the company responded stating that in order "to avoid any doubt about the compliance of good corporate governance policy, our business unit has decided to hold a selling of Jet A-1 to Myanmar until no such concerned issue."

Other companies featured in this report, such as shipping agents and vessel owners, when responding to Amnesty International's queries, similarly explained that they were involved in civilian only shipments of Jet A-1. But Puma Energy's own admission that it was not able to "maintain controls to restrict supply to civilian only airlines", shows that in practice this is impossible.

Indeed, Wilhelmsen stated that "[h]aving thoroughly reviewed the latest information provided by Amnesty International … we have determined that Wilhelmsen Ships Service Myanmar will not risk contributing in any way towards the human rights violations outlined by your report. Therefore, Wilhelmsen Ships Service Myanmar will immediately cease to provide agency services of any kind for vessel or cargo owners discharging Jet A-1 aviation fuel at ports in Myanmar."

All companies involved in the supply of aviation fuel to Myanmar – including companies that facilitate this supply – are linked to the Myanmar military through their business relationships with NEPAS, PEAS or Asia Sun. These companies should no longer provide aviation fuel to Myanmar or otherwise be involved in such provision, and, where applicable, responsibly disengage as no leverage seems possible to prevent the military from accessing the fuel once it arrives in Myanmar.

CONCLUSIONS AND KEY RECOMMENDATIONS

This report documents the pattern of unlawful military air strikes conducted by the Myanmar military, many of which amount to war crimes. These air attacks have resulted in the death and injury of civilian women, men and

children and caused the displacement of entire communities in conflict-affected areas across Myanmar. They have also destroyed homes, religious buildings, schools, medical facilities and a camp for displaced persons, all while sparking widespread fear.

Without the provision of aviation fuel, the Myanmar military would have no means to power the aircraft responsible for such air attacks. And yet companies continue to be involved in this deadly supply chain, one that links international and domestic companies to the Myanmar military, which has been implicated by Amnesty International, the United Nations, and others in war crimes, crimes against humanity and other serious human rights violations.

Since 2015, the main foreign business actor involved in the supply chain of aviation fuel to the Myanmar military has been Puma Energy. Following the company's announcement on 5 October 2022 that it is planning to leave the country, the company informed Amnesty International that it had become "aware of reports of incidents where the MAF had been able to breach controls that were put in place to maintain the segregation of civilian supply." This indicates that there is a comingling of civilian and military aviation fuel, which Puma Energy itself was unable to prevent. This also shows that all the companies involved in the supply chain – such as suppliers, vessel owners, shipping agents and marine insurers – have relied on a misguided assumption, that one can provide aviation fuel to counterparties in Myanmar without the risk of it being used by the Myanmar military.

Puma Energy, in addition to ensuring a responsible withdrawal, must remedy the harm to which it has contributed. All other companies involved in this supply chain must stop facilitating the provision of aviation fuel to Myanmar and, where applicable, responsibly disengage.

Finally, states must act as well. They have a duty to protect against human rights abuses by all actors, including companies. They must ensure that no aviation fuel is supplied to the Myanmar military. The only way to do so it to stop all aviation fuel supplies to the country. This may mean that civilian services are also affected, but as evidenced by this report, and admitted by Puma Energy itself, the Myanmar military has seized aviation fuel destined for civilian use. Until or unless states can put in place a mechanism to ensure that aviation fuel is not used by the military in air attacks that result in serious violations of international human rights law, all states must impose a suspension of aviation fuel supplies to Myanmar.

KEY RECOMMENDATIONS:

TO PUMA ENERGY

- While the withdrawal process from Myanmar is ongoing, demonstrate efforts to mitigate the adverse impact caused by its operations;
- Contribute to the remediation of all previous adverse impacts to which it has contributed.

TO ASIA SUN GROUP

- As a matter of urgency, suspend the supply of aviation fuel to the Myanmar military.

TO SUPPLIERS, VESSEL OWNERS, SHIPPING AGENTS, MARINE INSURERS AND FINANCIAL INSTITUTIONS INVOLVED IN THE SUPPLY CHAIN OF AVIATION FUEL IN MYANMAR

- Immediately suspend the direct and indirect supply, sale, and transfer, including transit, trans-shipment and brokering of aviation fuel to Myanmar.

TO THE STATE ADMINISTRATION COUNCIL (SAC)

- End the use of unguided air strikes in civilian areas. Even when there are military objectives in the vicinity, the military's employment of very large "dumb" bombs and unguided rockets have caused significant civilian casualties.

TO MEMBER STATES OF THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN):

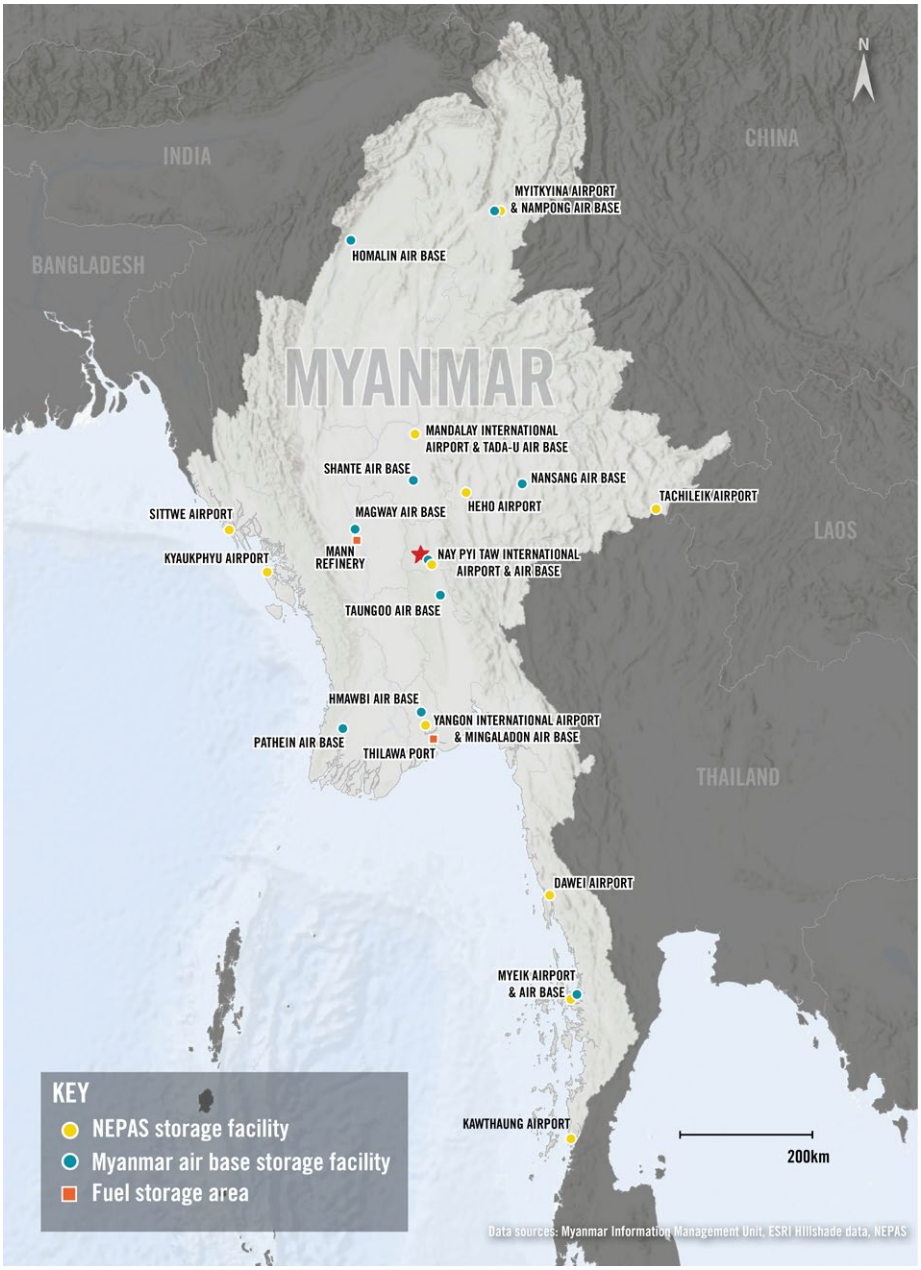
- Prohibit the use of ports for the oil and chemical tankers that are used to transport aviation fuel to Myanmar.

TO THE UN SECURITY COUNCIL

- Impose a comprehensive global arms embargo on Myanmar that covers all weapons, munitions, and other military and security equipment, and the provision of training and other military and security assistance;
- Impose a suspension of the direct and indirect supply, sale or transfer, including transit, trans-shipment and brokering of aviation fuel to Myanmar until effective mechanisms are in place to ensure that aviation fuel will not be used to commit serious violations of international human rights law or IHL.

TO ALL STATES

- Immediately cease the direct and indirect transfer of all weapons, munitions, and other military, security and surveillance equipment and systems, as well as the provision of training, maintenance and other military and security assistance to Myanmar;
- Impose a suspension of the direct and indirect supply, sale, and transfer, including transit, trans-shipment and brokering, of aviation fuel to Myanmar until effective mechanisms are in place to ensure that aviation fuel will not be used to commit serious violations of international human rights law or IHL.



METHODOLOGY

The military coup of February 2021 has had a devastating impact on the human rights of the Myanmar people. It has also significantly restricted access to information.[1] Nonetheless, Amnesty International, in a research collaboration with Justice For Myanmar and with the support of other civil society organizations, including Burma Campaign UK, has accessed a wide range of independent sources that shed light on Myanmar's aviation fuel supply chain.[2] We are deeply grateful to those who, often at great effort and personal risk, have shared invaluable information that have made this report possible.

This report relies on a wide range of sources.

First, it draws on Amnesty International's extensive documentation of violations of human rights and international law in Myanmar over the years, especially since the February 2021 military coup, and the role of the Myanmar military in these violations.[3] It builds on previous investigations by Amnesty International's Business and Human Rights team into the links between businesses and human rights abuses in Myanmar.[4] It also relies on the extensive work that Justice For Myanmar has done on mapping out the business and economic interests of the Myanmar military.[5]

Secondly, Amnesty International interviewed several former members of the Myanmar air force. These included a sergeant who served in Mingaladon air base and defected in April 2021; a captain who served in Nansang and Nay Pyi Taw air bases and defected in February 2022; a flight sergeant who served in the Mingaladon, Nansang and Pathein air bases and defected in April 2022; and an air force officer who served in the Nansang and Pathein air bases and defected in February 2022. Amnesty International also interviewed a former Myanmar police officer, two sources close to Puma Energy, two individuals working for oil and gas companies in Myanmar, an aviation fuel industry expert, a marine insurance expert and an aviation fuel trader.

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1 Office of the United Nations High Commissioner for Human Rights (OHCHR), ***Myanmar: UN experts condemn military's "digital dictatorship"***, 7 June 2022, ohchr.org/en/press-releases/2022/06/myanmar-un-experts-condemn-militarys-digital-dictatorship.

2 Justice For Myanmar is an activist group campaigning for justice and accountability for the people of Myanmar. justiceformyanmar.org/

3 Amnesty International, ***'Bullets rained from the sky': War crimes and displacement in eastern Myanmar*** (Index: ASA 16/5629/2022), 31 May 2022 (hereinafter: Amnesty International, ***'Bullets rained from the sky'***), https://www.amnesty.org/en/documents/asa16/5629/2022/en/ ; Amnesty International, ***Myanmar: 15 days felt like 15 years: Torture in detention since the Myanmar coup*** (Index: ASA 16/5884/2022), 2 August 2022 (hereinafter: Amnesty International, ***15 days felt like 15 years***), https://www.amnesty.org/en/documents/asa16/5884/2022/en/ ; Amnesty International, ***Myanmar: First executions in decades mark atrocious escalation in state repression***, 25 July 2022 (hereinafter: Amnesty International, ***First executions in decades***), amnesty.org/en/latest/news/2022/07/myanmar-first-executions-in-decades-mark-atrocious-escalation-in-state-repression/

4 Amnesty International, ***Open for Business? Corporate Crime And Abuses At Myanmar Copper Mine*** (Index: ASA 16/0003/2015), 10 February 2015, https://www.amnesty.org/en/documents/asa16/0003/2015/en/ ; Amnesty International, "Myanmar: Suspend copper mine linked to ongoing human rights abuses", 10 February 2017, amnesty.org/en/latest/news/2017/02/ myanmar-suspend-copper-mine-linked-to-ongoing-human-rights-abuses/ ; Amnesty International, "Japan: Investigate brewer Kirin over payment to Myanmar military amid ethnic cleansing of Rohingya", 14 June 2018, amnesty.org/en/latest/news/2018/06/japan-investigate-brewer-kirin-over-payments-to-myanmar-military-amid-ethnic-cleansing-of-rohingya/; Amnesty International, ***Myanmar: Military Ltd: The company financing human rights abuses in Myanmar*** (Index: 16/2969/2020), 20 September 2020, (hereinafter Amnesty International, ***Military Ltd***), https://www.amnesty.org/en/documents/asa16/2969/2020/en/

5 Justice For Myanmar, ***Cartel Finance Map***, data.justiceformyanmar.org; Justice For Myanmar, "How business finances the crimes of the Myanmar military: MEHL files", 10 September 2020, justiceformyanmar.org/stories/how-business-finances-the-crimes-of-the-myanmar-military; Justice For Myanmar, "Companies brokering arms & equipment to Myanmar military", 11 August 2022, justiceformyanmar.org/stories/exposed-companies-brokering-arms-equipment-to-myanmar-military; Justice For Myanmar, "International business linked to the Quartermaster General", 20 December 2021, justiceformyanmar.org/stories/international-businesses-linked-to-the-quartermaster-general; Justice For Myanmar, "Myanmar military-controlled businesses and associates that require targeted sanctions", 10 June 2021, justiceformyanmar.org/stories/myanmar-military-controlled-businesses-associates-that-require-targeted-sanctions; Justice For Myanmar, "Public companies financially supporting the illegitimate Myanmar junta", 6 May 2021, justiceformyanmar.org/stories/public-companies-financially-supporting-the-illegitimate-myanmar-junta; Justice For Myanmar, "Myanmar military SAC members, their businesses & associates that require targeted sanctions", 6 April 2021, justiceformyanmar.org/stories/myanmar-military-sac-members-their-businesses-and-associates-that-require-targeted-sanctions; Justice For Myanmar, "Nodes of corruption, lines of abuse", 20 December 2020, justiceformyanmar.org/stories/nodes-of-corruption-lines-of-abuse-how-mytel-viettel-and-a-global-network-of-businesses-support-the-international-crimes-of-the-myanmar-military.

Amnesty International also relied on a vast amount of documentary sources, open-source information, satellite imagery and geospatial data.

Amnesty International informed all interviewees about the nature and purpose of the research and about how the information they provided would be used. Oral consent was obtained for each interviewee before the interview. No incentives were provided to interviewees for their accounts.

Amnesty International also relied on a vast amount of documentary sources, open-source information, satellite imagery and geospatial data.

For the information pertaining to the corporate shareholding and business operations of companies featured in this report, Amnesty International accessed annual reports and other documents made public by the companies, including information on their websites, corporate records filed with state registries primarily in Myanmar and Singapore; Myanmar Extractive Industries Transparency Initiative databases; documents filed by companies with Myanmar agencies that have been leaked since the February 2021 military coup; and industry media reports. Justice For Myanmar conducted extensive research on the corporate structure of the Asia Sun Group, the main Myanmar company involved in the supply chain of aviation fuel. They relied primarily on corporate records filed with various agencies, including the Directorate of Investment and Company Administration (DICA).

For the information relating to the vessels that transported aviation fuel to Myanmar, Amnesty International relied on: vessel tracking or Automatic Identification System (AIS) data, records made public by the Myanma Port Authority, satellite imagery and information provided to Amnesty International by the suppliers of the aviation fuel.

AIS is a mechanism that automatically provides for the exchange of data between ships and coastal stations.[6] This data includes: (a) details of the ship, such as the unique call sign, name and the International Maritime Organization (IMO) number[7]; (b) automatically generated dynamic navigational data including details of the ship's position, course and speed and navigational status; and (c) manually entered voyage data.[8] Amnesty International accessed data from maritime analytics providers, including MarineTraffic[9] and Lloyds List Intelligence Seasearcher.[10]

Amnesty International reviewed "berthing lists" that the Myanma Port Authority publishes once or twice a week.[11] These include information on vessels entering and berthing at the Yangon port, such as the name of the vessel, type of cargo, quantity or weight of the cargo and berth or jetty where the vessel moored. However, as of January 2022, the Myanma Port Authority stopped providing this information for ships transporting oil and gas products. The Myanma Port Authority has been controlled by the military since 1 February 2021.

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6 "The fitting of AIS is mandatory for all vessels of 300 gross tonnage and above on international voyages. The purposes of AIS include promoting the safety of navigation, collision avoidance, enabling coastal States to obtain information about ships and their cargoes." See European Commission, *Study on reporting obligation resulting from directive 2010/65/EU*, 12 December 2013, transport.ec.europa.eu/system/files/2016-09/2013-12-reporting-obligation-2010l0065-final-report.pdf, p. 162.

7 The IMO number is a unique seven-digit number that the IMO issues to each vessel that stays with the vessel until it is scrapped. It never changes, regardless of the ship's owner, country of registration or name. See Pew Charitable Trusts, *The IMO Number Explained*, May 2017, pewtrusts.org/~/media/assets/2017/05/eif_the_imo_number_explained.pdf.

8 European Commission, *Study on reporting obligation resulting from directive 2010/65/EU*, 12 December 2013, p. 162, transport.ec.europa.eu/system/files/2016-09/2013-12-reporting-obligation-2010l0065-final-report.pdf.

9 MarineTraffic, Arrival and Departures, marinetraffic.com/, (accessed on 19 September 2022), "Explore".

10 Lloyd's List Intelligence Seasearcher, Vessels, seasearcher.com/, (accessed on 19 September 2022).

11 Myanma Ports Authority, Berthing List, mpa.gov.mm/berthing-list (accessed on 19 September 2022), "Announcement".

Amnesty International also drew on satellite imagery to confirm the location of the vessels involved in transporting aviation fuel to Myanmar. Finally, Amnesty International relied on information provided by the actual suppliers of these goods.

For the information relating to the distribution by tanker trucks of aviation fuel throughout Myanmar, Amnesty International obtained access to a series of confidential documents dated 2021 to 2022. Two sets of these were particularly important.

The first comprises 54 invoices dated from October 2021 to January 2022 issued by Cargo Link Pongrawe Logistics Co. Ltd. (Cargo Link Pongrawe) to one of the main subjects of this investigation, National Energy Puma Aviation Services Co. Ltd. (NEPAS).[12]

The second comprises three datasets that include information on: (1) the delivery by truck of aviation fuel from Thilawa port to NEPAS storage facilities, (2) the delivery by truck of aviation fuel to military air bases and (3) the total amount of aviation fuel delivered to air bases. The three documents cover the period from December 2021 to August 2022 and include over 1,500 trips.

Amnesty considers these documents to be authentic for the following reasons:

First, the source of the datasets is credible to Amnesty International.

Second, certain details are corroborated by other sources. For example, they include the licence plate numbers of tanker trucks that transported aviation fuel. Amnesty International confirmed the existence of all of these vehicles through the app Myanmar Car Checker, which provides information on vehicle registration in Myanmar.[13] Further, photographs of 11 of the trucks were accessible to members of the public on the Facebook account of Cargo Link Pongrawe – the company that manages these trucks. Finally, a former member of the air force that Amnesty International interviewed shared two additional photographs of tanker trucks involved in deliveries to air bases; their licence plate numbers match two of the tanker trucks included in the military air base dataset.

Third, the datasets are extremely detailed, which lead to the reasonable conclusion that falsifying such a document would take a lot of effort and, in this case, with no clear motive.

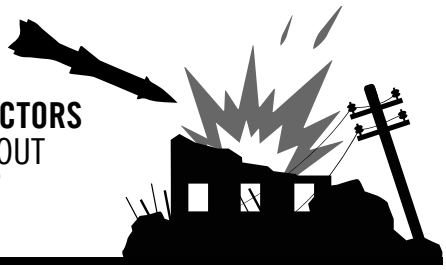
For the identification of NEPAS storage facilities at airports, Amnesty International relied on information made public by Puma Energy and on satellite imagery analysis. In the case of satellite imagery, the fuel depots were identified as they all had similar features that were constructed or updated between 2016 and 2018, which is when Puma Energy upgraded storage tanks across the airports it serviced.[14] As needed, roadways appear to be updated to allow ease of trucks delivering fuel. New similar buildings or new green roofs were also added to the compounds. Additionally, some updates to the fuel storage tanks and pipes appear to have been made.

12 Justice For Myanmar, leaked documents from a credible source, 10 August 2022, on file with Amnesty International.

13 Myanmar Car Checker, librarymyanmar.com/?p=26. This application is no longer updated and therefore may contain out-of-date information on car registration. Nevertheless, it provides information about the vehicles when they were registered.

14 Puma Aviation, *Uplifting Myanmar's aviation fuelling sector*, p. 29, pumaenergy.com/documents/35316/82442/Puma+Aviation+Brochure.pdf/fe1212af-57a5-2fd8-fa66-818382c087ed?t=1604307695431.

FOR THE INFORMATION OBTAINED ON AIR STRIKES, IN ADDITION TO THE **INTERVIEWS WITH AIR FORCE DEFECTORS** MENTIONED ABOVE, AMNESTY INTERNATIONAL CARRIED OUT **ON-THE-GROUND AND REMOTE RESEARCH ON CONFLICT AREAS ACROSS MYANMAR.**



Satellite imagery was also used to pinpoint the locations of probable fuel storage facilities at air bases and joint-use airports in Myanmar. Many of the facilities have distinctive features that are similar to known fuel depots, such as fuel storage tanks, pipes connecting tanks and buildings, and road designs allowing trucks to move through the facilities easily. Fuel truck activity and updates are visible at some of the air base facilities in the last few years, suggesting they are being used for jet fuel storage.

For the information obtained on air strikes, in addition to the interviews with air force defectors mentioned above, Amnesty International carried out on-the-ground and remote research on conflict areas across Myanmar. In April 2021, an Amnesty International delegate undertook research on the Thailand-Myanmar border related to military attacks, including air strikes, in Kayin (Karen) State. The delegate interviewed five women, seven men and one boy who were witnesses to attacks that had often occurred only days prior and collected photographic material related to these attacks.

In March and April 2022, three delegates undertook research on ongoing Myanmar military operations in Kayin (Karen) and Kayah (Karenni) States. In the course of two weeks on the Thailand-Myanmar border, delegates interviewed, among others, 25 women, 39 men and one boy who were survivors or other witnesses to conflict-related violations in eastern Myanmar. The incidents documented included eight air strikes on villages and a camp for internally displaced people (IDP) between January and March 2022, as detailed in a 1 June 2022 report.[15]

Then, from 25 June to 8 July 2022, two Amnesty International delegates undertook research inside Kayah (Karenni) State, interviewing 43 conflict-affected people in Kayah State's Demoso, Hpruso and Loikaw Townships. Among those interviewed were witnesses to five air strikes,[16] medical personnel who had treated civilians injured in air strikes and a member of the Karenni State Police who had investigated an air strike on an IDP camp. Delegates accessed four of those air strike sites, photographing damage and craters as well as in several instances, fragments of the munitions used in the air strikes, which were then reviewed by Amnesty International's weapons expert.

In September 2022, delegates carried out remote interviews with seven witnesses to three other air strikes that killed or injured civilians, including one on a health facility in Kayah State and another that hit a school building where community members were meeting in Chin State.

As part of documenting specific air strikes, in addition to interviews with witnesses, medical professionals and others with first-hand information, Amnesty International's Evidence Lab undertook an open source investigation to collect dozens of pieces of digital content depicting the attacks and their aftermath, and analysed hundreds of photographs and videos that sources from conflict-affected areas had provided in relation to those air strikes, including of killed or injured civilians, destroyed

15 For a more detailed methodology of this documentation, see Amnesty International, *Bullets rained from the sky: War crimes and displacement in eastern Myanmar* (Index no. ASA 16/5629/2022), June 2022.

16 Amnesty International had previously documented two of these air strikes through remote interviews as well as an analysis of photographic and video material. The findings were included in its 1 June 2022 report, *"Bullets rained from the sky"*.

or damaged civilian buildings, craters and weapon fragments. Also, Amnesty International's remote sensing expert analysed satellite imagery related to several of the air strikes. Finally, researchers reviewed logs posted online of aircraft observations by flight spotters on the ground in Myanmar; the flight spotter information, together with the air force defector and other key informant interviews, provided important information about which air bases were used for specific documented strikes that amount to war crimes – and more generally about which air bases are used for operations in different parts of Myanmar.

On 30 September 2022, Amnesty International wrote to Min Aung Hlaing, the Chairman of the State Administration Council (SAC) and Commander-in-Chief of Defence Services, with questions related to documentation of unlawful air attacks by the military. At the time of publication, his office had not replied.

This report explores the role of a number of corporate actors involved in the supply chain of aviation fuel in Myanmar.[17]

Amnesty International wrote to each of them to provide them with an opportunity to respond to the organization's findings. Out of the 24 companies contacted, 12 responded. Amnesty International reviewed the responses and took appropriate account of the information provided by updating the findings. Where relevant, corporate actors' responses are included in the text. In addition, copies of the companies' responses can be found in Annex 5 of this report. In the case of Puma Energy, Amnesty International met in person with their representatives in Geneva, Switzerland, on 2 September 2022 and engaged in correspondence.

17 Amnesty is aware that many other business enterprises not mentioned in this report also play a part in facilitating the supply of aviation fuel to the Myanmar air force. The companies included here were carefully selected based primarily on the strength of evidence collected against them.

1. BACKGROUND

1.1 MYANMAR'S HISTORY (1962-2011)



Between 1962 and 2011, the Myanmar military oversaw a series of governments that imposed severe and undue restrictions on the lives and human rights of the population, while maintaining political and economic isolation from the rest of the world. During these decades, the military held control over the country's economy and established near monopolies in various sectors.[18]

From 1988 to 2011, the military implemented a rapid programme of privatisation involving the transfer of state assets to newly formed military business conglomerates and their associates, helping to create a network of "crony" companies.[19] The market liberalization strategy of the military allowed it to "reconstitute and reassert authoritarianism" and provided a means for high-level military officers and close associates to enrich themselves.[20]

In 2008, following the establishment of a new, military-drafted Constitution, a gradual political liberalization began under a transitional military government. This started a reform process during which the military gradually eased some political and human rights restrictions while re-engaging with the international community. Politically, this culminated in 2015, when the general elections resulted in a victory for the National League for Democracy (NLD) led by Aung San Suu Kyi, a long-time opposition leader. The election of NLD accelerated the economic transition and the revitalisation of the country's economy.[21]

18 Kristian Sokke, Roman Vakulchuk and Indra Overland, *Myanmar: A Political Economy Analysis*, 2018, themimu.info/sites/themimu.info/files/assessment_file_attachments/Myanmar_-_A_Political_Economy_Analysis_-_Norwegian_Institute_of_International_Affairs_2018.pdf

19 The military's business interests are centred on the two largest business conglomerates in Myanmar: Myanma Economic Holdings Limited (MEHL) and the Myanmar Economic Corporation (MEC). The larger of the two, MEHL, has become one of Myanmar's largest companies. MEHL is a public company whose shareholders include military units behind past and continuing crimes under international law and other serious human rights violations across the country. Following the military's attempted coup, MEHL and MEC were sanctioned in multiple jurisdictions. See Amnesty International, ***Military Ltd.***

20 Between 1995 and 2011, the military government oversaw the privatization of 772 state assets. See Michele Ford, Michael Gillan & Htwe Thein, ***From Cronyism to Oligarchy? Privatisation and Business Elites in Myanmar,*** 46 J. Contemporary Asia 18, 2016, p. 19, 37-38; Aung Naing Oo, ***SOEs' recent development in Myanmar,*** oecd.org/daf/ca/Sept2017_PresentationsDay1_AsiaSOENetwork.pdf.

21 The World Bank, ***The World Bank in Myanmar,*** April 2022 worldbank.org/en/country/myanmar/overview, (accessed on 10 September 2022), "Where We Work".

1.2 ECONOMIC REFORMS AND FOREIGN DIRECT INVESTMENT

The opening up of Myanmar's economy led to a burst of foreign direct investment. Between 2012 and 2019, Myanmar attracted USD 41.3 billion of such investment – as compared to USD 40 billion for the entire period between 1989 and 2012 – largely from companies based in Singapore, China, Thailand and other Asian countries.[22]

Despite the opening up of Myanmar's economy, the military continued to steer market reforms behind the scenes. It privatized – yet held effective control over – key state-owned enterprises while also entering into public-private partnerships that ensured a steady stream of revenue for the military.[23] Consequently, as Myanmar opened up for business, it remained risky to enter into joint ventures and partnerships with state-owned enterprises, which many foreign investors were required to do.[24]

In 2019, the UN Independent International Fact-Finding Mission on Myanmar published a report on the Myanmar military's economic interests, concluding that "any foreign business activity involving the Tatmadaw [Myanmar's armed forces] … poses a high risk of contributing to, or being linked to, violations of human rights law and international humanitarian law" and recommended that businesses should cut ties with the Myanmar military and its conglomerates.[25]

1.3 MILITARY COUP AND ARMED CONFLICTS

On 1 February 2021, the Myanmar military, led by Senior General Min Aung Hlaing, staged a coup following a general election in which the military-backed political party lost heavily to other political parties, including the Aung San Suu Kyi-led NLD. The military claimed, without credible evidence, that there has been widespread election fraud and swiftly arrested political opponents, including Aung San Suu Kyi, who had effectively been the head of state.[26]

Immediately thereafter, thousands of people took to the streets to protest the coup and a civil disobedience movement was organized. The military authorities, known as the State Administration Council (SAC), responded with brutality, as soldiers and police opened fire on protesters and carried out extensive arrests of political figures, activists, medical professionals, journalists and others.[27]

In April 2021, a group of NLD-led elected members of Myanmar's parliament formed a government called the National Unity Government (NUG) which includes some representatives of ethnic minority groups. It's consultative body is the National Unity Consultative Council (NUCC).[28]

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22 Directorate of Investment and Company Administration (DICA), Foreign Investment by Sector, dica.gov.mm/en/topic/foreign-investment-sector, (accessed on 19 September 2022), "Resources".

23 See generally Andrew Bauer et al., ***State-Owned Economic Enterprise Reform in Myanmar: The Case of Natural Resource Enterprises***, January 2018, resourcegovernance.org/sites/default/files/documents/state-owned-economic-enterprise-reform-in-myanmar_0.pdf; Melissa Crouch, ***The Constitution of Myanmar: A Contextual Analysis***, Hart Publishing, 2019; Melissa Crouch, ***The Business of Transition: Law, Economics and Development in Myanmar***, Cambridge University Press, 2017.

24 See generally Amnesty International, ***Military Ltd.***

25 UN Independent International Fact-Finding Mission on Myanmar, ***The economic interests of the Myanmar military***, UN Doc. A/HRC/42/CRP.3, 5 August 2019, p. 5.

26 Amnesty International, 'Bullets rained from the sky', p. 11.

27 Amnesty International, 'Bullets rained from the sky', p. 11.

28 Special Advisory Council, "Briefing Paper: Effective Control in Myanmar", 5 September, 2022, specialadvisorycouncil.org/2022/09/statement-briefing-effective-control-myanmar/ The NUG also includes representatives from some civil society groups, ethnic armed organizations (EAOs), and other organisations representing ethnic minorities. The NUG, which is seen as the legitimate government by much of the population in Myanmar, soon announced the formation of People's Defence Forces (PDF) and has called for a "defensive war" against the military. (Amnesty International, 'Bullets rained from the sky', p. 11.)

The NUG, which is seen as the legitimate government by much of the population in Myanmar, soon announced the formation of People's Defence Forces (PDF) and has called for a "defensive war" against the military.[29]

Since the coup, the military has subjected many people in detention to torture and other ill-treatment, continuing a longstanding practice.[30] Amnesty International has recorded an increase in the use of the death penalty in Myanmar, where it has become a tool for the military in the ongoing persecution, intimidation and harassment of all who dare to challenge the authorities.[31] On 25 July 2022, the military authorities ordered the first executions of four men since the late 1980s.[32]

In addition to the urban protests and crackdown, the coup has led to renewed or increased fighting between the military and armed groups in many parts of the country.[33] The post-coup dynamics exist against a backdrop of decades-long struggles by many ethnic minorities for greater autonomy and ethnic federalism from the central government – whether military- or quasi civilian-led – that has politically and economically favoured the Burman ethnic majority.[34]

In the coup's aftermath, several ceasefires broke. New armed opposition groups emerged, many referred to as People's Defence Forces.[35] According to the Assistance Association for Political Prisoners (AAPP), as of 25 October 2022 , the military had killed at least 2,391 people, overwhelmingly civilians, and had arrested or charged more than 15,955 people.[36] The death toll in particular is likely to be a significant underestimate, especially in border areas, where fighting and human rights violations often occur in remote areas and the SAC has severely restricted communication.

Amid international inaction and waning global interest, the military has attacked civilians and civilian infrastructure from the air and the ground, unleashing a new wave of war crimes and likely crimes against humanity that have caused mass displacement and a deepening humanitarian crisis.[37]

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29 Al Jazeera, "Myanmar shadow government calls for uprising against military", 7 September 2021, bit.ly/3yJxYkq; NUG, "People's Defence Force", bit.ly/3NoSD1d; Los Angeles Times, "'The last battle for Myanmar': Citizens take up arms in bid to topple junta", 20 September 2021, lat.ms/3lv4zmc. The NUG includes some former ministers from the previous National League for Democracy (NLD)-led government, with Aung San Suu Kyi named state counsellor and Win Myint president. The NUG has been recognized as the "legitimate representatives" by the European Parliament, though most governments and international bodies have yet to formally recognize either the NUG or SAC. See The Diplomat, "EU Parliament Voices Support for Myanmar's Opposition Government", 11 October 2021, bit.ly/3a2iEoA

30 Amnesty International, *'15 days felt like 15 years'*, p. 8.

31 Amnesty International, "Myanmar: First executions in decades mark atrocious escalation in state repression", 25 July 2022, amnesty.org/en/latest/news/2022/07/myanmar-first-executions-in-decades-mark-atrocious-escalation-in-state-repression/.

32 Amnesty International, "Myanmar: First executions in decades mark atrocious escalation in state repression", 25 July 2022, amnesty.org/en/latest/news/2022/07/myanmar-first-executions-in-decades-mark-atrocious-escalation-in-state-repression/

33 Amnesty International, 'Bullets rained from the sky', p. 11.

34 Amnesty International, 'Bullets rained from the sky', p. 12. See also International Crisis Group, *Identity Crisis: Ethnicity and Conflict in Myanmar,* 28 August 2020; Stimson Center, *The Importance of Ethnic Minorities to Myanmar's Future*, 3 June 2021, stimson.org/wp-content/uploads/2021/06/The-Importance-of-Ethnic-Minorities-to-Myanmar-1.pdf

35 Amnesty International, 'Bullets rained from the sky', p. 12. Myanmar's non-international armed conflicts started soon after independence in 1948. The country has more than 20 ethnic armed organizations (EAOs), many of which have existed for decades. The military and EAOs have signed ceasefires at various points, some of which have held for years, even decades – at times with the military using a ceasefire in one region to focus operations elsewhere. See also International Crisis Group, *Myanmar's Coup Shakes Up Its Ethnic Conflicts*; New York Times, *Cold, Frightened and Armed: In Myanmar's Jungles, a Struggling Resistance*, 14 September 2021, nyti.ms/3OEtGAe; Al Jazeera, *'Our only option': Myanmar civilians take up arms for democracy*, 15 June 2021, bit.ly/3F2nA8h.

36 The death toll, in particular, is likely a significant underestimate, especially in border areas, where fighting and violations often occur in remote areas and the SAC has severely restricted communication. AAPP, "Daily Briefing in Relation to the Military Coup", 25 October 2022, aappb.org/?p=23238. AAPP's detailed list of people killed by the military indicates around 90 members of "resistance groups"; the rest appear to be civilians. See AAPP, "Daily Briefing", 25 October 2022, airtable.com/shrYUbzQe1hKXQ68x/tblswChRJGSzJWr7k, "Killed".

37 Amnesty International, *'Bullets rained from the sky'*, p. 5.

1.4 IMPACT ON BUSINESS

Following the coup, the military seized control of the state coffers and took over state-owned enterprises.[38] Overnight, hundreds of foreign investors became linked to the Myanmar military, directly or indirectly.[39] Many civil servants joined the civil disobedience movement and members of the public boycotted goods or services seen to be associated with the military.[40] Many companies that had invested millions of dollars were suddenly faced with enormous pressure from Myanmar's civil society and non-governmental organizations (NGO), which called for such companies to resist the military or pack up and leave. UN agencies made similar calls, including the Office of the United Nations High Commissioner for Human Rights (OHCHR), which reminded investors and businesses "not [to] enter into or remain in a business relationship of any kind with the Tatmadaw, or any enterprise owned or controlled by them (including subsidiaries) or their individual members."[41]

In addition, the European Union (EU),[42] the USA,[43] the UK[44] and Canada[45] imposed sanctions against those who led the military coup and their associates, including measures such as trade embargoes and travel and investment bans. These sanctions primarily targeted military members of the SAC, their immediate family members, their businesses and business associates.

By the end of 2021, many international companies had suspended operations (some just temporarily), announced they were planning to leave the country or had already left.[46]

38 According to OHCHR, "[i]n Myanmar SOEs have monopoly rights on economic activities in 12 sectors, either through joint venture or sole proprietorship. Extractive SOEs play a relatively significant role in the economy, contributing an estimated seven per cent of GDP in 2017. Despite this, most SOEs function as operational departments within line ministries – now under SAC control – rather than autonomous corporate entities, including the Myanma Oil and Gas Enterprise ('MOGE'), the largest SOE contributor to the government budget." See Office of the United Nations High Commissioner for Human Rights, ***Progress made and remaining challenges with regard to the recommendations of the independent international fact-finding mission on Myanmar***, 7 September 2022, A/HRC/51/41.

39 Justice For Myanmar, ***Myanmar military-controlled businesses and associates that require targeted sanctions***, 10 June 2021, justiceformyanmar.org/stories/myanmar-military-controlled-businesses-associates-that-require-targeted-sanctions.

40 Anonymous author, ***The Centrality of the Civil Disobedience Movement (CDM) in Myanmar's Post-Coup Era***, Australian National University, 2021, newmandala.org/wp-content/uploads/2021/10/SEARBO_CDM-Myanmar_paper.pdf.; Ministry of Planning, Finance and Investment, ***Boycott List***, mopfi.nugmyanmar.org/boycott-list/; Antoni Slodkowski, Ritsuko Ando, ***Japan's Kirin ends Myanmar beer tie-up with army-owned partner after coup***, 5 February 2021, reuters.com/article/myanmar-politcs-kirin-idUSL1N2KB04F.

41 See Office of the United Nations High Commissioner for Human Rights, ***Progress made and remaining challenges with regard to the recommendations of the independent international fact-finding mission on Myanmar,*** 7 September 2022, A/HRC/51/41. Office of the High Commissioner for Human Rights, "Progress made and remaining challenges with regard to the recommendations of the independent international fact-finding mission on Myanmar – Report of the Office of the United Nations High Commissioner for Human Rights", 7 September 2022, A/HRC/51/41

42 In 2021, the EU imposed a round of sanctions on Myanmar following the military coup and the subsequent violent repression of pro-democracy protests. The EU's 2021 sanctions expanded existing measures against Myanmar, targeting the highest ranks of the Myanmar armed forces and a series of state-owned (or military-controlled) organisations for asset freezes and investment prohibitions. See European Council of the European Union, "Myanmar/Burma: EU sanctions 11 people over the recent military coup and ensuing repression", 22 March 2021, consilium.europa.eu/en/press/press-releases/2021/03/22/myanmar-burma-eu-sanctions-11-people-over-the-recent-military-coup-and-ensuing-repression/

43 The 2021 US sanctions against Myanmar targeted the parties responsible for the military coup and reintroduced previous sanctions measures with new licences authorizing certain economic activities, including the provision of legal services and medical services. See generally U.S. Department of Treasury, "Burma-Related Sanctions", home.treasury.gov/policy-issues/financial-sanctions/sanctions-programs-and-country-information/burma

44 The UK's economic sanctions against Myanmar reflect those of the US and the EU with restrictive measures that include asset freezes, investment prohibitions, and travel bans against certain high level military officials. The UK's Myanmar (Sanctions) Regulations 2021 imposed 'financial, trade, and immigration' restrictions, including the prohibition on the export and transfer of military and communications technology and financial services to Myanmar. See generally Office of Financial Sanctions Implementation, "Financial sanctions, Myanmar", gov.uk/government/publications/financial-sanctions-burma

45 In 2021, in coordination with the US, the UK, and the EU, Canada expanded its Myanmar sanctions regime in response to the military coup and ongoing human rights abuses. See generally Government of Canada, "Canadian Sanctions Related to Myanmar", international.gc.ca/world-monde/international_relations-relations_internationales/sanctions/myanmar.aspx?lang=eng

46 World Bank Group, ***Myanmar Trade and Investment Update: FY2021 Review***, Table 2, 24 June 2022, documents.worldbank.org/curated/en/099135006272237487/P17700206f47fa0a10a5b20d1672ebf7760

2. UNLAWFUL MILITARY ATTACKS BY AIR

2.1 MYANMAR AIR FORCE

The Myanmar air force was formed on 15 December 1947, and it officially came under the authority of the Ministry of Defence on 8 May 1948 after Myanmar's independence.[47] It is commanded by General Tun Aung, the Commander-in-Chief, followed by the Chief of Staff (Air), Lieutenant General Zaw Win Myint.[48]

The three branches of the Myanmar armed forces (air force, navy and army) work together through interagency coordination.[49] The role of the air force is to "provide transport, logistical, and close air support to the Tatmadaw-Kyi [Myanmar army] counter-insurgency operations."[50] The Myanmar air force has been known to assist the Myanmar army when it loses ground control.[51]

2.2 AIR STRIKES AND WAR CRIMES

In the aftermath of the military coup and the brutal crackdown on protestors that immediately followed, fighting between the Myanmar military and newly formed armed groups emerged across the country and other long-running conflicts with certain ethnic armed organizations (EAOs) escalated significantly.[52] The Myanmar military increasingly relies on its air force, which regularly carries out air strikes with fighter jets and attack helicopters[53]. These have often had a devastating impact on civilians.

In the course of this research, Amnesty International documented 16 unlawful air attacks that took place between March 2021 and August 2022 in Kayah, Kayin and Chin States, as well as in Sagaing Region. The attacks killed at least 15 civilians and injured at least 36 other civilians. They also destroyed civilian objects including homes, religious buildings, schools, medical facilities and a camp for displaced persons.[54]

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47 Ministry of Defense, *History of Ministry of Defense*, mod.gov.mm/node/18 (accessed on 10 September 2022), "About Ministry".

48 Aljazeera, "Myanmar military replaces air force chief amid bombing campaign", 13 January 2022, aljazeera.com/news/2022/1/13/myanmar-junta-replaces-air-force-chief-amid-bombing-campaign-sources; https://www.irrawaddy.com/news/burma/myanmar-regime-sorry-for-junta-jet-intrusion-into-thai-airspace.html

49 SaferWord, "Security Integration in Myanmar: Past experiences and future vision", May 2017, saferworld.org.uk/resources/publications/1132-security-integration-in-myanmar-past-experiences-and-future-visions , p. 7; Radio Free Asia, "Myanmar military intensified attacks in Rathedaung, four civilians injured", 14 October 2020, rfa.org/burmese/news/four-civilian-injured-in-rathedaung-fight-10142020091634.html; Frontier Myanmar, "Myanmar military conducts Air Force, Army and Navy interagency coordinated operations training for the first time in 20 years", 4 February 2019, frontiermyanmar.net/mm/နှစ်-၂၀-အတွင်း-ပထမဆိုးအကာ/; Voice of Myanmar, "Myanmar military advances its forces to attack Arakan Army Bases', 15 October 2020, burmese.voanews.com/a/aa-rakhine-and-myanmar-military-conflict-in-rakhine-/5621700.html; Myanmar Now, "Depayin under coordinated operation attacks by Myanmar Army and Air Force", 7 December 2021, myanmar-now.net/mm/news/9568 8

50 Maung Aung Myoe, "Organisation and Force Structure", ***Building the Tatmadaw: Myanmar Armed Forces Since 1948,*** January 2009, p. 122.

51 The Irrawaddy, ***Myanmar Military Calls In Air Strikes to Keep Village From Falling to Resistance***, 11 May 2022, irrawaddy.com/news/burma/myanmar-military-calls-in-air-strikes-to-keep-village-from-falling-to-resistance.html; Myanmar Now, ***Military uses air strikes to fend off KIA attack in Hpakant***, 10 August 2022, myanmar-now.org/en/news/military-uses-air strikes-to-fend-off-kia-attack-in-hpakant.

52 For additional background, see Amnesty International, ***"Bullets rained from the sky"***, pp. 11-15.

53 Amnesty International observations and reporting from covering major Myanmar military operations across the country since 2016. See also Bertil Lintner, "Tatmadaw fighting a losing war in Myanmar", Asia Times, 24 February 2022, bit.ly/3yBNJZB; Myanmar Now, "Junta's reliance on airpower grows as resistance gain ground", 29 January 2022, bit.ly/3S2YCL8.

54 Under international humanitarian law, civilian objects are "all objects that are not military objectives". ICRC, Customary IHL Study, Rule 9, Definition of Civilian Objects.

In the vast majority of these documented air attacks, only civilians appear to have been present at the location of the strike at the time of the attack. In a few instances where armed group fighters were at the scene or nearby, the military's indiscriminate use of large unguided bombs and inherently inaccurate rockets in populated civilian areas still constitutes a violation of international humanitarian law and, when civilians were killed or injured as a result, a war crime. Such strikes have caused massive disruptions to people's lives, including affecting their ability to farm their lands and to move around; they have also sparked widespread fear and resulted in mass displacement, at times of entire villages.

2.2.1 ATTACKS THAT APPEAR DIRECTED AT CIVILIANS

Around 1am on 17 January 2022, Myanmar military fighter jets dropped two bombs on Ree Khee Bu IDP camp in Hpruso Township, Kayah State. The attack killed Nu Nu, a man in his 50s, as well as Maria and Caroline, sisters who were around 15 and 12 years old. It destroyed the camp's kitchen space, pockmarked the corrugated roof of the communal shed that had sleeping spaces for different families partitioned by plastic sheets and ended the use of the site as a displacement shelter. Many of the site's residents had already fled once before, escaping from Mo So village near where the Myanmar military massacred at least 35 people on 24 December 2021.[55]

Local authorities and civil society activists told Amnesty International that the IDP camp should have been well known to the military and that, on any aerial surveillance, the camp would appear distinct from an armed group base.[56] Photographs of the IDP camp area in the immediate aftermath of the attack, as well as a visit to the site by Amnesty International researchers in July 2022, show it was near civilian homes and other displacement sites, with no identifiable miliary objective nearby, which is likewise supported by testimony from survivors and others with direct knowledge.

Two Amnesty International researchers visited the family of the killed girls; six months after the attack their mother remained in distress, unable to speak about what she had witnessed that day. She was sleeping next to her daughters when the attack happened; she and her youngest daughter, 9, were not physically hurt. The girls' father, Kaw Reh, 50, told Amnesty International he was not at the camp but heard the bombing from a nearby village where he was staying that night. "I arrived at Ree Khee Bu at 7 in the morning. I found the bodies of my daughters covered with cloth… They placed the bodies of my daughters and the man in the church. I just wanted to see the bodies and sit there," he said, adding that the family's belongings at the bombing site were either destroyed by shrapnel or burned by other residents because there were "organs and blood everywhere".[57]

Kaw Reh said his surviving daughter, once outgoing and active, no longer plays with other children and that her health has been fragile since. As for him and his wife, he said, "When we think about it, we cannot eat… It's also affecting our health."[58]

55 Interviews in person, Kayah State, Myanmar, July 2022, and by voice call, 29 March 2022. See also The Karenni Human Rights Group (KnHRG), Facebook post, 24 December 2021, bit.ly/3FfiXrz; Myanmar Now, "At least 35 charred bodies found in Karenni State village on Christmas", 25 December 2021, bit.ly/3rXwhLN; Al Jazeera, "Christmas eve killings reinforce views of 'evil' Myanmar military", 30 December 2021, bit.ly/3s0I3p1; Myanmar Now, "Doctor says victims of Karenni State massacre 'murdered in cruelest, most inhumane manner'", 4 January 2022, bit.ly/3s3faIF; Fortify Rights, *Ongoing war crimes in Karenni (Kayah) State, Myanmar: May 2021 to January 2022,* 15 February 2022; Sky News, "Myanmar: The Christmas Eve massacre with 'all the hallmarks of a war crime'", 16 April 2022, bit.ly/3xXxMO6

56 Interviews in person and by voice call, March and April 2022.

57 Interview in person, Kayah State, Myanmar, 2 July 2022.

58 Interview in person, Kayah State, Myanmar, 2 July 2022. For additional testimony on this attack, see Amnesty International, *"Bullets rained from the sky"*, p. 23.

UNLAWFUL AIR ATTACKS BETWEEN MARCH 2021 AND AUGUST 2022 DOCUMENTED BY AMNESTY INTERNATIONAL IN **KAYAH, KAYIN AND CHIN STATES COLLECTIVELY**

KILLED 15 CIVILIANS & INJURED AT LEAST 36 OTHER CIVILIANS



Amnesty International reviewed photographs taken the day after the attack of two craters in the IDP camp area.[59] In July 2022, two Amnesty International researchers also visited the site of the attack and surveyed the craters and the remaining damage.[60] The craters were about 8-10 metres in diameter; at least one was more than a metre deep, based on a comparison to a person standing in it. The pattern of distinctive fractured and shattered soil on the crater walls is consistent with a sub-surface detonation of high explosives.

Amnesty International's weapons investigator analysed photographs of ordnance scrap collected at the scene. One shows a long metal strip with explosive residue and extremely sharp scalloped edges, consistent with fragments from an aerial bomb of the type in the Myanmar military's inventory.

Given the lack of fighters or other military objectives in the vicinity at the time of the strike, this appears to be a direct attack on civilians and civilian objects and would constitute a war crime.

A little over five weeks later, at around 6pm on 23 February 2022, fighter jets dropped bombs and fired aircraft cannons on a residential area in Dung Ka Mee village, Demoso Township, Kayah State, killing two civilian men and injuring several others. Amnesty International interviewed three witnesses as well as a relative of one of the men who was killed and an aid worker who responded after the attack. They said there was no fighting in the area that evening and that the nearest armed group base was a mile or more away.[61] Ka Naw, a 73-year-old man, said it was still light out when the attack unfolded:

> ***The sound was so loud. I saw [the] jets going down, bombing, and then going up again… They flew very low… The first [pass], they bombed and then they turned around and shot with machine gun… I was standing outside my house… and saw the two people dead. I was afraid to go [up close] and see what happened [to them]…***
>
> ***Two houses were destroyed. These two persons [who were killed] lived in [one of the houses]… The bomb [was] dropped in the middle of that house…***
>
> ***I don't know what to do… I'm getting older. I can't walk. I'm worried about what happens next. I can't go home.[62]***

59 Photographs on file with Amnesty International. Amnesty International interviewed a community worker and a police officer who took photographs of the site, including of the craters, the damaged shelter and the bodies of the three people who were killed. Interviews by voice call, 1 April 2022, and in person, Kayah State, Myanmar, 30 June 2022.

60 Photographs and video shot by Amnesty International researchers on file.

61 Interviews by voice call, 2 April 2022, and in person, Kayah State, Myanmar, 7 July 2022.

62 Interview in person, Kayah State, Myanmar, 7 July 2022.



The house in Dung Ka Mee village in which two people were killed by a Myanmar air strike lies in ruin the morning after the attack, 24 February 2022. © Free Burma Rangers

Another witness, a 40-year-old farmer who lived near the two-story building where the two civilian men were killed, said he heard explosions and that his house shook and the photographs on his wall fell from the vibrations. He went outside after he could no longer hear a jet and saw the nearby home and shop severely damaged and on fire; he also saw the remains of one neighbour's body.[63]

Amnesty International's weapons investigator analysed a photograph of an unexploded munition from the scene of the strike and identified it as a BA/76 aircraft bomb, an approximately 100lb unguided weapon manufactured in Myanmar and used by the Myanmar air force.[64]

Like the attack on Ree Khee Bu IDP camp, this appears to have been a direct attack on civilians and/or civilian objects and would constitute a war crime.

In what seems likely related to the attack on Dung Ka Mee village, ground spotter reports posted online and reviewed by Amnesty International show that a K-8 jet was observed taking off from Taungoo air base flying east at 6.32pm, and then flying from south to north at 6.40pm.[65] The Chinese-made K-8 carries gun pods and bombs and could have carried out that attack. According to a credible source who spoke to Amnesty International, the departure point for at least some of the attacks on Kayah State is Taungoo air base in Bago Region.[66]

63 Interview by voice call, 2 April 2022. For additional testimony on this attack, see Amnesty International, *"Bullets rained from the sky"*, pp. 22-23.

64 Other groups sometimes refer to this model as a "27-inch bomb". See Free Burma Rangers, Early July clash account summary: Kachin State and northern Shan State, 30 July 2018, bit.ly/3xSMRzv

65 Ground spotter report, 23 February 2022, reviewed and on file with Amnesty International.

66 Interview by video call, 18 May 2022.

In another attack that appears directed at civilians, Myanmar military aircraft struck several houses shortly after 1am on 5 February 2022 in Ta Dwee Koh village, Hpapun Township, Kayin State. Most families had fled the village after hearing rumours of a possible attack, but two households stayed. The aircraft fired what appears to have been a rocket that exploded near the two houses, killing two people and seriously injuring several more. A 28-year-old farmer who witnessed the attack told Amnesty International:

> ***Eight people were sleeping in my house, including my parents [who] were killed… When the air strike happened, I tried to call out for my parents, but I didn't hear back. Then my younger brother called out for me and said he was injured. When I looked for my parents, I could not find them because the house was covered with discarded bamboo [and debris]… [The air strike] destroyed four houses, [including] my house and my sister's…***
>
> ***Since that incident, all the villagers have been hiding in the jungle and have not returned to the village. No one can stay there. Women and children stay away because they are afraid of air strikes hitting again. Some of us go back to take care of the house and feed the chicken and animals. None of us return to sleep in the village since that morning.[67]***

A 38-year-old farmer said the sound of the aircraft woke him, and that shortly after, the shockwave from the blast threw one of his two daughters away from him and caused a serious injury to his 23-year-old wife's lower spine. Two of his extended family members, referenced in the previous testimony, were killed in the house next door. Livestock and cattle were also blown up. "There was flesh scattered all around – you don't know whether human flesh or animal flesh. I just picked it up and put it into one pile. And then I told people to bury [them] in the morning because I had to go to the hospital [for my wife]."[68] He said military aircraft had been flying over the area for some time, adding, "We thought that they won't launch an air strike as they have no enemy in our village… I don't know [why they struck us]… I don't understand why they cause trouble to civilians."[69]

In what seems likely related to the attack on Ta Dwee Koh village, which amounts to a war crime, ground spotter reports reviewed by Amnesty International identify two YAK-130 jets taking off from Hmawbi Air Base headed to the KNU's 'Brigade 5' area, or Hpapun District, at 12.46am, and then three YAK-130 jets were observed returning to that base between 1.30 and 1.37am.[70] The YAK-130 is capable of carrying the type of ordnance used in the attack. Credible sources, including a flight sergeant who defected from the Myanmar air force, told Amnesty International that Hmawbi Air Base in Yangon is used as the departure point for some attacks on Kayin State,[71] which is further supported by ground spotter reports posted online and reviewed by Amnesty International for many air attacks on Kayin State.[72]

67 Interview by video call, 28 March 2022.

68 Interview in person, Thailand, 31 March 2022.

69 Interview in person, Thailand, 31 March 2022.

70 Ground spotter report, 5 February 2022, reviewed and on file with Amnesty International.

71 Interviews by messaging app, 6 May 2022, and by video call, 11 August 2022.

72 Ground spotter reports, December 2021 through July 2022, on file with Amnesty International.

In the early afternoon of 15 January 2022, a truck driver, 25, was traveling on the highway between Tedim and Kalay when he saw a group of civilians running from Taingen village, Tedim Townhsip, Chin State. Fighting had been raging between the Myanmar military and PDF forces in the area; people from the village told him they were fleeing for their lives, so he stopped his vehicle by the side of the road and joined them. He said he could hear gunfire and other weapons in the distance as he ran with the group of civilians to take cover in a mountainous area. Then came the sound of aircraft around an hour later, he said. At first, the aircraft bombed in the distance but "after that they came towards us".[73] An explosive ordnance was dropped on the huts and cornfields where they were huddled; one civilian man was killed and six other civilians, including two children, were seriously injured by fragmentation.[74]

"People were screaming, crying and shouting," he said, describing chaos as the group struggled to figure out how to help the wounded, with no medical facilities anywhere nearby.[75] The driver said he helped carry on his shoulder the body of the man who had been killed, as the group walked for two hours until reaching the road; there, he left the group and drove off in his truck. He told Amnesty International, "I see the face of the dead man all the time in my mind. It was very difficult to recognize because it had a lot of injuries… Especially in the evening, the image of that face comes to my mind, and I feel really afraid."[76]

BOX 1: CLUSTER MUNITIONS

In the course of this research, Amnesty International has documented multiple occasions where the Myanmar air force has employed cluster munitions, which are banned under international law because they are inherently indiscriminate.[77] While there have been historic allegations of the Myanmar military using cluster munitions, Myanmar has denied owning or using such weapons,[78] and, in its documentation of military crimes across the country in the five years preceding the coup, Amnesty International did not come across evidence of cluster munitions use. Their use in several attacks in different parts of the country since the coup, and in particular from April 2022, raise significant concerns that they will be deployed more regularly going forward.

Amnesty International researchers viewed and photographed the remnants of a cluster munition "clam shell" (the outer body of the dispenser that is discarded during employment) dropped in an air strike on 13 April 2022 in Kayah State's Demoso Township. On an asphalt road outside Oe Khu Yi village, near where the clam shell was discovered, Amnesty International researchers observed and photographed the distinctive splatter patterns where two of the submunitions reportedly landed.[79]

73 Interview by video call, 22 September 2022.

74 Interview by video call, 22 September 2022.

75 Interview by video call, 22 September 2022.

76 Interview by video call, 22 September 2022.

77 Myanmar is not among the 107 state parties to the 2008 Convention on Cluster Munitions, which bans the use, development, production, acquisition, stockpiling and transfer of cluster munitions under all circumstances. Customary international humanitarian law prohibits the use of inherently indiscriminate weapons such as cluster munitions.

78 Landmine and Cluster Munition Monitor, Myanmar_Burma: Cluster Munition Ban Policy, 8 July 2019, bit.ly/3UxWiON

79 Photographic material on file with Amnesty International.





At left: The remnants of a cluster munition 'clam shell' dropped on 13 April 2022 in Kayah State, as seen by Amnesty International researchers on 27 June 2022. © Amnesty International. At right: The distinctive splatter pattern where a submunition reportedly landed in Kayah State, as seen by Amnesty International researchers on 28 June 2022. © Amnesty International

Amnesty International's weapons expert also reviewed photographs provided by the Karen Human Rights Group (KHRG) of at least one cluster munitions dispenser dropped during an air strike in Kayin State on 10 April 2022. The detailed photographs clearly show the same clam shell as documented by Amnesty International researchers in Kayah State, as well as the tail kit, nose cone and internal "plumbing" that connects those portions of the weapon. Connected to the plumbing are lugs for connection to the aircraft, which correspond to cut-outs in the clam shell. Finally, in the tail kit there are additional cut-out points to access a fuse, where a control dial is visible. This dial matches the "delay" dial in the nose fuse of the unexploded bomb in the 8 March 2022 attack in Kayah State documented below.

Based upon the green and red paint scheme of the munition (similar to the aerial bombs manufactured in Myanmar), the identical controls on the delay settings of the fusing and the lack of key identification features corresponding to cluster munitions produced by other states, Amnesty International believes that this is a new weapon designed and produced within Myanmar. Amnesty International has not documented unexploded bomblets or fragments of the submunitions themselves and has therefore been unable to determine the size of the cluster munition's payload.

Together, the information reviewed from these attacks demonstrates that Myanmar has recently developed and employed a new weapon system which is inherently indiscriminate and banned under international law. In one incident discussed in more detail below, during a 2 July 2022 attack in Chin State's Mindat Township, it strongly appears that a cluster munition was one of several types of bombs used in an attack that injured many civilians and destroyed civilian objects, including a school.

2.2.2 ATTACKS ON PROTECTED CULTURAL PROPERTY, OFTEN KILLING CIVILIANS

Myanmar military air strikes have also destroyed civilian objects that have specific protections under international humanitarian law, including religious buildings and schools.[80] In several such attacks documented by Amnesty International, the air strikes killed or injured civilians in those buildings or nearby.

Amnesty International researchers surveyed first-hand in June 2022 the damage caused at Our Lady of Fatima Church in Saung Du Lar village, Demoso Township, Kayah State. Two bombs were dropped on the church in the early hours of 8 March 2022. One malfunctioned and did not explode, but the other detonated and produced a large blast wave, shattering windows and ripping parts of the ceiling in the main building as well as destroying the church kitchen and priest's house.[81] Amnesty International researchers saw the crater on the church grounds; based on photographs and video they took, the organization's weapons expert estimated the crater to be about 8-10 metres in diameter and up to two metres deep, with fractured soil and a size and shape consistent with a high order detonation.

Pictures of the excavation of the bomb that did not detonate were shared with Amnesty International.[82] The organization's weapons expert analysed the photos and determined the weapon to be a Myanmar manufactured unguided aerial bomb weighing approximately 250lbs. This determination is based upon the paint and coding on the ordnance (distinctive green body paint and red stripe); the style and manufacturing details on the fins on the tail kit; and the use of English to label the electronic time fuse in the nose of the weapon. An unguided munition of this size should never be used in an area populated by civilians, as the blast affects a large area and is very inaccurate; unguided bombs of this size typically have a Circular Error Probable (meaning, the radius of a circle within which one would expect half of a certain type of weapon to strike) of approximately 100 metres.[83]

In Chin State's Chat village, in Mindat Township, community leaders, residents, and members of a local People's Defence Force (PDF) held a meeting on 2 July 2022 in the village's only school to discuss several issues, including education and development projects as well as security. Dozens of civilians packed a hall in the school's compound; on a day off from school, many children were in attendance with family members or were playing in the vicinity. Close to 11am, people inside and outside the hall heard the sound of a fighter jet, but they were not initially alarmed as such aerial activity is common in the area, three witnesses told Amnesty International.[84] A 20-year-old university student who was standing outside the meeting hall said:

> ***We thought the plane was flying as usual, like the previous days. But suddenly… it started bombing…***

80 See ICRC, Customary IHL Study, Rule 38. Attacks against cultural property. Several additional attacks not detailed in this section, including one on a convent in Kayah State, are documented in Amnesty International, *"Bullets rained from the sky"*, p. 21-24.

81 Interviews in person, Kayah State, Myanmar, 27 June 2022. See also Myanmar Now, "Myanmar junta uses 'highly destructive' bomb in Karenni State, military insiders say", 16 March 2022, bit.ly/3UrZ8Vn

82 Photographic material on file with Amnesty International.

83 Geneva International Centre for Humanitarian Demining, "Explosive Weapons Effects", February 2017, bit.ly/3LIsQkP

84 Interviews by voice calls, 20 September 2022.



During a visit to Our Lady of Fatima Church, Amnesty International researchers surveyed the extensive damage it sustained due to a March 2022 Myanmar military air strike, 27 June 2022. © Amnesty International

> ***The villagers scattered, [some] collapsed, [some were] running screaming and shouting. Some of the villagers ran into the fields, some ran to the mountain. We also heard the sound of machine guns… [The fighter jets] were shooting with machine guns at the villagers who were running…***
>
> ***I heard around four explosions. I, myself, was injured, so I tried to run [and take cover] in the church… The fighter jets [kept circling] and bombed the village [again]…***
>
> ***Every time I hear the planes flying over our village, I feel unsafe and afraid until now. Children and adults are very scared because [we] had not experienced this kind of thing before. [Children] run and take cover when they hear thunder or the sound of a motorbike… We all do not feel safe [as] the planes are always coming to our village[85]***

85 Interview by voice call, 20 September 2022.

The university student said she suffered a serious injury to her abdomen that hospitalized her for two months. "It still hasn't recovered," she said.[86] Around 13 civilians were injured in the attack; roughly half of the village's few hundred residents have abandoned their homes. Three PDF members who were inside the hall were killed.[87]

According to witness testimonies, there were multiple bombing runs that likely involved more than one fighter jet.[88] The school hall where the meeting was held and the teachers' dormitory next to it were destroyed, and classrooms sustained significant damage; at least four houses were also destroyed, two of them completely.[89] Amnesty International reviewed photographs provided by one of the witnesses of damaged buildings and craters in the surrounding area. An analysis of materials reveals multiple strikes, including two larger craters consistent with aerial bombs, and a frag splatter pattern along a concrete wall that is consistent with smaller munitions.

Amnesty International's weapons expert also analysed photographs of scrap from one of the munitions dropped. Based on design features in the fragments – including the internal "plumbing" connecting the distinctive tail kit to the nose section and the "delay" settings on the fusing and mechanism – which have been employed in other parts of Myanmar, the weapon was identified as a Myanmar manufactured cluster munitions dispenser (for more on cluster munitions, see Box 1 above).[90] Amnesty International was not able to determine the specific cluster munitions payload in this attack.

Cluster munitions are inherently indiscriminate and their use here, amid a populated civilian area, amounts to a war crime. Even with the presence of armed group members in the meeting hall, the attack more generally, including the use of other unguided aerial bombs and the strafing with jet cannons of people fleeing, was indiscriminate and amounts to a war crime. The three witnesses who spoke to Amnesty International said there was no fighting at the time and that the nearest armed group base was in the jungle, far from the school.

Credible sources, including from a local human rights group, told Amnesty International that the Magway Air Base is the departure point for fighter jets involved in some attacks in Chin State.[91]

Amnesty International documented other air attacks on schools, including a March 2022 strike that hit a high school in Hpapun Township, Kayin State; the same school had been hit by another air strike one year earlier.[92] The 2021 strike on the school was part of hours long bombardment on Day Bu Noh village that lasted between 7.30pm and 3am on 27-28 March, killing four civilians and injuring seven others. A teenager who was in a house close to the school said he heard explosions around 8pm, which prompted him to take shelter in a cave. "The ground was shaking… bombs kept coming… I stayed in the cave until the bombing stopped and I returned to sleep in the house. But then the jets came back, I saw a jet clearly fly very low above me [around 1am] and dropping bombs… the planes were also rapidly firing bullets," he told Amnesty International.[93]

A 15-year-old student who attended the school was at his uncle's house with three cousins when the air strikes began. As the jets approached, someone ran into the house and told them to seek shelter, but in that moment "a bomb fell directly on this man, whose whole body started burning and he died

86 Interview by voice call, 20 September 2022.

87 Interviews by voice call, 20 September 2022.

88 Interviews by voice call, 20 September 2022.

89 Interviews by voice call, 20 September 2022.

90 Photographs on file with Amnesty International.

91 Interviews by voice call, 8 and 20 September 2022. See also Myanmar Now, "Two civilians killed by Myanmar military air strikes in Chin State", 4 July 2022, bit.ly/3xLJ5b9. Amnesty International does not have ground spotter information for this attack on 2 July 2022.

92 Photographic and video material on file with and verified by Amnesty International, as well as an analysis of satellite imagery.

93 Interview in person, Thailand, 10 April 2021.





Damage caused by the 2 July 2022 air attack on Chat village, Chin State, which hit a school compound and surrounding civilian properties. One civilian was killed and around 13 civilians injured, July 2022. © Chin Human Rights Organization

immediately in front of us," the boy said.[94] Shrapnel lodged deep in the boy's thigh; he sought shelter with his cousins in a nearby bunker, where they hid for an hour. He told Amnesty International, "A doctor came to rescue me, and I was brought to the Day Bu Noh clinic, but after an hour I wasn't able to stay at the clinic [due to ongoing air strikes] and was brought to hide in the jungle."[95] The uncle's house had burned to the ground by the following morning as a result being hit by one of the air strikes, according to witnesses and photographs and videos obtained by Amnesty International.[96]

Finally, on 16 September 2022, Myanmar military attack helicopters fired on buildings used as a monastery and school in Let Yet Kone village, Tabayin Township, Sagaing Region. Credible reporting by UNICEF and media outlets have indicated that at least 11 civilians were killed, primarily children.[97]

Amnesty International was not able to independently verify the casualty count, and so has not included the Let Yet Kone village attack in the sum total of civilians that the organization has documented as killed or injured by military air strikes, noted at the start of this section. However, the organization was able to verify certain aspects of the attack through an open-source investigation of photographic and video material as well as satellite imagery. The analysis confirmed that the school and monastery sustained damage consistent with the use of air-launched rockets. Amnesty International's weapons expert reviewed photographs of ordnance scrap from the strike and identified 57mm S-5 rockets, which can be fired by Mi-35 helicopters, known to be part of the Myanmar air force's fleet and to have been deployed often in Sagaing Region.[98] The military has acknowledged that it carried out the Let Yet Kone attack though denied that children were killed, saying it targeted fighters.[99] However, as is clear from documentation by Amnesty International and others, the attack fits a pattern of unlawful military strikes and should be investigated as a war crime.

94 Interview in person, Thailand, 5 April 2021.

95 Interview in person, Thailand, 5 April 2021.

96 Interview in person, Thailand, 5 April 2021. Photographs and video on file with Amnesty International

97 See, for example, UNICEF, "At least 11 schoolchildren killed in Myanmar attack", 19 September 2022, uni.cf/3UCEYrP; Associated Press, "Witnesses: Myanmar air attack kills 13, including 7 children", 19 September 2022, bit.ly/3r8CDrc; BBC, "Children killed after Myanmar army helicopters fire at school", bbc.in/3xSMHYV

98 Photographic material on file with Amnesty International. Information about the Mi-35 helicopters comes from, among other sources, interviews with air force defectors, August and September 2022; and ground spotter information reviewed by Amnesty International.

99 See, for example, CNN, "Myanmar army helicopters fire on school, killing six", 20 September 2022, cnn.it/3RxxwM1

2.2.3 ATTACKS ON MEDICAL FACILITIES AND UNITS

Amnesty International documented three air attacks on medical facilities. International humanitarian law affords special protection to specific persons and objects, including medical personnel and medical units. Facilities and personnel used solely for the purpose of providing medical care should be protected from attacks in all circumstances.[100]

On 9 August 2022, around 10am, a fighter jet fired on and around a health centre in Daw Par Pa village, Loikaw Township, Kayah State, three witnesses said.[101] At the time, 12 people were present in two buildings in the compound – all but one in the main clinic building. Those present were four medical professionals, two unarmed medical volunteers affiliated with a local armed group, two patients and four of their relatives. A 26-year-old medical professional said:

> ***I was standing beside the doctor as he was examining an asthma patient… As we were caring for the patient, one man said, "I hear the sound of shooting." The man stepped outside and then I heard the bombing…***
>
> ***We knew we were under attack… We lay down on the floor. [Then], the doctor and I went outside. The doctor was trying to approach the person… hit by the bomb outside [while] I was trying to run to the other building… I was searching for my friend, the medic who was [in that building] but no one was there. Then a second bombing happened, and I was stuck there. After that when the jet flew away, I ran back to the clinic building. I stayed with the patients and [their] relatives, then a third bombing happened again…***
>
> ***I got injured by the third bombing. I saw blood where I was sitting. I looked at my [left] knee and saw the blood coming.[102]***

The man who had stepped out of the clinic, the approximately 70 year-old father of one of the patients, was killed near the compound's gate by the first bomb, witnesses said; Amnesty International reviewed images of his body.[103] The jet's second pass had prevented the doctor from getting close to him; the doctor then had to take shelter in a nearby corn field.[104] A medical professional in training who climbed out of the clinic's window after the first explosion and also hid in the corn field said: "At first, I planned to run as fast as I could. But I could not move anymore. So, I stayed put until the end of the strikes. I was very scared. I felt I might be killed. I just covered my ears and hid in that area. I was afraid if I ran that they might kill me, they might shoot me."[105] All three witnesses said they heard the jet firing a machine gun, in addition to the use of explosive ordnance.[106]

Amnesty International's weapons expert analysed post-strike photographs of the facility and of fragments of the munitions found at the site. The damage to the clinic's walls is consistent with a rocket attack, and the fragments belong to an 80mm S-8KOM rocket.

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100 ICRC, Customary IHL Study, Rule 25. Medical Personnel, Rule 28. Medical Units, and Rule 30. Persons and Objects Displaying the Distinctive Emblem.

101 Interviews by voice calls, 14 September 2022. See also Kantarawaddy Times, "Burma Army bombs Loikaw clinic", 10 August 2022, bit.ly/3BWTVxB

102 Interview by voice call, 14 September 2022.

103 Interviews by voice call, 14 September 2022; photographs on file with Amnesty International.

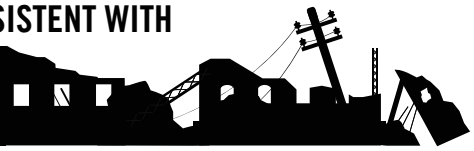
104 Interviews by voice call, 14 September 2022.

105 Interview by voice call, 14 September 2022.

106 Interviews by voice call, 14 September 2022.

THE DAMAGE TO THE CLINIC'S WALLS IS CONSISTENT WITH

A ROCKET ATTACK



AND THE FRAGMENTS BELONG TO AN 80MM S-8KOM ROCKET

The health centre, the only medical facility with a doctor in the area, had been operational for one month before the attack. There was no fighting in the area and no armed group base in the vicinity. "We felt that area was secure; that's why we set up the clinic there," the doctor said.[107] Not only did the compound sustain significant damage, "We are also afraid. If we stay and try and rebuild it, we fear there will be more attacks… We are trying to provide mobile medical care [instead]," the doctor added.[108]

This attack on the Daw Par Pa clinic amounts to a war crime; the military strongly appears to have deliberately targeted the medical facility and those it was serving, causing death and injury to civilians.

During a visit to Kayah State in June 2022, Amnesty International researchers surveyed two craters caused by aerial bombing four months prior near a hospital in Lo Bar Kho village, Demoso Township. There were no casualties, but the attack forced the central facility to move to a remote area and operate a much more limited medical unit under cover. A doctor who had been working at the Lo Bar Kho village hospital when the bombing occurred told Amnesty International, "We had to flee from the hospital [and] start a hospital in the jungle where the fighter jets couldn't see or couldn't attack or bomb [us]… We are afraid of the fighter jets bombing us again… There were no [armed group] bases [in the vicinity]… or any kind of organizations. It was just us. They were trying to make us stop our jobs."[109]

In the first half of January 2022, the military carried out air strikes that hit the Village Tract Health Centre in Wah Ka Der, Hpapun Township, Kayin State. Satellite imagery shows two craters next to the health centre; the craters, also visible in video material reviewed by Amnesty International's weapons expert, are consistent with those caused by air strikes.[110]

2.2.4 REPEATED WAR CRIMES, PART OF WIDESPREAD AND SYSTEMATIC ATTACK

Amnesty International's investigation into attacks detailed in this chapter has led it to conclude that the Myanmar air force is responsible for war crimes, which are serious violations of international humanitarian law committed with criminal intent – that is, deliberately or recklessly. Some of the documented air attacks strongly appear to have been intentionally directed against civilians and civilian objects, including protected objects such as medical facilities and schools, all of which amount to war crimes.[111] In other attacks, the air force dropped large "dumb" bombs or fired unguided rockets indiscriminately, failing to distinguish between civilians and military objectives and causing the death or injury of civilians, which is likewise a war crime.[112] Finally, the air force has used cluster munitions, a banned weapon, including in at least one attack that seriously injured civilians, again amounting to a war crime.[113]

107 Interview in person, Thailand, 5 April 2021.

108 Interview by voice call, 14 September 2022.

109 Interview in person, Kayah State, Myanmar, 29 June 2022.

110 Photographic and video material on file with and verified by Amnesty International.

111 See Rome Statute, Articles 8(2)(b)(i), 8(2)(b)(ii), 8(2)(b)(ix)

112 See ICRC, Customary IHL, Rule 156. Definition of War Crimes.

113 See ICRC, Customary IHL, Rule 71. Weapons That Are by Nature Indiscriminate, and Rule 156. Definition of War Crimes. Although Myanmar is not a state party, see also Convention on Cluster Munitions, entered into force 1 August 2010.

As previously reported by Amnesty International, the air strikes are also part of a well-established pattern of the Myanmar military targeting civilians, medical facilities, schools, homes and other civilian infrastructure in areas controlled by ethnic armed groups or, in the coup's aftermath, to quell the wider protest movement. The unlawful air strikes have occurred together with the relentless shelling of villages with artillery and mortars, at times deliberately and at times indiscriminately; the use of internationally banned anti-personnel landmines that have killed and injured civilians; extrajudicial executions; torture and other ill-treatment; arbitrary detention; the burning of villages; and pillage, among other crimes.[114] These prohibited acts have been carried out systematically by the Myanmar military in Kayin, Kayah, Chin and other states in Myanmar, in furtherance of the state's policy to punish civilian communities perceived to support an armed group. As such, they form part of the state's widespread, as well as systematic, attack against the civilian population, which likely constitutes crimes against humanity.[115]

Relatedly, in one incident analysed by Amnesty International, the organization linked Myanmar military air assets to war crimes through the transport of troops who then unlawfully attacked civilians. Amnesty International analysed open-source video showing Russian-made Mi-17 helicopters likely transporting SAC soldiers to Yin Paung Taing village, Yinmabin Township, Sagaing Region, on 11 August 2022.[116] According to media reporting, the soldiers engaged in a three-day rampage that included firing at random on civilians and committing extrajudicial executions before abducting some residents as the soldiers left.[117] Other aircraft, including fighter jets, were also reportedly involved in this operation (see Section 2.3 below, for information on air bases used in different parts of the country, including for attacks on Sagaing Region), though Amnesty International was unable to determine definitively if they fired on and killed any civilians during that attack.

2.3 AIR BASES USED IN ONGOING MILITARY OPERATIONS

In its ongoing operations, the Myanmar military uses different air bases depending on the particular state or region that it is surveilling or attacking.

To determine some of the key air bases used in attacks in different parts of Myanmar, Amnesty International reviewed open-source information in which ground spotters or other sources relay some or all of the following: the date and time that a jet or helicopter take off from a particular air base; the direction the aircraft is flying, at times including the state or area that may be attacked; the type of aircraft being used; and the time that the aircraft returns to the base. Amnesty International also interviewed four air force defectors who served at different air bases, including an officer who monitored flights across the country, as well as other credible sources on the principal take-off point for operations in different areas. Finally, Amnesty International analysed satellite imagery of many of the air bases, corroborating that the types of aircraft at the base were consistent with those described by flight spotters or other sources.

114 See Amnesty International, *"Bullets rained from the sky"*; Amnesty International, *15 days felt like 15 years: Torture in detention since the Myanmar coup*; and Amnesty International, "After coup, Myanmar military puts chokehold on people's basic needs".

115 For an analysis of likely crimes against humanity in eastern Myanmar, see Amnesty International, *"Bullets rained from the sky"*, pp. 45-46.

116 Video material on file with Amnesty International.

117 See Myanmar Now, "Myanmar military launches air strike on Yinmabin Township village, trapping civilians", 15 August 2022, bit.ly/3Sr5faO; The Irrawaddy, 'Myanmar regime troops kill 17 civilians in two days in Sagaing", 15 August 2022, bit.ly/3BB2pZZ; Myanmar Now, "In Myanmar's heartland, hatred of the military deepens after a village's destruction", 23 August 2022, bit.ly/3Uvo8Ly



The information below is not comprehensive of every air base currently being used in military operations. But Amnesty International has enough evidence to indicate the following air bases have been used for attacks:

- **Hmawbi Air Base, Yangon Region** – Hmawbi is a principal air base used for attacks on Kayin (Karen) State, including with MiG-29s and Yak-130s.[118] Amnesty International has credible evidence linking attacks from this base to incidents of war crimes in which civilians have been killed or injured, including the attack on Ta Dwee Koh village discussed above.
- **Magway Air Base, Magway Region** – Magway is a principal air base used for attacks on Chin State as well as Magway Region itself, including with MiG-29s.[119] Amnesty International has documented several air attacks on Chin State that amount to war crimes, as detailed above, and there is credible reporting of a similar pattern of air attacks on Magway Region that have harmed civilians.[120]
- **Nansang Air Base, Shan State** – Nansang is a principal air base used for operations and reconnaissance in at least parts of Shan State, including with A-5s and PT-6s.[121]
- **Tada-U Air Base, Mandalay Region** – Tada-U is a principal air base used for attacks on Sagaing Region, including with Yak-130s and A-5s; it may also be used for attacks in other areas, according to interviews with air force defectors and other sources.[122] Credible reporting on military operations in Sagaing Region have linked air attacks to the death or injury of civilians, as well as the destruction of civilian objects, in several incidents that likely amount to war crimes and that fit a broader pattern of documented unlawful attacks.[123] Amnesty International has not been able to interview first-hand witnesses to these incidents, in large part due to the particular challenges of communicating securely, and the related security risks, for people in conflict-affected areas of Sagaing Region. However, it has verified through open-source information aspects of several unlawful air attacks on Sagaing Region, including one involving fighter jets.
- **Taungoo Air Base, Bago Region** – Taungoo is a principal air base used for attacks on Kayah (Karenni) State, including with K-8s and MiG-29s.[124] Amnesty International has credible evidence linking attacks from this base to incidents of war crimes in which civilians have been killed or injured, including the attack on Dung Ka Mee village discussed above.

118 Interviews by video call with air force defectors, August and September 2022; ground spotter information, reviewed by Amnesty International; and confidential document on air bases and aircraft, on file with Amnesty International.

119 Interviews by video call with air force defector, 11 August 2022, and with activists in Chin State, September 2022; and confidential document on air bases and aircraft, on file with Amnesty International.

120 For incidents in Magway Region, see, for example, The Irrawaddy, "Junta Air strikes Kill Over Ten People and Displace Hundreds in Upper Myanmar", 22 December 2021 bit.ly/3SB9yQV; The Irrawaddy, "The Worst Myanmar Regime Airstrikes on Civilians", 18 January 2022, bit.ly/3SuARMz

121 Interviews by video call with air force defectors, August and September 2022; and confidential document on air bases and aircraft, on file with Amnesty International.

122 Interviews by video call with air force defectors, August and September 2022; ground spotter information, reviewed by Amnesty International; and confidential document on air bases and aircraft, on file with Amnesty International.

123 See, for example, The Irrawaddy, "The Worst Myanmar Regime Air strikes on Civilians", 18 January 2022; The Irrawaddy, "Over 10,000 Civilians Flee Myanmar Junta Airstrikes in Sagaing", 15 July 2022, bit.ly/3DTs1Uz

124 Interviews by video with an air force defector, August 2022; communication with a credible source on Kayah State, May 2022; ground spotter information, reviewed by Amnesty International; and confidential document on air bases and aircraft, on file with Amnesty International.

3. LEGAL FRAMEWORK AND STANDARDS ON CORPORATE ACTORS AND STATES

3.1 RESPONSIBILITY OF COMPANIES TO RESPECT HUMAN RIGHTS

Companies have a responsibility to respect all human rights wherever they operate. This responsibility is laid out in the UN Guiding Principles on Business and Human Rights (UN Guiding Principles), an internationally endorsed standard of expected conduct.[125] The responsibility of companies to respect human rights is independent of a state's own human rights responsibilities and exists over and above compliance with national laws and regulations protecting human rights.[126]

This responsibility requires companies to avoid causing or contributing to human rights abuses through their own business activities and to address adverse impacts with which they are involved, including by remediating any actual impacts. It also requires them to seek to prevent or mitigate adverse human rights impacts directly linked to their operations or services by their business relationships, even if they have not contributed to those impacts.[127]

An enterprise "contributes to" an impact if "its activities, in combination with the activities of other entities, cause the impact, or if the activities of the enterprise cause, facilitate or incentivise another entity to cause an adverse impact."[128] The following factor may be taken into consideration: "the extent to which an enterprise could or should have known about the adverse impact or potential for adverse impact, i.e. the degree of foreseeability".[129]

A company's "business activities" include both actions and omissions, and its "business relationships" include "relationships with business partners, entities in its value chain, and any other non-State or State entity directly linked to its business operations, products or services".[130]

To meet its corporate responsibility, a company must take proactive and ongoing steps to identify and respond to its potential or actual human rights adverse impacts. Primarily, businesses must implement a due diligence process to identify, prevent, mitigate and account for how they address their human rights impacts that the enterprise may cause or contribute to through its own activities, or which may be directly linked to its operations, products or services by its business relationships.[131]

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125 This responsibility was expressly recognised by the UN Human Rights Council on 16 June 2011, when it endorsed the UN Guiding Principles on Business and Human Rights (UN Guiding Principles), and on 25 May 2011 when the 42 governments that had then adhered to the Declaration on International Investment and Multinational Enterprises of the OECD unanimously endorsed a revised version of the OECD Guidelines for Multinational Enterprises. See Human Rights Council, Human Rights and Transnational Corporations and other Business Enterprises, Resolution 17/4, UN Doc A/HRC/RES/17/4, 6 July 2011, daccess-ods.un.org/tmp/638279.914855957.html ; OECD Guidelines for Multinational Enterprises, 2011, OECD Publishing, oecd.org/corporate/mne/

126 UN Guiding Principles, Principle 11 including Commentary.

127 UN Guiding Principles. Principle 13.

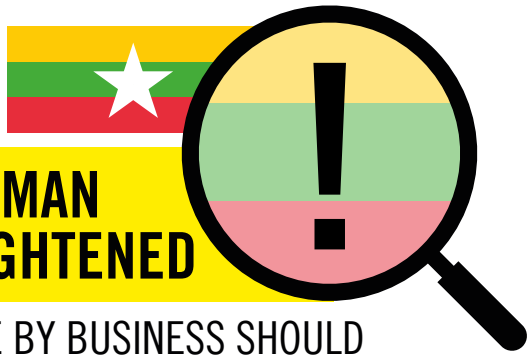
128 OECD, "OECD Due Diligence Guidance for Responsible Business Conduct", 2018, Question 29.

129 OECD, "OECD Due Diligence Guidance for Responsible Business Conduct", 2018, Question 29.

130 UN Guiding Principles, Principles 11 and 13 including Commentary, ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf

131 UN Guiding Principles, Principle 17.

IN CONFLICT-AFFECTED CONTEXTS, SUCH AS **MYANMAR**



THE RISK OF GROSS HUMAN RIGHTS ABUSES IS HEIGHTENED

AND, THEREFORE, DUE DILIGENCE BY BUSINESS SHOULD BE HEIGHTENED ACCORDINGLY

There could be cases in which a company identifies through due diligence that it may cause or contribute to a serious human rights abuse. In those cases, the business enterprise must cease or prevent the adverse impact, and where applicable, use its leverage to mitigate any remaining impact.[132]

If a company has not contributed to an adverse harm but is nonetheless directly linked to it through operations by its business relationship with another entity, then, as the UN Guiding Principles articulate, "if the business enterprise has leverage to prevent or mitigate the adverse impact, it should exercise it. And if it lacks leverage there may be ways for the enterprise to increase it."[133]

In some cases, however, where the company lacks the leverage and cannot increase it, then the UN Guiding Principles recommend companies to consider ending the relationship, taking into account potential adverse human rights impacts in so doing.[134]

Similarly, the OECD Guidelines for Multinational Enterprises (OECD Guidelines) state that as a last resort, "disengagement" with the partnering company may be necessary, especially after failed attempts at mitigation or where the company considers mitigation unfeasible.[135]

3.1.1 THE CORPORATE RESPONSIBILITY TO RESPECT IN THE CONTEXT OF CONFLICT

Due diligence is based on the concept of proportionality: the more severe the risk, the more adapted the due diligence processes must be to the context and particularity of the risk.[136] Severity of impacts are assessed by their scale, scope and irremediable character.[137]

It has been acknowledged that in conflict-affected contexts, such as Myanmar, the risk of gross human rights abuses is heightened and, therefore, due diligence by business should be heightened accordingly.[138]

132 UN Guiding Principles, Principle 17.

133 UN Guiding Principles, Commentary on Principle 19.

134 UN Guiding Principles, Commentary on Principle 19.

135 OECD Guidelines for Multinational Enterprises 2011 (OECD Guidelines), Commentary on Chapter 2, para. 22.

136 UNDP, "Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts: A Guide", 16 June 2022.

137 UN Guiding Principles, Principle 14 including Commentary.

138 Working Group on the issue of human rights and transnational corporations and other business enterprises, "Towards Heightened Action", UN doc A/75/212, 21 July 2020; ohchr.org/en/documents/thematic-reports/a75212-report-business-human-right-and-conflict-affected-regions-towards

In June 2022, the UN Development Programme published a guide for companies on "Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts" (UN Guide).[139] According to this document, heightened due diligence requires companies to do as the UN Guiding Principles recommend, but also to identify the relation between business activities and conflict, which requires businesses to understand the conflict, identify their impact on the conflict and act upon those findings.[140]

According to the UN Guide, assessments of the impact business activities have on conflict should be "undertaken at regular intervals: prior to a new activity or relationship; prior to major decisions or changes in the operation […]; in response to or anticipation of changes in the operating environment (e.g. rising social tensions); and periodically throughout the life of an activity or relationship."[141] Importantly, "[r]obust stakeholder engagement practices and grievance management systems are key elements to accomplishing this."[142]

3.1.2 RESPONSIBLE WITHDRAWAL

In cases where a business must cease its contribution to human rights, or in cases where a business must disengage from a business partnership, the withdrawal must be conducted "responsibly". According to the UN Guiding Principles and OECD Guidelines, "responsibly" disengaging requires that companies identify, mitigate and prevent the potential and actual adverse impacts of its disengagement.

The 2018 OECD Due Diligence Guidance for Responsible Business Conduct provides additional guidance on what responsible disengagement looks like in practice. It provides a range of actions that an enterprise may take, such as meaningfully engaging with relevant stakeholders prior to disengagement and providing detailed information to these stakeholders relating to such disengagement.[143] This Guidance also notes that it is important to provide sufficient notice of the disengagement.[144]

According to the UN Guide, "a hasty exit may be as damaging as one that comes too late."[145]

Although the specific steps an enterprise needs to take will be context-dependent, the UN Guide clarifies that "an exit strategy requires more than ordinary shutting down of operations and evacuation of expatriate employees."[146] Rather, it requires "[a]nticipating and planning a clear exit strategy in advance."[147] Enterprises are also asked to develop mitigation strategies such as:

> ***"…providing reasonable notice to communities, suppliers, workers and other partners affected by the pending disengagement; ensuring that staff continue to receive income for the duration of the crisis, in the event of temporary suspension or training, and capacity-building to mitigate the loss of employment; also, ensuring the security of remaining staff who cannot be evacuated."[148]***

In cases where an enterprise decides to sell its assets, it must assess the human rights capability of the buyer and request, such as through contractual provisions, that the buyer put specific human rights-related policies and procedures in place to enable them to operate responsibly in a conflict-affected context.[149]

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139 UNDP, "Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts: A Guide", 16 June 2022.

140 UNDP Guide, p. 23. As the UNDP Guide goes on to explain, "[u]nderstanding how business activities interact with conflict in a particular context and how to mitigate unintended negative effects is commonly known as 'conflict sensitivity'".

141 UN Guide, p. 20.

142 UN Guide, p. 20.

143 OECD, 2011, OECD Due Diligence Guidance for Responsible Business Conduct, p. 80.

144 OECD, 2011, OECD Due Diligence Guidance for Responsible Business Conduct, p. 80.

145 UN Guide, p. 35.

146 UN Guide, p. 35.

147 UN Guide, p. 35.

148 UN Guide, p. 36.

149 UN Guide, p. 36.

While an enterprise is involved in the disengagement process and therefore its involvement in adverse human rights impacts continues, the UN Guiding Principles stipulate that the company must be able to demonstrate its own ongoing efforts to mitigate these impacts and be prepared to accept any consequences – reputational, financial or legal – of the continuing connection.[150]

3.1.3 REMEDIATION

The UN Guiding Principles indicate that companies should remediate any human rights abuse to which they have contributed.[151] Remedy should include guarantees of non-repetition as well as satisfaction,[152] compensation and other measures of reparation as appropriate to the circumstances and the wishes of those affected.[153]

3.2 LIABILITY OF CORPORATE ACTORS FOR INTERNATIONAL CRIMES

In addition to compliance with human rights law, companies also have a responsibility to respect international humanitarian law (the laws of war) and applicable obligations under international criminal law.[154] Corporate actors need to be aware that the most serious human rights violations may constitute international crimes defined by states under the Rome Statute of the International Criminal Court (ICC) as genocide, crimes against humanity, and war crimes.[155]

Corporate actors that are involved in human rights violations or crimes under international law may face criminal or civil liability. They can be held accountable for their direct acts or omissions and for involvement with others in crimes under international law, if they directly commit or otherwise aid, abet, or assist in genocide, crimes against humanity, and war crimes.[156] International criminal law jurisprudence indicates that the relevant standard for aiding and abetting is "knowingly providing practical assistance or encouragement that has a substantial effect on the commission of a crime."[157] Acts including the provision of financial assistance, goods, information, and services, such as banking and communications services, can amount to "practical assistance".[158]

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150 UN Guiding Principles, Commentary to Principle 19.

151 UN Guiding Principles, Principle 15(c).

152 Satisfaction covers a broad range of measure which will be applicable as appropriate to the circumstances and includes: measures aimed at the cessation of the violations; verification of the facts and full and public disclosure of the truth, a public apology, including acknowledgment of the facts and acceptance of responsibility; and judicial and administrative sanctions against those responsible for the violations. See 2 Principle 22, UN Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, UN Doc A/RES/60/147, 21 March 2006.

153 UN General Assembly, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law (UN Doc. A/RES/60/147), 21 March 2006.

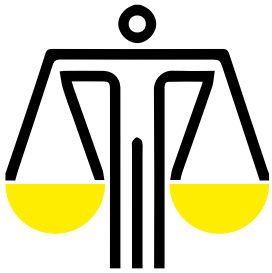
154 UN Guiding Principles, Commentary to Principle 12; see also ICRC Business and International Humanitarian Law, 2006 and the update by the Australian Red Cross and RMIT University, Australian Red Cross, ***Doing Responsible Business in Armed Conflict: Risks, Rights and Responsibilities***, 2020. See also the International Court of Justice Advisory Opinion on the Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory of 9 July 2004, A/ES-10/273/Corr.1, para. 78.

155 The Rome Statute of the International Criminal Court codifies rules of customary international law, which, as such, apply to all states. See also UN Guiding Principles, Commentary to Principle 12.

156 Article 25(39(c) of the Rome Statute establishes criminal liability for someone who facilitates the commission of a crime by aiding, abetting or otherwise assisting in the commission or attempted commission of the crime; see also ***Prosecutor v. Momčilo Perišić***, Case No. IT-04-81-A, Judgment (Appeal Chamber), 28 January 2013, para. 29.

157 UN Guiding Principles, Commentary to Principle 17.

158 International Commission of Jurists Corporate Complicity & Legal Accountability: Report of the International Commission of Jurists Expert Legal Panel on Corporate Complicity in International Crimes, Volume 2: Criminal Law and International Crimes, 2008, pp. 19-20; see also, ***United States v Krupp***, Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No. 10 (1948), Vol. IX; ***United States v Carl Krauch***, Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No. 10 (1948), Vol. VIII; ***United States v Friedrich Flick***, Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No. 10 (1948), Vol. VI.



UNDER INTERNATIONAL HUMAN RIGHTS LAW,
ALL STATES HAVE A DUTY TO PROTECT AGAINST HUMAN RIGHTS ABUSES BY ALL ACTORS, **INCLUDING COMPANIES**

At the international level, individual officers of companies can be held criminally liable for the commission of international crimes at the ICC or other international ad hoc tribunals.[159] At the national level, corporate actors can be held accountable both through criminal and civil lawsuits. For example, where a company causes a human rights abuse, this may amount to a criminal offence under domestic laws relevant to human rights-related issues or provide a basis for victims to pursue a legal claim.[160] These proceedings can be directed against a company and/or individual corporate officers, depending on the jurisdiction.

3.3 STATE OBLIGATIONS

Under international human rights law, all states have a duty to protect against human rights abuses by all actors, including companies, within their territory and / or jurisdiction.[161] States are required to take appropriate measures to prevent human rights abuses by private actors and to respond to these abuses when they occur by investigating the facts, holding the perpetrators to account and ensuring effective remedy for the harm caused.[162] The pivotal principle of this duty is that states must protect individuals and communities from the harmful activities of corporate actors through "effective policies, legislation, regulation and adjudication".[163]

159 Rome Statute of the International Criminal Court, Articles 25 and 28, 17 July 1998, 2187 U.N.T.S. 90. See, for example, *The Prosecutor v Ferdinand Nahimana, Jean-Bosco Barayagwiza, Hassan Ngeze* (judgment and sentence), ICTR-99-52-A, International Criminal Tribunal for Rwanda (ICTR), 28 November 2007.

160 See, for example, *Public Prosecutor v Van Anraat*, LJN AX6406, The Hague District Court, 23 December 2005.

161 UN Guiding Principles, Principle 1.

162 UN Guiding Principles, Principle 1.

163 See generally, Amnesty International, *Injustice incorporated: Corporate abuses and the human right to remedy* (Index: POL/30/001/2014), 7 March 2014, https://www.amnesty.org/en/documents/pol30/001/2014/en/

4. COMPANIES INVOLVED IN AVIATION FUEL INDUSTRY

The aviation fuel industry in Myanmar falls under the purview of the Ministry of Energy (MOE).[164] Until May 2020, it was managed by the state-owned Myanma Petroleum Product Enterprise (MPPE).[165] MPPE was responsible for importing and distributing fuel and other petroleum products, including aviation fuel, in Myanmar.[166]

The opening of the country's economy to foreign investors around 2012 came hand-in-hand with an increase in aviation fuel demand. As a response, MPPE was "keen to improve its methods of importing, selling and distributing jet fuel and other services at international standards [sic]."[167] Accordingly, the MOE wanted to "transform many of its state-owned enterprises into joint ventures with foreign businesses in an effort to improve their operations."[168] Puma Energy was to become MPPE's joint venture partner. Its country manager described the state of decay they found when they arrived in Myanmar:

> ***"the 30 to 40 years of global isolation also affected the ability to deliver jet fuel to international standards. So all parts of the supply chain were significantly underinvested. You're dealing with old tanks, small tanks, old pipelines, very old working practices, and practices which today are not seen as compliant – we're talking about equipment from the '50s and '60s. The nation's fuel supply was hanging by a thread. The government recognised that they needed an international partner to invest and upgrade their facilities and upgrade their fuel handling processes..."[169]***

Following a series of tenders that Puma Energy won in 2013 and 2014, it became the state's key foreign partner in the aviation fuel business.

164 In May 2022, the SAC by way of Order 33/2022 split the Ministry of Electricity and Energy (MOEE) into two separate ministries: the Ministry of Electric Power (MOEP) and the Ministry of Energy (MOE). See dfdl.com/resources/legal-and-tax-updates/myanmar-sac-reconstitutes-energy-sector-ministries/ The MOE's new website is accessible here: energy.gov.mm/

165 BDO LLP, *Commodity Trading in Myanmar, Case Study: Oil and Gas, Myanmar Extractive Industries Transparency Initiative*, 30 September 2020 (hereinafter BDO LLP, *Commodity Trading in Myanmar*, myanmareiti.org/sites/myanmareiti.org/files/publication_docs/meiti_commodity_trading_report.pdf , p. 54.

166 MOE, Myanma Petroleum Products Enterprise (MPPE), moee.gov.mm/en/ignite/page/449 (accessed on 8 August 2022), "About PPRD". On 22 May 2020, MPPE was restructured, becoming a regulatory agency by the name of "Petroleum Products Regulatory Department". It appears that MPPE was replaced, in its function, by another sate-owned entity, MPE.

167 Insights Global, "Puma Energy to Sign Deal with MPPE on Jet-Fuel Joint Venture", 24 September 2015, https://tankterminals.com/news/puma-energy-to-sign-deal-with-mppe-on-jet-fuel-joint-venture/

168 Myanmar Times, "Puma Energy to sign deal on jet-fuel joint venture," 24 September 2015, mmtimes.com/business/16666-puma-energy-to-sign-deal-on-jet-fuel-joint-venture.html.

169 Frontier Myanmar, "Puma Energy chief: 'Competition will help to improve standards and pricing'", 19 June 2017, frontiermyanmar.net/en/puma-energy-chief-competition-will-help-to-improve-standards-and-pricing/.

4.1 PUMA ENERGY

Puma Energy Holdings Pte. Ltd. ("Puma Energy") is a global energy company incorporated in Singapore but based in large part out of Geneva, Switzerland.[170] Puma Energy is a supplier and distributor of oil products, including aviation fuel.[171] Its operations span around 40 countries and encompass the supply, storage, refining, distribution and retail of a range of petroleum products.[172] According to the company, Puma Energy operates more than 1,948 retail sites and 5.1 million cubic meters of oil storage facilities.[173] As of 31 December 2021, Puma Energy's gross profit amounted to USD 999 million.[174]

Puma Energy's business is split into two units, downstream and infrastructure. The downstream business is comprised of (1) fuel products and services (e.g., oil, lubricants, bitumen); (2) non-fuel products and services (e.g., convenience retail); (3) new energy sources (e.g., solar, LPG or hydrogen); and (4) transportation and storage.[175] The infrastructure business[176] owns and commercially operates a global network of infrastructure assets such as marine and inland storage terminals.[177]

One of the company's downstream lines of business is Puma Aviation.[178] As part of this business, Puma Energy is involved in the importation, handling, storage, bridging and transportation, into-plane operations and their own airport fuelling depots.[179]

BOX 2: PUMA ENERGY'S SHAREHOLDERS

Puma Energy is majority owned by global commodity trading giant Trafigura and since 2021, fully consolidated into the Trafigura group.[180] Trafigura specialises in the oil, minerals and metals markets, with over 4,000 employees across Europe, Africa, Asia, Australia and North, Central and South America.[181] According to its annual reports, Trafigura has achieved substantial growth in recent years, growing turnover from USD 18 billion in 2004 to USD 231 billion in 2021.[182]

Trafigura's primary trading businesses are involved in the supply and transport of crude oil, petroleum products, renewable energies, coal, refined metals, ferrous and non-ferrous ores and concentrates.[183] It is the world's third-largest independent oil trader.[184]

According to Trafigura, Puma Energy is one of the company's largest suppliers of midstream services, such as storage and bunkering, which in turn provides Puma Energy with stable cash flows.[185] Trafigura is a preferred supplier of petroleum products to Puma Energy.[186]

170 Its registered address is 1 Marina Boulevard #28-00, Singapore 018989. Many of the company's high-level officers are based out of Geneva, Switzerland, as is part of the company's operations. See Puma Energy, *Annual Report 2021*, pp. 85, 132.

171 Puma Energy, *Annual Report 2021*, p. 85.

172 Puma Energy, *Annual Report 2021*, pp. 6-7.

173 Puma Energy, *Annual Report 2021*, pp. 6-7.

174 Puma Energy, *Annual Report 2021*, p. 5.

175 Puma Energy, *Annual Report 2021*, p. 10

176 Puma Energy established its Infrastructure business as a standalone business unit in 2020. (See Puma Energy, *Annual Report 2021*, p. 36.)

177 Puma Energy, *Annual Report 2021*, pp. 6-7; 36-37.

178 Puma Energy, *Annual Report 2021*, p. 24; Puma Aviation, "Overview", Puma Energy, pumaenergy.com/en/web/aviation/overview

179 Puma Energy, *Annual Report 2021*, p. 32.

180 Puma Energy is owned by Trafigura PE Holding Ltd (58.10%), Trafigura PTE Ltd (34.16%), TPE Holdings 2 LLC (4.32%), PE Investments Limited (3.2%) and other investors (0.22%). In September 2021, Puma Energy was fully consolidated into the Trafigura Group. (Puma Energy, *Annual Report 2021*, p. 85.)

181 Puma Energy, *Annual Report 2021*, p. 75.

182 Puma Energy, *Annual Report 2021*, p. 75.

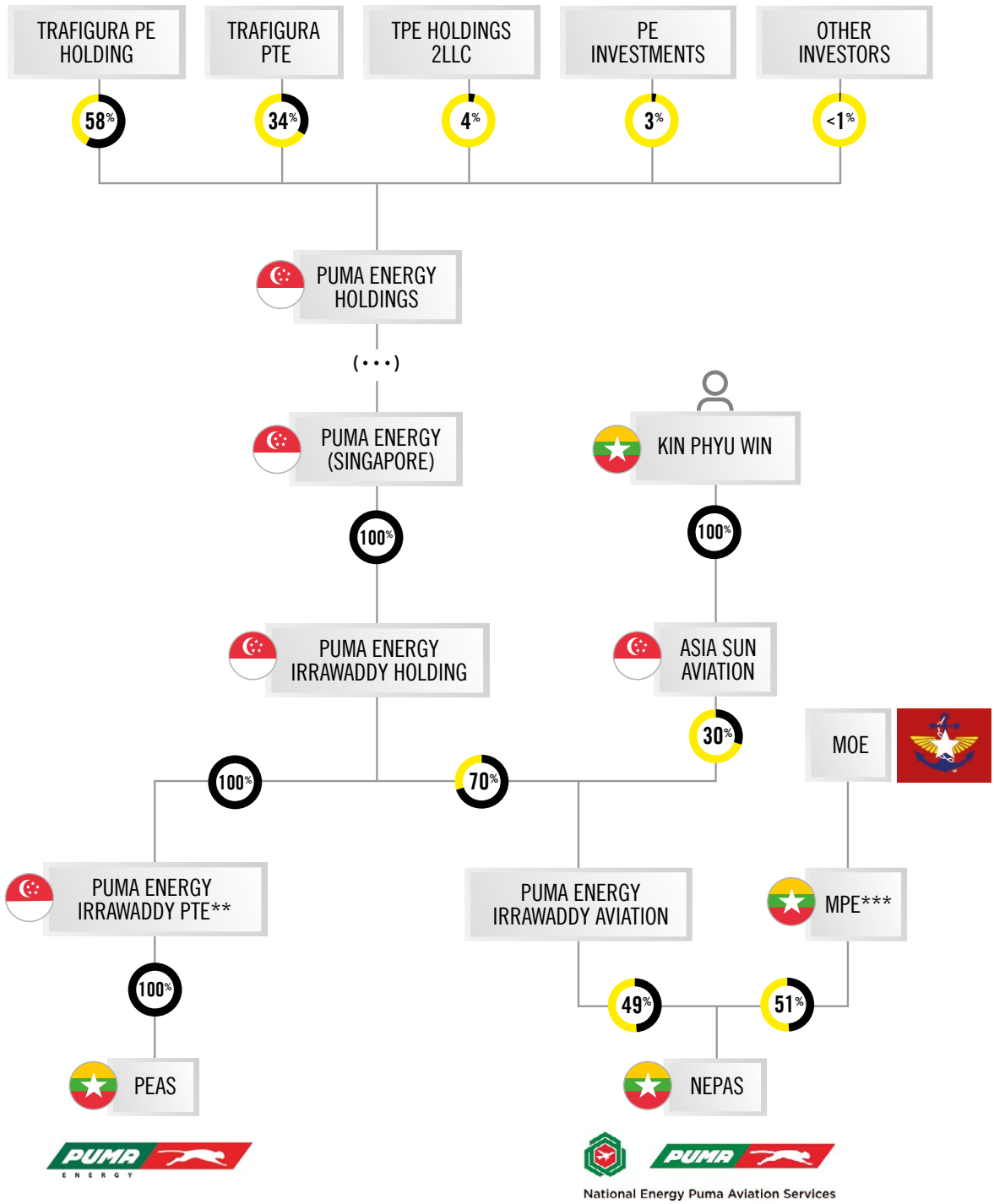
183 Puma Energy, *Annual Report 2021*, p. 76.

184 Puma Energy, *Annual Report 2021*, p. 76.

185 Puma Energy, *Annual Report 2021*, p. 76.

186 Puma Energy, *Annual Report 2021*, p. 76.

PEAS and NEPAS ownership*



* On 5 October 2022, Puma Energy announced that it had entered into agreements to fully exit Myanmar. It also stated that, pending completion of this exit, the company continues to be a minority shareholder in NEPAS and the sole shareholder of PEAS. Accordingly, this diagram is accurate as of the date of publication.

** At the time of incorporation, PEAS was jointly owned by Puma Energy Irrawaddy Pte. Ltd. (80%) and Asia Sun Energy Co. Ltd. (20%). Three days after the military coup, on 3 February 2021, Puma Energy bought out Asia Sun Energy's stake in PEAS.

*** At the time of incorporation, the majority shareholder of NEPAS was state-owned MPPE. However, on 22 May 2020, MPPE was restructured. According to corporate filings, as of March 2022, MPE (as opposed to MPPE) is the majority shareholder of NEPAS.

4.1.1 PUMA ENERGY IN MYANMAR

Until 5 October 2022, Puma Energy has primarily operated in Myanmar through two entities, Puma Energy Asia Sun Co. Ltd. (PEAS) and National Energy Puma Aviation Services Co. Ltd. (NEPAS). These companies play different but complementary roles.[187] PEAS is primarily responsible for handling and storing aviation fuel delivered to the port terminal through which the vast majority of aviation fuel enters the country; while NEPAS is primarily responsible for procuring, selling, distributing aviation fuel as well as providing refuelling services at 11 Myanmar airports.[188] As of June 2017, Puma Energy reported investing USD 170 million in its operations in the country.[189]

Together, NEPAS and PEAS made Puma Energy, along with its local joint venture partners, the most important importer and distributor of aviation fuel in Myanmar from 2015 to October 2022.



Puma Energy Terminal, Thilawa, Myanmar: *Satellite imagery shows the Puma Energy Terminal while it was under construction at Thilawa (2014) and later in 2020, when the terminal appears to be operational. According to a company video, the three tanks used for jet fuel storage are shown in the image – highlighted with a red square.*

4.1.1.1 PEAS

In June 2013, Puma Energy was awarded a tender to lease Plot 3 of the Thilawa area port by the Ministry of Transport and the Myanma Port Authority, to construct and operate storage tanks for bitumen and petroleum products.[190] Puma Energy established PEAS in 25 June 2014 as a foreign joint venture company to manage the project and thereafter store petroleum products.[191] At the time of incorporation, PEAS was jointly owned by its Singapore-registered subsidiary Puma Energy Irrawaddy Pte. Ltd. (80%) and Asia Sun Energy Co. Ltd. ("Asia Sun Energy"), a Myanmar company (20%).[192] Three days after the military coup, on 3 February 2021, Puma Energy bought out Asia Sun Energy's stake in PEAS.[193]

187 Although Puma Energy announced that it is selling its interests in PEAS and NEPAS, there is no indication that these companies have ceased to exist. However, as this report focuses on the operations of these entities up until October 2022, reference to their operations may be made in the past tense, even if they likely continue to exist and operate as described.

188 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

189 Frontier Myanmar, interview with David Holden, Puma Energy Country Manager, 8 June 2017, youtube.com/watch?v=6f5ljphCkoA.

190 Application letter from Puma Energy Irrawaddy Pte Ltd to Myanmar Investment Commission regarding foreign investment, undated, p. 1.

191 Application letter from Puma Energy Irrawaddy Pte Ltd to Myanmar Investment Commission regarding foreign investment, undated, pp. 4-5.

192 DICA corporate filing, Historical Company Extract, Puma Energy Asia Sun Co. Ltd, last accessed on [21 March 2022].

193 Puma Energy, *Annual Report 2020*; Puma Energy Asia Sun Co. Ltd, Company Extract, Myanmar Companies Online, last accessed on 18 August 2022.

In May 2017, the PEAS terminal opened at the Thilawa port.[194] According to Puma Energy, "[t]his USD92 million investment into the country's largest and most modern petroleum products terminal is a first of its kind for the petroleum industry in Myanmar, which has just opened up to foreign direct investment in this area."[195] With a fuel storage capacity of 91,000m³, the storage facilities at the PEAS terminal "cater for a range of petroleum products, including commercial fuels (Mogas 95 and 92, low sulphur Diesel), HFO (heavy fuel oil typically used for power generation), bitumen and jet fuel."[196]

4.1.1.2 NEPAS

In 2014, MPPE announced that it would issue a tender for a joint venture partner to co-manage the importation, storage, distribution and sale of aviation products.[197] A total of 23 companies applied and Puma Energy was selected.[198] Puma Energy became the first foreign company to import, distribute and sell aviation fuel products in Myanmar.[199]

In order to run this part of the business, NEPAS was established on 1 October 2015 between MPPE (51%) and Puma Energy Irrawaddy Aviation Pte. Ltd. (Puma Energy Irrawaddy Aviation) (49%).[200] In 2018, Puma Energy sold 30% of its stake in Puma Energy Irrawaddy Aviation to Asia Sun Aviation.[201] This transfer of shares reduced Puma Energy's beneficial stake in NEPAS to 34%. However, even as a minority shareholder, Puma Energy has stated over the years – and until early 2022 – that it "retains effective control over" NEPAS, "despite the fact that it does not hold a clear majority of the shares, by virtue of the fact the Group is exposed to, or has rights to, variable returns from its involvement with the entities and has the ability to affect those returns through its power over the entities."[202] The joint venture partners agreed at the time of incorporation that the managing director of NEPAS, who would be a Puma Energy employee.[203]

In June 2016, Puma Energy expanded the operations of NEPAS, which by then had become the sole importer and distributor of aviation fuel in Myanmar, to 11 airports across the country.[204] As part of this agreement, Puma Energy committed to upgrading all of Myanmar's ageing fuelling assets at the country's airports to meet international standards for quality and performance.[205] According to Puma Energy's Country Manager at the time, "[e]verything you see to do with the supply of jet into the country has been upgraded – that's the terminal that it comes into, the trucks that take it to the airport, it's the airport terminal, the trucks that take it to the plane, and all the people processes in between – everything has been upgraded."[206]

194 Puma Energy, *Annual Report 2017*, p. 92.

195 Puma Energy, "Puma Energy Asia Sun opens Myanmar's largest and most modern petroleum products terminal", 8 May 2017, pumaenergy.com/es/newsroom/newsdetails?articleId=274088

196 Puma Energy, "Puma Energy Asia Sun opens Myanmar's largest and most modern petroleum products terminal" (previously cited).

197 Myanmar Times, "MPEE announces JV tender for petroleum business", 10 July 2015, mmtimes.com/business/15441-mppe-announces-jv-tender-for-petroleum-business.html

198 Reuters, "Myanmar firm picks Puma Energy as jet fuel distribution partner", 20 December 2014, reuters.com/article/myanmar-energy-idUKL3N0U402420141220

199 Frontier Myanmar, interview with David Holden, Puma Energy Country Manager, 8 June 2017, youtube.com/watch?v=6f5ljphCkoA

200 Puma Energy, *Annual Report 2016*, p. 65; National Energy Puma Aviation Services Co. Ltd, Company Extract, Myanmar Companies Online, last accessed on 21 March 2022.

201 Puma Energy Irrawaddy Aviation, Company Extract, Accounting and Corporate Regulatory Authority (ACRA), Singapore, last visited 25 July 2022.

202 Puma Energy, *Annual Report 2019*, p. 139; Puma Energy, *Annual Report 2020*, p. 163; Puma Energy, *Annual Report 2021*, p. 127.

203 Joint venture agreement between MPPE and Puma Energy Group, 2015, Provision 9 ("Managing Director and Other Positions").

204 Puma Energy, *Annual Report 2016*, p. 95; Puma Energy, *Annual Report 2021*, p. 8; Myanmar Investment Commission Permit No. 1017/2016, 26 March 2016.

205 Puma Aviation brochure, p. 29.

206 Frontier Myanmar, "Puma Energy chief: 'Competition will help to improve standards and pricing", 19 June 2017, frontiermyanmar.net/en/puma-energy-chief-competition-will-help-to-improve-standards-and-pricing/

According to media reports, NEPAS' monopoly of the aviation fuel business was widely criticized prior to the coup, which prompted the Myanmar Investment Commission in 2019 to grant investment permits and other licences to companies other than NEPAS.[207]

4.1.1.3 IMPACT OF MILITARY COUP ON PUMA ENERGY

The military coup had a significant impact on all businesses across Myanmar, including Puma Energy. A source close to the company described the morning of 1 February 2021:

> ***Since the early morning of the coup, the internet and phone lines were disconnected. A number of colleagues were in the office at the time. Soldiers arrived at Thilawa port. They came with guns and they did not let anyone leave. Eventually, the staff was allowed to go home, but since then, the military has been present at the Thilawa terminal. Many employees have been threatened by MPE; those who have continued to work do so under the constant threat of MPE and the military.***

According to Puma Energy's communications with Amnesty International, "[t]his was a particularly challenging and uncertain period as a result of having to address, not only the immediate aftermath of the coup, but also the unfolding COVID-19 pandemic."[208]

A few days later, on 10 February 2021, Puma Energy announced that it was suspending operations "to protect the safety and security of employees and partners with immediate effect until a time that it is safe for our staff to resume operations. Our shareholders and partners have been informed."[209] As stated by the company, "[d]uring this period … employees experienced incidents of harassment and threats of violence."[210] Shortly thereafter, Puma Energy resumed its operations in Myanmar.[211]

Following the military coup, changes were made to the make up of the NEPAS' board of directors. The two Puma Energy representatives, until then employees of Puma Energy, were replaced by Trafigura employees. On 2 August 2021, Mikhail Solomon Zeldovich, a Trafigura Pte. employee and director of Trafigura Mongolia & Vietnam, became a board member.[212] On 15 March 2022, Timothy John Codrington, another Trafigura Pte. employee and the Head of Business Development Asia, became the second Puma Energy representative on the board.[213]

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207 For example, a licence issued to Golden Myanmar Airlines Public Co. Ltd (GMA) allowed it to distribute, transport, import, store and fuel planes at seven airports (Tachileik, Kawthaung, Nyaung Oo, Heho, Sittwe, Myitkyina and Mandalay International) and a jetty terminal at Yangon Region, Thanlyin-Kyauktan Area. Despite this, and prior to the military coup, NEPAS' business did not appear to have been affected in any significant way by the entry of additional players into the aviation fuel market, see frontiermyanmar.net/en/puma-energy-chief-competition-will-help-to-improve-standards-and-pricing/ ; Directorate of Investment and Company Administration Myanmar, Permitted Investments, dica.gov.mm/sites/default/files/document-files/mic_english_final_0.pdf (accessed on 19 August 2022, "Permitted Enterprises by Myanmar Investment Commission (5/2019)"; Kyaw Ye Lynn and Thomas Kean, "Puma's jet fuel debacle", Frontier Myanmar, 12 February 2020, frontiermyanmar.net/en/pumas-jet-fuel-debacle/.

208 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

209 Reuters, "Trafigura's Puma Energy suspends all operations in Myanmar", 12 February 2021, reuters.com/article/myanmar-politics-puma-energy-idUSL1N2KH1UT

210 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

211 Meeting in person with Omar Zaafrani, Puma Energy's Head of ESG and Corporate Affairs at meeting, 2 September 2022, Geneva.

212 National Energy Puma Aviation Services Co. Ltd, Company Extract, Myanmar Companies Online, last accessed on 14 March 2022.

213 National Energy Puma Aviation Services Co. Ltd, Company Extract, Myanmar Companies Online, last accessed on 14 March 2022.

According to the company, since February 2021, "Puma Energy exercised its limited influence to put in place various measures to help protect the safety and security of PEAS and NEPAS employees and their families."[214] Further, "Puma Energy exercised its influence so that NEPAS terminated supply to the MAF [Myanmar Air Force] and restricted its activities to civilian only airlines."[215]

The company explained in a letter to Amnesty International what happened afterwards:

"In early 2022, in light of the deteriorating human rights situation in Myanmar, Puma Energy took a decision to review our ongoing presence in Myanmar and commissioned a confidential, independent Human Rights Impact Assessment to help inform our decision and how best to mitigate any potential human rights risks.

> ***This Assessment concluded that Puma Energy had taken positive steps to protect the safety and wellbeing of PEAS and NEPAS employees and leveraged its influence to seek to limit supply to civilian only airlines. However, this Assessment also concluded that it would prove increasingly difficult to continue to exert even limited influence on MPE and maintain controls to restrict supply to civilian only airlines, particularly in light of the deteriorating human rights position in the country.***
>
> ***More recently, we had also become aware of reports of the military forcibly demanding fuel at selected NEPAS airport facilities. These reported incidents undermined our confidence in NEPAS's ability to maintain the controls that were put in place and supported the opinion of the Human Rights Impact Assessment that it would be difficult to exert meaningful influence over MPE going forward.***

This led to the Board's conclusion that the only option was for Puma Energy to fully exit its Myanmar investment and to do so in a manner that prioritised safety and security of PEAS and NEPAS employees."[216]

214 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

215 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

216 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

According to Puma Energy, "[following several months of careful negotiations with relevant stakeholders and existing partners … – and prioritising measures to protect the safety and security of PEAS and NEPAS employees, on 5 October 2022 we entered into agreements for the transfer of the businesses."[217] Until the company's departure – of which no detail or date was shared with Amnesty International – Puma Energy will continue to operate in Myanmar through wholly-owned PEAS and joint venture NEPAS.[218]

4.2 MPPE/MPE

When Puma Energy started operating in Myanmar, its state-owned joint venture partner, and the majority shareholder of NEPAS, was MPPE. However, on 22 May 2020, MPPE was restructured and became a regulatory agency by the name of "Petroleum Products Regulatory Department".[219] According to NEPAS' company extract filed with the Myanmar Companies Online Registry, MPPE continued to be the majority shareholder of NEPAS until March 2022.[220] On 28 March 2022, NEPAS filed a change in ownership from MPPE to Myanmar Petrochemical Enterprise (MPE).[221] Despite this filing, according to Puma Energy, MPE – as opposed to MPPE – was the majority shareholder of NEPAS as early as February 2021. As the company explained: "With respect to the NEPAS operations specifically, these resumed [following the military coup] under the direction of majority shareholder Myanma Petrochemical Enterprise (MPE)."[222]

Since February 2021, MPE has been under military control. According to Puma Energy, following the military coup, MPE ran a tender for the supply and distribution of jet fuel to the Myanmar air force, in which Puma Energy did not participate.[223] Amnesty International has not been able to independently verify this, although various industry sources have noted that other Myanmar companies entered the aviation fuel supply chain following the military coup.

4.3 ASIA SUN GROUP

The Asia Sun Group is a medium-sized, Myanmar business conglomerate with companies operating in the aviation fuel business, import and export, logistics, transportation, construction and others.[224] Asia Sun is, as noted above, Puma Energy's key local partner in its Myanmar aviation fuel business.

In addition to playing a role in the import and storage of aviation fuel through PEAS (until 2021) and NEPAS, the Asia Sun Group has also been involved in the distribution of aviation fuel across Myanmar through another subsidiary. In 2017, NEPAS contracted its truck transportation of aviation fuel in Myanmar to Cargo Link Pongrawe Logistics Co. Ltd. (Cargo Link Pongrawe).[225] At the time, this was a joint venture

217 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

218 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

219 See Notification No. 215 /2020 (Myanmar Gazette Volume 73- No.46 / 13 Nov 2020 / Page 72) dated 22 May 2020, which states, in part: "According to the consent of the Union Government of the Republic of Myanmar No. (9/2020) held on May 14 2020, the structure of the Myanmar Petroleum Products Enterprise (MPPE) of the Ministry of Electricity and Energy, established with (325) senior staffs, (4403) junior staffs, and a total of (4728) staff positions has been reduced and reorganized to Petroleum Products Regulatory Department (PPRD), with (426) senior staffs, (3039) junior staffs, and a total of (3465) places as follows."

220 National Energy Puma Aviation Services Co. Ltd, Company Extract, Myanmar Companies Online, last accessed on 14 March 2022.

221 National Energy Puma Aviation Services Co. Ltd, Company profile page, Myanmar Companies Online, last accessed on 17 October 2022.

222 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

223 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

224 Until recently, the main person behind the Asia Sun Group was Khin Phyu Win (who also uses the name Kyauk Kyar Shwe in various corporate records). She continues to beneficially own 16% of NEPAS through Asia Sun Aviation but, in April 2022, her interests in many of the companies were transferred to Zaw Min Tun. The other key players in the Asia Sun Group are three individuals in their 30s: Win Kyaw Aung, Myo Myint Aung and May Thwe Aung.

225 Myanmar Tracker, Saving Lives and Maintaining Puma Energy's/Pongrawe Cargo Link's Reputation, myanmartracker.com/IVMS_Driver_Behavior.html (accessed on 20 September 2022), "Case Studies: Puma's IVMS (In-vehicle Monitoring System)".

between Thai company Pongrawe Co. Ltd. (Pongrawe) and Cargo Link Co. Ltd. (Cargo Link), which is wholly-owned by Asia Sun.[226] On 24 June 2022, Cargo Link bought out Pongrawe's stake and changed the name of the company to Cargo Link Petroleum Logistics Co. Ltd. (Cargo Link Petroleum).[227]

Asia Sun, through another subsidiary, Asia Sun Trading, is also involved in the import of one type of aviation fuel, avgas or aviation gasoline. According to confidential documents obtained by Amnesty International, Asia Sun Trading was involved at least twice in 2022 in importing avgas in drums (or barrels) from Thailand "for use by the Tatmadaw (Air Force)."[228]

The table below provides details on the main companies of the Asia Sun Group involved in the aviation fuel business:

NAME	OWNERSHIP	SHAREHOLDER OF	ROLE
Asia Sun Aviation Pte. Ltd. (Singapore)	Khin Phyu Win (100%)	Puma Energy Irrawaddy Aviation (30%)	Beneficiary shareholder of NEPAS
Asia Sun Trading Co. Ltd. (Myanmar)[229]	Zaw Min Tun (100%)		Consignee of Jet A-1 and avgas fuel delivery
Asia Sun Energy Co. Ltd. (Myanmar)[230]	Myint Mo Kyaw Zin (100%)	PEAS (20%) (until February 2022)	Former joint venture partner of Puma Energy through PEAS
Asia Sun Logistics Co. Ltd. (Myanmar)[231]	Zaw Min Tun (100%)		Owner of a number of trucks distributing aviation fuel for NEPAS
Cargo Link Co. Ltd. (Myanmar)[232]	May Thwe Aung (100%)	Cargo Link Petroleum (100%)	Joint venture shareholder of Cargo Link Petroleum
Cargo Link Petroleum Logistics Co. Ltd. (Myanmar)[233]	Cargo Link Co. Ltd. (100%)		Involved in distribution by tanker truck of aviation fuel to NEPAS storage facilities and military air bases

226 Cargo Link Petroleum Logistics Co. Ltd., Company Extract, Myanmar Companies Online, last visited 18 August 2022.

227 Cargo Link Petroleum Logistics Co. Ltd., Company Extract, Myanmar Companies Online, last visited 18 August 2022.

228 Anonymous, credible source, leaked document from the Customs Department of the Myeik Coastal Township Office relating to the arrival of avgas 100 LL into Myeik port for the direct delivery to the Myanmar air force dated 27 July 2021, 17 August 2022, on file with Amnesty International.

229 Asia Sun Trading Co. Ltd., Company Extract, Myanmar Companies Online, last visited 19 August 2022.

230 Asia Sun Energy Co. Ltd., Company Extract, Myanmar Companies Online, last visited 24 August 2022.

231 Asia Sun Logistics Co. Ltd., Company Extract, Myanmar Companies Online, last visited 27 August 2022.

232 Cargo Link Co. Ltd., Company Extract, Myanmar Companies Online, last visited 19 August 2022.

233 Cargo Link Petroleum Logistics Co. Ltd., Company Extract, Myanmar Companies Online, last visited 18 August 2022.

5. AVIATION FUEL

5.1 TYPES OF AVIATION FUEL

There are two main types of aviation fuel: jet fuel and avgas.[234] Myanmar imports both types of fuel.

Jet fuel is a colourless, refined kerosene-based fuel used for airplanes with turbine turbine engines, such as jet engines and turboprops.[235] The vast majority of aircraft, commercial and military, use jet fuel.[236] Jet fuel is subject to strict quality specifications.[237]

There are various sub-types of jet fuel, but the two most relevant to this report are Jet A-1 (the most commonly used) and JP-8, the military equivalent of Jet A-1 with the addition of corrosion inhibitor and anti-icing additives.[238] Amnesty International's investigation indicates that the Myanmar military uses Jet A-1 and that, therefore, the distinction between commercial and military grade jet fuel is not relevant to the Myanmar context. This conclusion is based on interviews conducted with a wide range of individuals, from former members of the Myanmar air force[239], including pilots; to industry experts, including a Myanmar engineer involved in the handling of aviation fuel in Myanmar. These individuals all believe only one type of jet fuel is used in Myanmar. In addition, Amnesty International obtained access to two separate invoices for the purchase of Jet A-1 that was subsequently delivered to the Myanmar military, confirming that the military purchases and uses Jet A-1.[240]

The second broad category of aviation fuel is aviation gasoline, or 'avgas'. Avgas is used to power piston-engine airplanes, which are typically smaller aircraft.[241] Usage of avgas is far less common. Avgas includes two main types: avgas 100 and the more common avgas 100LL (one hundred low lead).[242]

According to four former officers of the Myanmar air force interviewed by Amnesty International, the Myanmar air force uses jet fuel for the vast majority of its aircraft.

234 Mark A. Rumizen, "Qualification of Alternative Jet Fuels," Frontiers in Energy Research, 2 November 2021, frontiersin.org/articles/10.3389/fenrg.2021.760713/full

235 iJet, "The Different Types of Aviation Fuel or Jet Fuel", 5 January 2021, ijet.aero/ijet-blog/different-types-aviation-fuel-jet-fuel#:~:text=AVGAS%2C%20or%20aviation%20gasoline%2C%20is,the%20thrust%20of%20expelled%20air.

236 National Aviation Academy, "What Are the Different Types of Aviation Fuel?", naa.edu/aviation-fuel/

237 The primary aviation fuel specifications used globally to ensure jet fuel supply is consistent with properties and performance include ASTM International Standard D1655, 1942 and UK MOD Defence Standard 91-091, 1138. See Mark A. Rumizen, "Qualification of Alternative Jet Fuels," Frontiers in Energy Research, 2 November 2021, frontiersin.org/articles/10.3389/fenrg.2021.760713/full

238 Total Energies, "What is jet fuel", services.totalenergies.uk/business-products/aviation-fuels/our-aviation-fuels/jet-fuel; Shell, "Military jet fuel", shell.com/business-customers/aviation/aviation-fuel/military-jet-fuel-grades.html

239 These individuals referred to the fuel used by the Myanmar military as "JP", which is likely in reference to "JP-8", the military equivalent of Jet A-1. Despite the use of the term JP, which could indicate that the Myanmar air force uses Jet A-1 with additives only (and therefore different to the fuel used by commercial aircraft), Amnesty International believes that not to be the case. When asked, these sources clarified that they believe the fuel they used is no different to the one used by commercial aircraft even if they referred to it as JP (and not Jet A-1).

240 Anonymous, credible source, leaked documents relating to the purchase by Asia Sun Trading of Jet A-1 subsequently delivered to the Myanmar military, on file with Amnesty International.

241 iJet, "The Different Types of Aviation Fuel or Jet Fuel", 5 January 2021, ijet.aero/ijet-blog/different-types-aviation-fuel-jet-fuel#:~:text=AVGAS%2C%20or%20aviation%20gasoline%2C%20is,the%20thrust%20of%20expelled%20air

242 Business Aircraft Jet Center, "Understanding Aviation Fuels", December 2015, businessaircraftcenter.com/articles/how-to-understand-ing-learn-about-aviation-avgas-jet-a-fuel-art1215.htm

The air force relies on avgas (also referred to as "octane" by at least three members of the air force) for two of its aircraft: the PT-6 (Nanchang CJ-6), a reconnaissance aircraft used for training; and the BN-2 (MPA) Islander, a special mission aircraft that was gifted to Myanmar by the Indian government.[243]

For the purposes of this report, jet fuel and avgas are jointly referred to as aviation fuel.

5.2 HOW AVIATION FUEL ENTERS THE MARKET

According to media reports, Myanmar relies on imports for all of its fuel needs, including aviation fuel.[244] Amnesty International has not been able to independently verify this. However, as per Amnesty International's findings, if any aviation fuel is refined in country, the amounts are likely to be negligible given the deteriorated state of the refining infrastructure in the country.

BOX 3: MANN REFINERY

There are three main refineries in Myanmar: the refinery at Thanlyin in Yangon region, which has been shut down according to MOEE[245]; the refinery in Chauk in Magway Region; and the Mann Thanbayarkan Petrochemical Complex (Mann refinery) located in Minhla township, Magway Region.[246] The Mann refinery is managed by MPE.[247]

As indicated in MOEE's old website, the Mann refinery had the capacity to produce turbine aviation fuel.[248] According to 2020 figures, its production capacity was 25,000 barrels of fuel a day, although no breakdown was provided on the production quantity by type of fuel.[249] Despite having this capacity, the ministry website does not state whether any aviation fuel is in fact being refined at Mann. Indeed, according to numerous media and industry reports, Myanmar is reliant on imports for all of its aviation fuel, suggesting that Mann refinery does not produce any aviation fuel.[250]

Even though the refinery does not appear to actually produce aviation fuel, it does however play a role in the supply chain, most likely as a storage facility. Leaked documents obtained by Amnesty International indicate that from December 2021 to January 2022, trucks transported a total of 1,518,354 litres of Jet A-1 from Mann refinery to at least the following air bases: Hmawbi, Meikhtila, Monywa, Nay Pyi Taw, Tada-U and Taungoo.[251] Four of these bases are linked to war crimes as documented by Amnesty International and described in Section 3.

243 "Myanmar gets India's maritime aircraft," Hindustan Times, 12 May 2007, hindustantimes.com/india/myanmar-gets-india-s-maritime-aircraft/story-Ex5EUD2cztE4egrQNVcXIP.html

244 Elaine Kurtenbach, "Rights advocates urge jet fuel sanctions against Myanmar", Associated Press News, 24 February 2022, apnews.com/article/business-myanmar-aung-san-suu-kyi-83079a61717f72b500cefc73cac1d35e; Feliz Solomon, "Russia Sanctions Intensify Calls for Myanmar Fuel Ban – 'If The Jets Can't Fly, They Can't Bomb', Wall Street Journal, 8 March 2022, wsj.com/articles/russia-sanctions-intensify-calls-for-myanmar-fuel-banif-the-jets-cant-fly-they-cant-bomb-11646751635

245 Thiha Ko Ko, "Myanmar govt commits to new refinery projects with private sector," Myanmar Times, 24 June 2020, mmtimes.com/news/myanmar-govt-commits-new-refinery-projects-private-sector.html.

246 MOEE, *Completed Projects*, moee.gov.mm/en/ignite/page/439 ; BDO LLP, *Commodity Trading in Myanmar* (previously cited), p. 29.

247 MOEE, *Completed Projects* (previously cited).

248 MOEE, *Completed Projects* (previously cited).

249 BDO LLP, *Commodity Trading in Myanmar* (previously cited), p. 29.

250 Elaine Kurtenbach, "Rights advocates urge jet fuel sanctions against Myanmar", Associated Press News, 24 February 2022, apnews.com/article/business-myanmar-aung-san-suu-kyi-83079a61717f72b500cefc73cac1d35e; Feliz Solomon, *Russia Sanctions Intensify Calls for Myanmar Fuel Ban – 'If The Jets Can't Fly, They Can't Bomb'*, 8 March 2022, wsj.com/articles/russia-sanctions-intensify-calls-for-myanmar-fuel-banif-the-jets-cant-fly-they-cant-bomb-11646751635

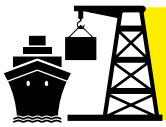
251 Anonymous, credible source, three leaked documents showing truck transportation routes to NEPAS storage facilities and military air bases between December 2021 and August 2022, 17 August 2022, on file with Amnesty International.



Mann Thanbayakan Petrochemical Complex, Myanmar: *Satellite imagery shows the Mann Thanbayakan Petrochemical Complex, located approximately 20 kilometres south of Magway, Myanmar. The refinery has a complex area inland and one along the shore – highlighted in orange. At the shore of the river, barges are often seen in satellite imagery in the area highlighted with a white box. Many fuel trucks have also been seen over time at the entrance to the complex along the shore – highlighted with a yellow circle.*

The fuel that is imported enters the country by land (in trucks) or by sea. Little is known about the import of aviation fuel from Thailand by truck, probably because the quantities are minimal. However, on 8 March 2022, a letter from NEPAS addressed to the Chief of Myanmar's police force requested police protection for a tanker truck that intended to travel from the border town of Myawady to Mandalay International Airport. According to Puma Energy, NEPAS requested police protection for an empty tanker truck,[252] though it seems unlikely that an empty truck would need police protection for its journey.

Based on Amnesty International's analysis, the vast majority of aviation fuel enters the country by sea as described below.



JET A-1 IS USED BY THE MYANMAR MILITARY FOR MOST OF ITS AIRCRAFT



ACCORDING TO A NUMBER OF SOURCES, THE MAJORITY OF JET A-1 FUEL ENTERS MYANMAR THROUGH THE PEAS TERMINAL AT THILAWA PORT

252 Puma Energy, email to Justice For Myanmar, 16 March 2022, on file with Amnesty International.

5.2.1 AVGAS

According to leaked records obtained by Amnesty International, in 2022, avgas was imported at least twice from Thailand by vessel, entering Myanmar through the Myeik port. The Myeik port is on the Myeik River and consists of four wharfs managed by the Myanma Port Authority and various jetties, one managed by MPPE.[253] Close to the Meik port is the Myeik air base.

According to the leaked information, two separate shipments transporting avgas in "drums" or barrels (holding approximately 200 litres each) arrived at Myeik port from Ranong port, Thailand – the first in June 2022, the second one on 27 July 2022. Asia Sun Trading was involved in both of these shipments. For the June 2022 shipment, Amnesty International obtained access to a proforma invoice between the "consignee", Asia Sun Trading, and the seller.[254]

For the 27 July 2022 shipment, one of the documents obtained by Amnesty International is a letter from the Customs Department of the Myeik Coastal Township Office addressed to the Customs Department in Yangon explaining that the "100 LL imported by Asia Sun Trading Company Limited, [is] required for use by the Tatmadaw (Air Force)."[255]

5.2.2 JET A-1

Jet A-1 is used by the Myanmar military for most of its aircraft. According to a number of sources, the majority of Jet A-1 fuel enters Myanmar through the PEAS terminal at Thilawa port.[256] The Thilawa area port is part of the Yangon Port and located approximately 16 kilometres southeast of Yangon on the shores of the Yangon River.[257] It is a medium-sized port, with multi-purpose terminals and berths for seagoing vessels transporting primarily bulk, cargo, containers and oil, gas and chemical products.[258] As of February 2019, the port was comprised of 37 plots managed by private companies through concession contracts.[259]

253 "Myeik Port", Myanmar Port Authority, mpa.gov.mm/facts-figures/myeik-port; "2.1.9 Myanmar Port of Tanintharyi, Myeik", Logistics Cluster, Digital Logistics Capacity Assessments, dlca.logcluster.org/spaces/flyingpdf/pdfpageexport.action?pageId=9406771.

254 Anonymous, credible source, leaked proforma invoice relating to the sale of avgas 100LL by Asia Sun Trading dated 27 June 2022, 17 August 2022, on file with Amnesty International.

255 Anonymous, credible source, leaked document from the Customs Department of the Myeik Coastal Township Office relating to the arrival of avgas 100 LL into Myeik port for the direct delivery to the Myanmar air force dated 27 July 2021, 17 August 2022, on file with Amnesty International.

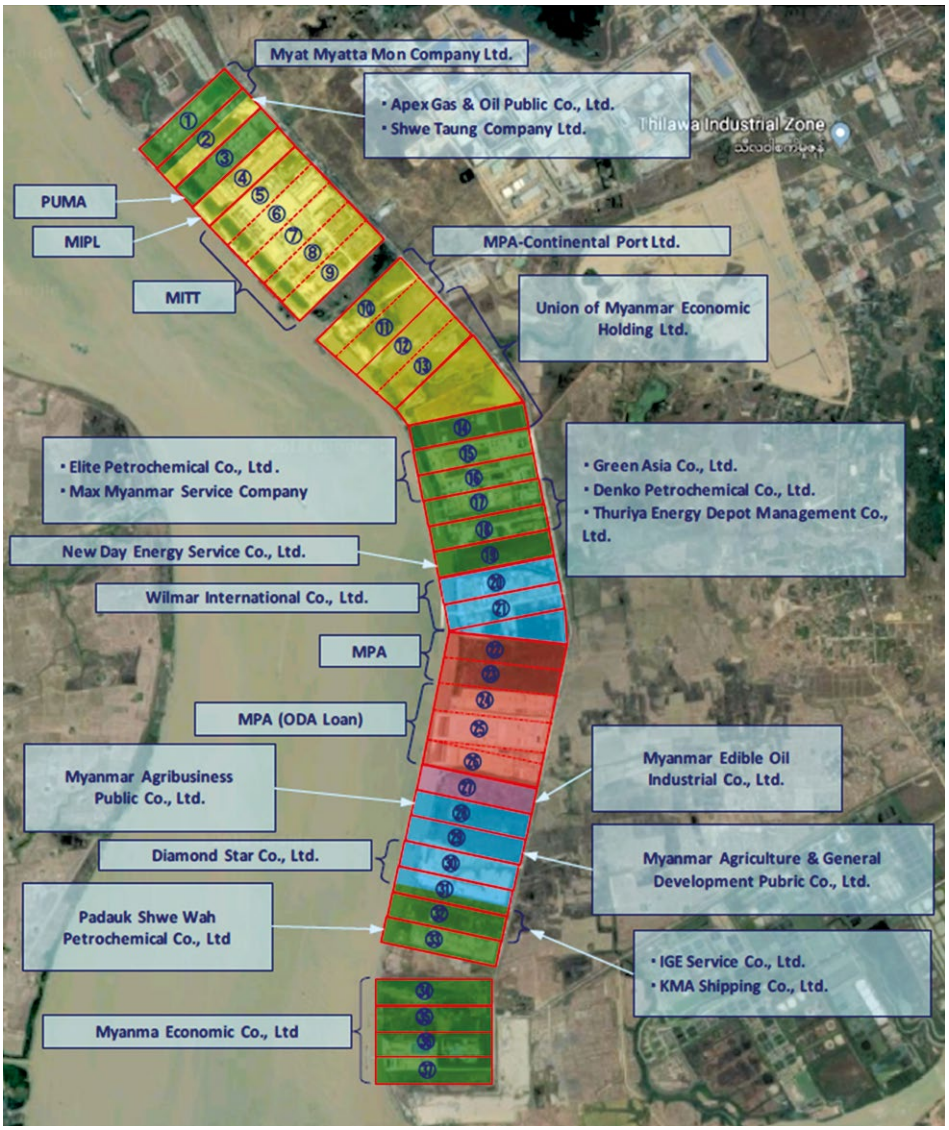
256 This is based in large part on information obtained by Amnesty International from interviews of an industry expert in Myanmar, sources close to Puma Energy and former members of the Myanmar air force.

257 Myanma Port Authority, Data Collection Survey for the Development of Yangon Port in Republic of the Union of Myanmar: Final Report, February 2019, (accessed on 19 September 2022), mpa.gov.mm/facts-figures/myanmar-international-terminal-thilawa-mitt, "Myanmar International Terminal Thilawa (MITT)"; Marine Traffic, Thilawa Port, marinetraffic.com/en/ais/details/ports/24533?name=THILAWA&country=Myanmar, (accessed on 19 September 2022), "General Information".

258 Myanma Port Authority, Data Collection Survey for the Development of Yangon Port in Republic of the Union of Myanmar: Final Report, February 2019, (accessed on 19 September 2022), mpa.gov.mm/facts-figures/myanmar-international-terminal-thilawa-mitt, "Myanmar International Terminal Thilawa (MITT)";

259 Myanma Port Authority, Data Collection Survey for the Development of Yangon Port in Republic of the Union of Myanmar: Final Report, February 2019, p. 26, (accessed on 19 September 2022), mpa.gov.mm/facts-figures/myanmar-international-terminal-thilawa-mitt, "Myanmar International Terminal Thilawa (MITT)"; Marine Traffic, Thilawa Port, marinetraffic.com/en/ais/details/ports/24533?name=THILAWA&country=Myanmar, (accessed on 19 September 2022), "General Information".

The Myanma Port Authority published the image below showing the companies that managed each plot as of February 2019.



This image map indicates the location of the 37 plots within the Thilawa Area Port as of February 2019. Source: Myanma Port Authority & Google Earth

Plot 3 was leased by Puma Energy, where it constructed the PEAS terminal. It was inaugurated in May 2017, making it Myanmar's largest petroleum products terminal.[260]

260 Puma Energy Annual Report 2017, p. 92; Puma Energy, "Puma Energy Asia Sun opens Myanmar's largest and most modern petroleum products terminal", 8 May 2017, pumaenergy.com/es/newsroom/newsdetails?articleId=274088

6. SUPPLY CHAIN OF AVIATION FUEL

Amnesty International, in a research collaboration with Justice For Myanmar, has obtained access to unpublished documents and leaked information that shed light on one of the most secretive and strategic business operations in Myanmar – the supply of aviation fuel to the military. This section provides a detailed account of this supply chain following the military coup of February 2021 and until at least September 2022.

Puma Energy, through its affiliate entities in Myanmar, has played a role in almost every step of the supply chain, linking it to the Myanmar military and its air strikes that amount to war crimes. Although on 5 October 2022 Puma Energy announced that it "has entered into agreements … to fully exit Myanmar," it also stated that, pending completion of its exit, the company continues to be a minority shareholder in NEPAS and the sole shareholder of PEAS.[261] As of the date of publication, Puma Energy has not provided details on the timing of their departure.



6.1 STEP 1: SUPPLIERS SHIPPING JET A-1

Between February 2021 and 17 September 2022, at least seven oil tankers offloaded eight shipments of Jet A-1 at the PEAS terminal in Thilawa port for a combined import volume of 66,626 MT in 2021 and 31,577 MT 2022. All imports of aviation fuel require a "consignee" or customer, who is the entity to whom the fuel is shipped, although not always the end user. According to various sources and company documents described below, the eight shipments were consigned to NEPAS or Asia Sun Trading, part of the Asia Sun Group.

Amnesty International confirmed the supplier of four of the eight shipments: PetroChina's wholly-owned Singapore Petroleum Company (December 2021), Rosneft (December 2021), Chevron (February 2022) and Thai Oil (June 2022). In addition, findings implicate ExxonMobil in a shipment of aviation fuel to Myanmar in June 2022. A few of the shipments have not been definitively linked to any one supplier, although as provided below, information has been obtained through vessel tracking data of the port of origin of the Jet A-1 for those shipments. All shipments originated in one of four countries (Singapore, Thailand, Malaysia or India), the primary port of origin being Jurong Island, Singapore.

NO	VESSEL NAME	IMO	LOAD PORT	MYANMAR PORT	ARRIVAL DATE
1	YU DONG	9846366	SRC - Jurong, Singapore	PEAS terminal, Thilawa	15 Apr 21
2	SANTYA	9667277	SRC - Jurong, Singapore	PEAS terminal, Thilawa	27 Jun 21
3	SWARNA MALA	9421403	Nayara Refinery - Gujarat, India	PEAS terminal, Thilawa	7 Dec 21
4	SYNERGY	9858761	SRC - Jurong, Singapore	PEAS terminal, Thilawa	21 Dec 21
5	SUPER HERO (STX HERO)	9341330	SRC - Jurong, Singapore	PEAS terminal, Thilawa	22 Feb 22
6	BHUREEMAS	9547568	Thai Oil - Sriracha, Thailand	PEAS terminal, Thilawa	5 Jun 22
7	SUPER INFINITY	9341342	ExxonMobil - Jurong, Singapore	PEAS terminal, Thilawa	17 Jun 22
8	SUPER HERO (STX HERO)	9341330	Pengerang Terminals - Malaysia	PEAS terminal, Thilawa	25 Aug 22

261 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.



This map illustrates the approximate voyages taken by the oil tankers that carried aviation fuel to Myanmar between February 2021 and August 2022.

6.1.1 YU DONG

The Yu Dong (IMO 9846366) is an oil products tanker built in 2018 that sails under the flag of Hong Kong.[262] On or about 11 April 2021, the Yu Dong departed Jurong Island, the petrochemical hub of Singapore.[263] Based on vessel tracking data and satellite imagery, it docked at one of the berths of the Singapore Refining Co. Pte. Ltd. (SRC) before departing for Myanmar.[264]

On 15 April 2021, the Yu Dong arrived at Thilawa area port and berthed at the PEAS terminal.[265] It stayed for two days and, according to the Myanma Port Authority, offloaded 13,319 MT[266] of Jet A-1.[267]

The SRC is located on the northern portion of Jurong Island and has five oil handling berths and one dry cargo/oil berth.[268] It is a joint venture between Singapore Petroleum Co. Ltd. (Singapore Petroleum Company) (wholly-owned by PetroChina International (Singapore) Pte. Ltd. (PetroChina))[269] and Chevron

262 Marine Traffic, Yu Dong, marinetraffic.com/en/ais/details/ships/shipid:5597582/mmsi:477176500/imo:9846366/vessel:YU_DONG, (accessed on 19 September 2022), "Voyage Information".

263 Yu Dong data, Lloyds' List Intelligence Seasearcher, p. 7.

264 Yu Dong data, Lloyds' List Intelligence Seasearcher, p. 7.

265 Myanma Port Authority Berthing List – 15 April 2021, p. 1.

266 Myanma Port Authority Berthing List – 15 April 2021, p. 1.

267 The berthing list provided by the Myanma Port Authority states that the total amount of fuel offloaded was 17,398MT, but this is believed to be the total of Jet A-1 offloaded at the PEAS terminal and the MOGAS offloaded at the Green Asia / Denko Petrochemical jetty, also at Thilawa port. Myanma Port Authority Berthing List – 15 April 2021, p. 1. On 17 April 2021, the Yu Dong sailed south of the river, to the nearby berth of Green Asia / Denko Petrochemical, where it offloaded 4,079 metri tons of MoGas 92 (motor gasoline). Myanma Port Authority Berthing List – 15 April 2021, p. 1.

268 Singapore Refining Company Private Limited, "Berth Regulations", January 2021, src.com.sg/wp-content/uploads/2021/08/SRCBerthRegulations.pdf, p. 6.

269 Singapore Petroleum Company Limited, SPC at a glance, spc.com.sg/about-us/spc-at-a-glance/, (accessed on 19 September 2022), "About SPC"; PetroChina Annual Report 2021, p. 172, hkexnews.hk/listedco/listconews/sehk/2022/0427/2022042700819.pdf.

Singapore Pte. Ltd. (Chevron).[270] Both shareholders own 50% of the company.[271] According to the SRC, the refinery produces jet fuel.[272]

Amnesty International contacted the SRC, and one of its two shareholders, the Singapore Petroleum Company, about this shipment but at the time of publication, it had not received a reply from either company.[273]

Amnesty International also contacted Chevron, the SRC's other shareholder, who responded explaining it was involved only in supplying a shipment of Jet A-1 that was transported by the Super Hero in February 2022 (see below).[274]



Jurong island, Singapore: *Satellite imagery from 11 April 2021 shows a ship with similar length and breadth (147m x 30m) and colour as the Yu Dong vessel.*

6.1.2 SANTYA (VOLTA)

The Volta (IMO 9667277) is an oil products tanker built in 2013.[275] At the time the vessel was involved in transporting Jet A-1 into Myanmar, it was called Santya and sailed under the flag of Panama.[276]

On or about 21 June 2021, the Santya was at the SRC on Jurong Island.[277] On 22 June 2021, the vessel appears to have onloaded fuel, departing the port later that day.[278] On 27 June 2021, the Santya arrived at the PEAS terminal in the Thilawa area port and offloaded 17,328 MT of Jet A-1. This was confirmed by the Myanma Port Authority.[279] The supplier of this shipment is unknown.

270 Singapore Refining Company Private Limited, Our Profile, src.com.sg/about-us/ (accessed on 19 September 2022), "About Us".

271 Singapore Refining Company Private Limited, Our Profile, src.com.sg/about-us/ (accessed on 19 September 2022), "About Us".

272 Singapore Refining Company Private Limited, Our Profile, src.com.sg/about-us/ (accessed on 19 September 2022), "About Us".

273 Amnesty International contacted the SRC on 24 August 2022; and the Singapore Petroleum Company on 25 August 2022 and 12 October 2022..

274 Annex 5, Chevron, letter to Amnesty International, 5 September 2022, on file with Amnesty International.

275 VesselFinder, Volta, vesselfinder.com/vessels/VOLTA-IMO-9667277-MMSI-563164600, (accessed on 19 September 2022), "Vessels".

276 Volta Lloyds Vessel Report, 16 August 2022, p. 24.

277 Volta Lloyds Vessel Report, 16 August 2022.

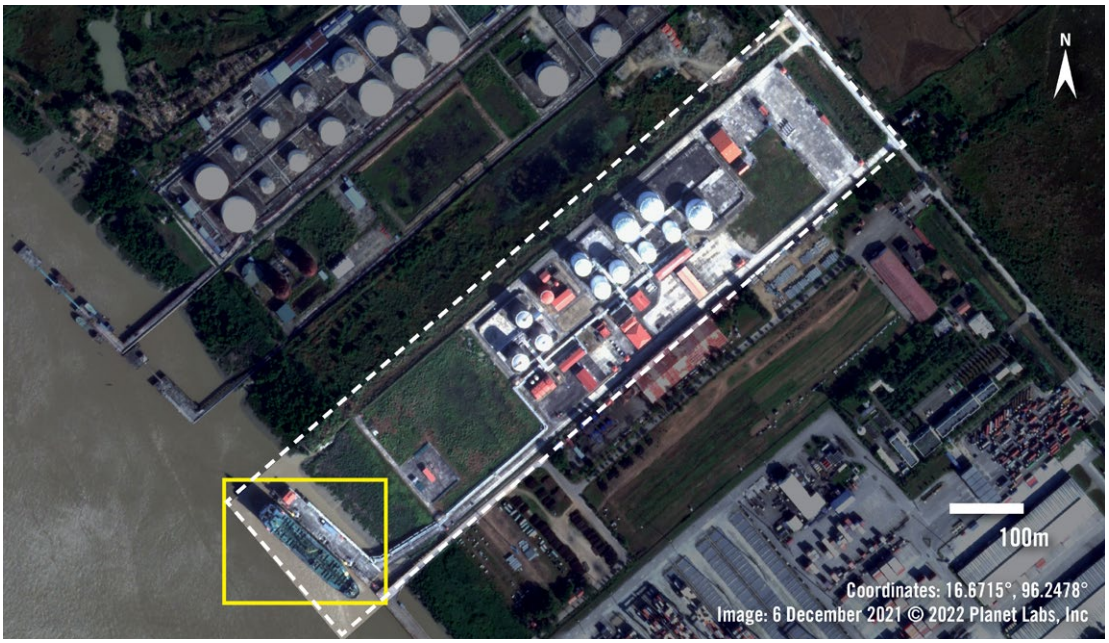
278 Volta Lloyds Vessel Report, 16 August 2022.

279 Myanma Port Authority Berthing List – 25 June 2021, p. 1. The Lloyds data, based on the vessel's AIS data, indicates that during the dates in question, the Santya was in Singapore and travelled from the South Anchorage to other parts of the port. This directly contradicts the information provided by the Myanma Port Authority. We defer to the Myanma Port Authority in this case.

6.1.3 SWARNA MALA

The Swarna Mala (IMO 9421403) is a chemical and oil products tanker built in 2010 that sails under the flag of India.[280] On or about 25 November 2021, the Swarna Mala was berthed at the Essar jetty B at the Vadinar Oil Terminal[281], located in Jamnagar, Gujarat, India, for 22 hours.[282]

It later sailed to the PEAS terminal at the Thilawa area port, where it arrived on 5 December 2021.[283] It spent approximately a day at the port, where it offloaded 15,710 MT of Jet A-1 fuel.[284]



Puma Energy Terminal, Thilawa, Myanmar: *Satellite imagery from 6 December 2021 shows a ship at the Puma Energy berth in Thilawa, Myanmar. Ship tracking data documented the vessel, Swarna Mala, at Thilawa around the time the image was taken. The length, breadth (183m x 32m) and colours of the ship in the image match that of the Swarna Mala.*

The Vadinar Oil terminal is part of the Nayara Energy refinery, India's second-largest single-site refinery, managed by Nayara Energy Ltd. (Nayara Energy).[285] Nayara Energy's shareholders include (1) Rosneft Singapore Pte. Ltd. (Rosneft), which owns 49.13%; and (2) Cyprus-based Kesani Enterprises Co. Ltd., a consortium led by Trafigura[286] and a Russian-owned asset manager, UCP Investment Group, which holds another 49.13%.[287]

280 VesselFinder, Swarna Mala, vesselfinder.com/vessels/SWARNA-MALA-IMO-9421403-MMSI-419000103, (accessed on 19 September 2022), "Vessels"; MarineTraffic, Swarna mala, marinetraffic.com/en/ais/details/ships/shipid:5504610/mmsi:419000103/imo:9421403/vessel:SWARNA_MALA (accessed on 20 September 2022), "Voyage Information".

281 Swarna Mala Lloyds Vessel Report, 16 August 2022, p. 12.

282 MarineTraffic, Swarna Mala, archive.essar.com/upload/pdf/Destimoney_EPL_Dec2012.pdf, (accessed on 19 September 2022), "Voyage Information".

283 Swarna Mala Lloyds Vessel Report, 16 August 2022.

284 Swarna Mala Lloyds Vessel Report, 16 August 2022.

285 Nayara Energy, Refinery, nayaraenergy.com/refinery, (accessed on 19 September 2022), "Our Operations"; Nayara Energy Annual Report 2020-2021, p. 4, nayaraenergy.com/storage/annual-reports/August2021/dHkvfQWP6WV20HX105P6.pdf.

286 Trafigura 2021 Annual Report, p. 100.

287 Trafigura, "Nayara Energy", trafigura.com/about-us/assets-and-alliances/nayara-energy/ (accessed on 19 August 2022); Mayank Bhargava, Company Secretary, Nayara Energy Limited, letter to BSE Limited, 21 March 2022, nayaraenergy.com/storage/corporate-announcements/March2022/OY2njDk4MnBZVqwWyF59.pdf; Reuters, "RPT-Exclusive-Trafigura plans to exit Rosneft Indian refining JV-sources", 17 November 2021, reuters.com/article/india-trafigura-idCNL1N2S804U



Rosneft is a state-owned Russian integrated energy company, considered one of the largest oil companies in the world.[288] Trafigura is one of the largest physical commodities trading groups in the world.[289] UCP Investment Group is a Russian asset manager investing in publicly traded securities and private companies in the Russian market.[290] According to Trafigura's 2021 annual report, it planned to sell its equity investment in Nayara Energy (through Tendril Ventures) in the first half of 2022.[291] However, as confirmed by Trafigura on 5 September 2022, the sale had not yet taken place.[292]

Nayara Energy[293] and Trafigura[294] informed Amnesty International that they were not involved in the sale of this shipment of Jet A-1. Rosneft acknowledged that it was involved, explaining that "the shipment […] had been offloaded at the Puma Energy Asia Sun Co. Ltd. terminal in Thilawa area port to the benefit of National Energy Puma Aviation Services – the end user of the fuel."[295]

According to Rosneft, the consignee for this shipment was NEPAS.[296] Rosneft explained that "the prohibition of the use of fuel for military purposes was stated in the supply contract."[297] It also stated that "Myanmar's [has its] own capacity (1.1 million tonnes) producing all types of fuel, including jet fuel."[298] However, based on media reports, Myanmar imports all of its jet fuel.[299]

6.1.4 SYNERGY

The Synergy (IMO 9858761) is a chemical and oil tanker built in 2020 that sails under the flag of Singapore.[300] From 14-16 December 2021, the Synergy was at the SRC.[301] On 21 December, the Synergy offloaded 20,270 MT of Jet A-1 at the PEAS Thilawa terminal.[302]

The aviation fuel transported by the Synergy was destined for the military, according to a confidential document seen by Amnesty International and included below. The Ministry of Defence sent this document to the Myanma Port Authority on 16 December 2021.[303] It explains that the "SYNERGY Vessel carrying 21,000 tones [sic] of Jet A-1 (Kerosene) Aviation Fuel required for use in Tatmadaw (Air Force)'s Aircrafts and Helicopters purchased by Asia Sun Trading Co., Ltd. from Singapore-based Singapore Petroleum Co." is to arrive at the port in December 2021.

288 "Largest oil and gas companies by market cap", companiesmarketcap.com/oil-gas/largest-oil-and-gas-companies-by-market-cap/ (accessed on 19 August 2022); Visual Capitalist, Govind Bhutada, "Ranked: The Largest Oil and Gas Companies in the World", 25 October 2021, visualcapitalist.com/ranked-the-largest-oil-and-gas-companies-in-the-world/ (accessed on 19 August 2022).

289 Mayank Bhargava, Company Secretary, Nayara Energy Limited, letter to BSE Limited, 21 March 2022, nayaraenergy.com/storage/corporate-announcements/March2022/OY2njDk4MnBZVqwWyF59.pdf

290 UCP Investment Group, "About UCP," ucp.com/en/ (accessed on 19 August 2022).

291 Trafigura 2021 Annual Report, p. 100.

292 Annex 5, Trafigura, letter to Amnesty International, 5 September 2022, on file with Amnesty International

293 Annex 5, Nayara Energy, letter to Amnesty International, 6 September 2022, on file with Amnesty International.

294 Annex 5, Trafigura, letter to Amnesty International, 5 September 2022, on file with Amnesty International.

295 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.

296 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.

297 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.

298 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.

299 Elaine Kurtenbach, "Rights advocates urge jet fuel sanctions against Myanmar", Associated Press News, 24 February 2022, apnews.com/article/business-myanmar-aung-san-suu-kyi-83079a61717f72b500cefc73cac1d35e; Feliz Solomon, "Russia Sanctions Intensify Calls for Myanmar Fuel Ban – 'If The Jets Can't Fly, They Can't Bomb', Wall Street Journal, 8 March 2022, wsj.com/articles/russia-sanctions-intensify-calls-for-myanmar-fuel-banif-the-jets-cant-fly-they-cant-bomb-11646751635

300 Synergy Lloyds Vessel Report, 17 August 2022, p. 20; Marinetraffic, Synergy, marinetraffic.com/en/ais/details/ships/shipid:6112902/mmsi:563100800/imo:9858761/vessel:SYNERGY (accessed on 20 September 2022), "Voyage Information".

301 Synergy Lloyds Vessel Report, 17 August 2022, p. 12.

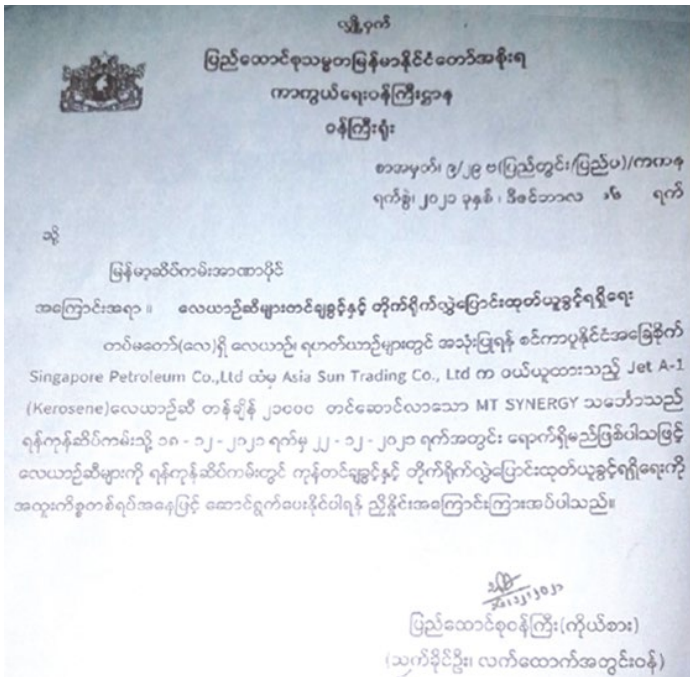
302 Interview by voice call with a source close to Puma Energy, 28 July 2022.

303 Anonymous, credible source, leaked document from the Ministry of Defence relating to the arrival of Jet A-1 Fuel for military use dated 16 December 2021, 17 August 2022, on file with Amnesty International.

As indicated by the letter, the consignee or customer in this case was Asia Sun Trading. The supplier was Singapore Petroleum Company, wholly-owned by PetroChina, which has not responded to any of Amnesty International's requests for comment.



Puma Energy Terminal, Thilawa, Myanmar: *Satellite imagery from 21 December 2021 shows a ship at the Puma Energy berth in Thilawa, Myanmar. Vessel tracking data documented the vessel, Synergy, at Thilawa around the time the image was taken. The length, breadth (154m x 36m) and colours of the ship in the image match that of the Synergy.*



ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
ကာကွယ်ရေးဝန်ကြီးဌာန
ဝန်ကြီးရုံး

ခွဲ

မြန်မာ့ဆိပ်ကမ်းအာဏာပိုင်

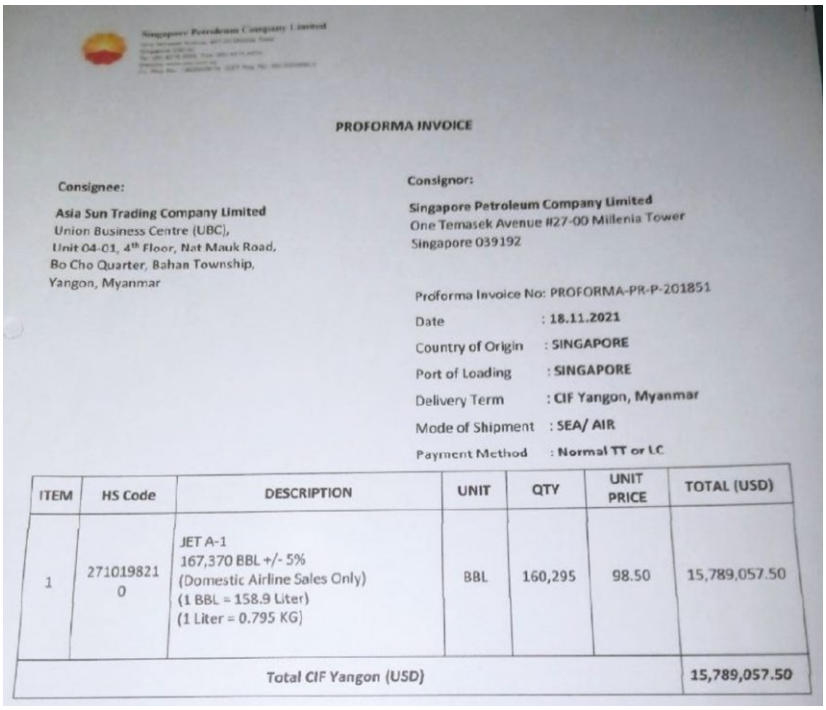
အကြောင်းအရာ ။ လေယာဉ်ဆီများတင်ချွှင့်နှင့် တိုက်ရိုက်လွှဲပြောင်းထုတ်ယူခွင့်ရရှိရေး

Singapore Petroleum Co.,Ltd ထံမှ Asia Sun Trading Co., Ltd က ဝယ်ယူထားသည့် Jet A-1 (Kerosene)လေယာဉ်ဆီ တန်ချိန် ၂၁၀၀၀ တင်ဆောင်လာသော MT SYNERGY သင်္ဘောသည်

လေယာဉ်ဆီများကို ရန်ကုန်ဆိပ်ကမ်းတွင် ကုန်တင်ချွှင့်နှင့် တိုက်ရိုက်လွှဲပြောင်းထုတ်ယူခွင့်ရရှိရေးကို

ပြည်ထောင်စုဝန်ကြီး(ကိုယ်စား)
(သက်ခိုင်ဦး၊ လက်ထောက်အတွင်းဝန်)

This letter in Burmese, dated 16 December 2021, was sent by the Ministry of Defence to the Myanma Port Authority. As noted above, this letter indicates the aviation fuel shipped by the Synergy was "for use in Tatmadaw (Air Force)'s Aircrafts and Helicopters."



PROFORMA INVOICE

Consignee:

Asia Sun Trading Company Limited
Union Business Centre (UBC),
Unit 04-01, 4th Floor, Nat Mauk Road,
Bo Cho Quarter, Bahan Township,
Yangon, Myanmar

Consignor:

Singapore Petroleum Company Limited
One Temasek Avenue #27-00 Millenia Tower
Singapore 039192

Proforma Invoice No: PROFORMA-PR-P-201851
Date : 18.11.2021
Country of Origin : SINGAPORE
Port of Loading : SINGAPORE
Delivery Term : CIF Yangon, Myanmar
Mode of Shipment : SEA/ AIR
Payment Method : Normal TT or LC

ITEM	HS Code	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL (USD)
1	271019821 0	JET A-1 167,370 BBL +/- 5% (Domestic Airline Sales Only) (1 BBL = 158.9 Liter) (1 Liter = 0.795 KG)	BBL	160,295	98.50	15,789,057.50
Total CIF Yangon (USD)						15,789,057.50

This is a photograph of a proforma invoice dated 18 November 2021 between Asia Sun Trading and Singapore Petroleum Company in relation to a shipment of Jet A-1 to Myanmar.

6.1.5 SUPER HERO (STX HERO)

The Super Hero or STX Hero (IMO 9341330) is a chemical and oil tanker built in 2009 that sails under the flag of Panama.[304] It is owned by Panamanian POS Maritime TC S.A., which is in turn owned by Pan Ocean Co. Ltd., a Korean global shipping company.[305]

The Super Hero transported two shipments of Jet A-1 to Myanmar in 2022.

The first voyage started at the SRC in Jurong Island between 15 to 18 February 2022,[306] arriving at the PEAS Thilawa terminal on 23 February 2022. It stayed there for approximately 24 hours, during which it offloaded 13,310 MT of Jet A-1 fuel. It then returned to Singapore.

According to Chevron, it supplied this Jet A-1 shipment.[307] Although in its letters Chevron does not name the customer, based on information obtained by Amnesty International, the customer in this case was NEPAS. Chevron explained that "the customer in Singapore provided assurance that the Jet A-1 fuel was for commercial purposes only"[308] and, in a subsequent communication, clarified that "the importer of the jet fuel [supplied it] to a commercial airline."[309] Chevron did not disclose the name of the airline.

304 Marinetraffic, Super Hero, marinetraffic.com/en/ais/details/ships/shipid:416767/mmsi:370755000/imo:9341330/vessel:SUPER_HERO (accessed on 20 September 2022), "Voyage Information".

305 Pan Ocean: Global No. 1 Shipping Company, Corporate Brochure panocean.com/common/board/pdfViewer/company%20profile_Eng.pdf?board_attachment_id=5276; Super Hero Lloyds Vessel Report, p. 23, 17 August 2022.

306 Super Hero Lloyds Vessel Report, 16 August 2022, p. 10; Annex 5, Chevron, letter to Amnesty International, 5 September 2022, on file with Amnesty International. According to the supplier, vessel tracking data and satellite imagery

307 Annex 5, Chevron, letter to Amnesty International, 5 September 2022, on file with Amnesty International.

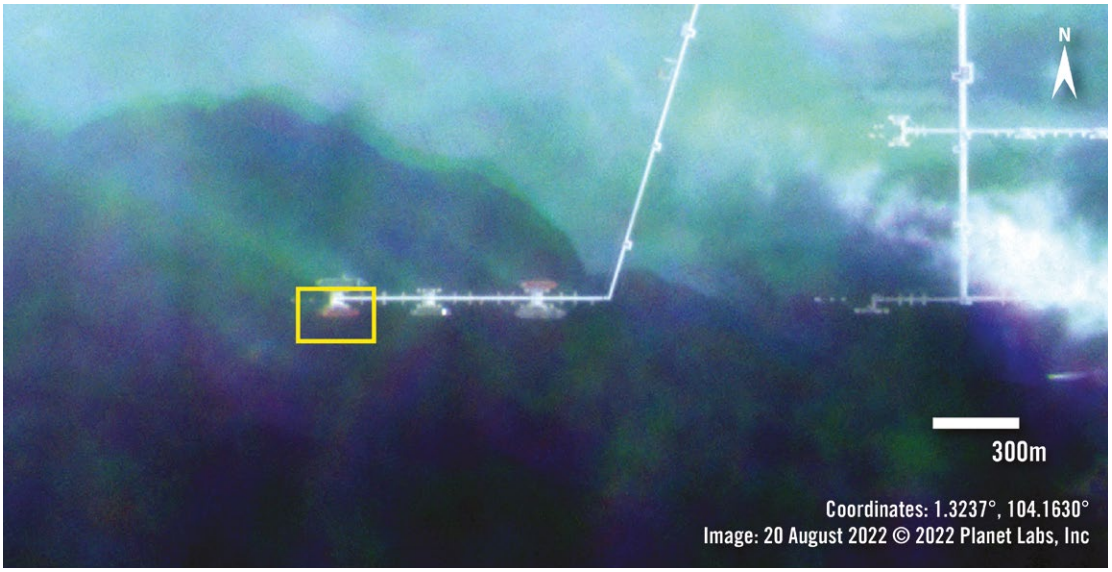
308 Annex 5, Chevron, letter to Amnesty International, 5 September 2022, on file with Amnesty International.

309 Annex 5, Chevron, letter to Amnesty International, 18 October 2022, on file with Amnesty International.



SRC, Singapore: *Satellite imagery from 18 February 2022 shows a ship with similar length and breadth (150m x 22m) and colour as the Super Hero vessel.*

The second voyage started at the Pengerang Independent Terminals, Malaysia, on or around 20 August.[310] It subsequently sailed to Myanmar, arriving at the PEAS Thilawa terminal on 25 August 2022 where it offloaded aviation fuel.[311]



Pengerang Independent Terminals, Malaysia: *Satellite imagery from 20 August 2022 shows a ship with similar length and breadth (150m x 22m) and colour as the Super Hero vessel.*

The Pengerang Independent Terminals Sdn Bhd (PITSB), which manages the Pengerang terminals, is beneficially owned by Dialog Group Berhad (46%), Vopak (44%) and Johor State S.S.I (10%).[312] Vopak confirmed that the shipment departed from the Pengerang terminal but clarified that it was not the supplier.[313] Vopak noted that it is "an independent storage service provider" that does "not produce, transport, own, buy or sell products."[314] Its "service is the safe storage of [its] customers' products while

310 Super Hero Lloyds Vessel Report, 14 September 2022, p. 6.

311 Super Hero Lloyds Vessel Report, 14 September 2022, p. 6.

312 Pengerang Deepwater Terminals, dialogasia.com/pengerang; "Pengerang Terminals", 8 January 2018, mdbc.com.my/wp-content/uploads/2018/02/MDBC-NL-Emb-Historic-Links-PITSB.pdf

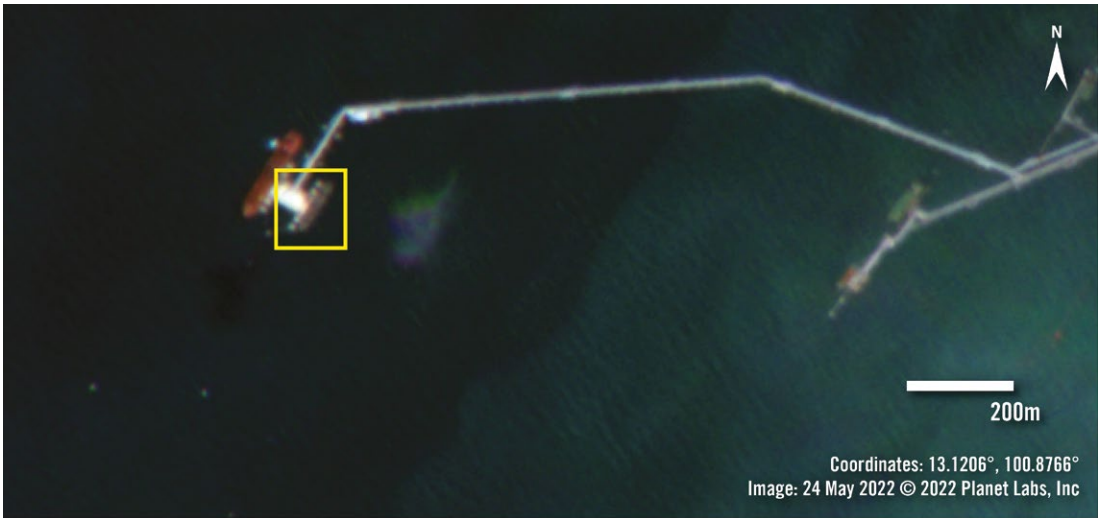
313 Annex 5, Vopak, letter to Amnesty International, 11 October 2022, on file with Amnesty International.

314 Annex 5, Vopak, letter to Amnesty International, 11 October 2022, on file with Amnesty International.

it is in [their] terminals in the ports."[315] Vopak did not name its customer, that is, the supplier of this shipment.

6.1.6 BHUREEMAS

The Bhureemas (IMO 9547568) is a chemical and oil tanker built in 2009 that sails under the flag of Thailand.[316] From 24-27 May 2022, it was at jetty no. 4 of the Thai Oil Marine Terminal[317] in Sriracha, Thailand.[318] Satellite imagery shows the berth at which Bhureemas docked.



Thai Oil Marine Terminal, Thailand: *Satellite imagery from 24 May 2022 shows a ship with similar length and breadth (101m x 19m) as the Bhureemas vessel.*

From there, it went to Myanmar, arriving at the PEAS Thilawa terminal on 5 June 2022.[319] It stayed there for approximately 24 hours, during which it offloaded 4,942 MT Jet A-1 fuel.[320] It then returned to Thailand.[321]

Thai Oil was the supplier of this shipment, as confirmed by the company.[322] According to Thai Oil, "prior to the supply of the fuel, our responsible unit obtained binding written contractual warranties and undertakings from its customer in Myanmar that the fuel being purchased and delivered is and will be solely and ultimately for the purpose of commercial and civilian use in Myanmar, and that in no event will the fuel be used for any military purpose whether in Myanmar or otherwise."[323]

315 Annex 5, Vopak, letter to Amnesty International, 11 October 2022, on file with Amnesty International.

316 Marinetraffic, Bhureemas, marinetraffic.com/en/ais/details/ships/shipid:734334/mmsi:567389000/imo:9547568/vessel:BHUREEMAS (accessed on 20 September 2022), "Voyage Information".

317 The Thai Oil Company's Marine Terminal is part of the Sriracha Oil Terminals, located on the eastern shore of the Gulf of Thailand, between Sichang Island and the mainland, approximately 120km from Bangkok. Thai Oil's Marine Terminal has a number of berths for the importation/exportation and internal distribution of petroleum products. The Thai Oil refinery is the largest single-site refinery and one of the most complex oil processing facilities in Thailand. Thai Oil is listed on the Bangkok stock exchange. According to its website, it produces jet fuel. See shipnext.com/port/sriracha-oil-terminals-thsir-tha; https://thaishipowners.com/pdf/x217.pdf; https://www.findaport.com/port-of-sriracha-thai-oil-terminal#:~:text=Summary&text=OVERVIEW%3A%20Sriracha%20Refinery%20is%20the,jetty%2C%20operated%20by%20Thai%20Oil; https://www.thaioilgroup.com/home/content.aspx?id=81

318 Bhureemas Lloyds Vessel Report, 17 August 2022, p. 9. Thai Oil also separately confirmed this

319 Bhureemas Lloyds Vessel Report, 17 August 2022, p. 9.

320 Bhureemas Lloyds Vessel Report, 17 August 2022, p. 9.

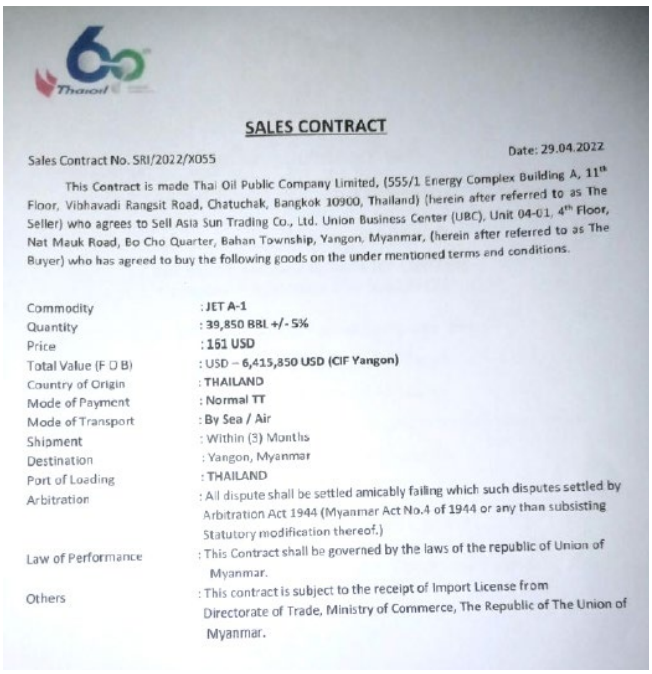
321 Bhureemas Lloyds Vessel Report, 17 August 2022, p. 9.

322 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International.

323 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International.

Amnesty International obtained access to a sales contract dated 29 April 2022 under which Thai Oil committed to selling a total of 39,850bbl (roughly equivalent to 4,942 MT) of Jet A-1 for over USD 6 million to Asia Sun Trading. Given the date of, and parties to, the sales contract, as well as the amount of fuel intended to be sold, this document appears to be the underlying sales contract of the Jet A-1 shipment transported by the Bhureemas on 5 June 2022.

Amnesty International has had access to another document which raises questions about the actual end user of the Jet A-1 delivered by Thai Oil. The letter, dated May 2022, was written by Asia Sun Trading and addressed to the Director General of the Customs Department. It cites the "issuance of Jet A-1 (Kerosene) Aviation Fuel under Special Order" given that "we, Asia Sun Trading Co. Ltd. procured and imported Jet A-1 (Kerosene) Aviation fuel from Thailand-based Thai Oil Public Company Limited for use by the Tatmadaw (Air Force)."[324]



SALES CONTRACT

Sales Contract No. SRI/2022/X055

Date: 29.04.2022

This Contract is made Thai Oil Public Company Limited, (555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900, Thailand) (herein after referred to as The Seller) who agrees to Sell Asia Sun Trading Co., Ltd. Union Business Center (UBC), Unit 04-01, 4th Floor, Nat Mauk Road, Bo Cho Quarter, Bahan Township, Yangon, Myanmar, (herein after referred to as The Buyer) who has agreed to buy the following goods on the under mentioned terms and conditions.

Commodity	: JET A-1
Quantity	: 39,850 BBL +/- 5%
Price	: 151 USD
Total Value (F O B)	: USD – 6,415,850 USD (CIF Yangon)
Country of Origin	: THAILAND
Mode of Payment	: Normal TT
Mode of Transport	: By Sea / Air
Shipment	: Within (3) Months
Destination	: Yangon, Myanmar
Port of Loading	: THAILAND
Arbitration	: All dispute shall be settled amicably failing which such disputes settled by Arbitration Act 1944 (Myanmar Act No.4 of 1944 or any than subsisting Statutory modification thereof.)
Law of Performance	: This Contract shall be governed by the laws of the republic of Union of Myanmar.
Others	: This contract is subject to the receipt of Import License from Directorate of Trade, Ministry of Commerce, The Republic of The Union of Myanmar.

This is a photograph of a sales contract for Jet A-1 dated 29 April 2022 between Thai Oil and Asia Sun Trading.

6.1.7 SUPER INFINITY

The Super Infinity (IMO 9341342) is a chemical and oil tanker built in 2009 that sails under the flag of Panama.[325] It is owned by Panamanian POS Maritime UC S.A., which is in turn owned by Pan Ocean.[326]

According to vessel tracking data, from 11 to 12 June 2022, the Super Infinity was at the ExxonMobil Berth (OM5) in Singapore.[327] From there, the Super Infinity departed towards Myanmar, arriving at the

324 The vessel mentioned in the letter (Synergy) and the amount of Jet A-1 (20,000 MT) do not match the Bhureemas' shipment, however the month of the shipment (May 2022) does match, so Amnesty International considers this to be a genuine letter.

325 Marinetraffic, Super Infinity, marinetraffic.com/en/ais/details/ships/shipid:416176/mmsi:356819000/imo:9341342/vessel:SUPER_INFINITY (accessed on 20 September 2022), "Voyage Information".

326 Pan Ocean: Global No. 1 Shipping Company, Corporate Brochure panocean.com/common/board/pdfViewer/company%20profile_Eng.pdf?board_attachment_id=5276; Super Infinity Lloyds Vessel Report, p. 29, 17 August 2022.

327 Super Infinity Lloyds Vessel Report, 16 August 2022, p. 8; see video of berthing at ExxonMobil om5 terminal, see at 1:30 minutes youtube.com/watch?app=desktop&v=u6O--q0SJt0

PEAS Thilawa terminal on or about 16 June 2022. It stayed there for approximately 24 hours, during which it offloaded 13,311MT of Jet A-1 fuel.[328] It then sailed back to Singapore.

ExxonMobil Asia Pacific Pte. Ltd. (ExxonMobil) has nine wharfs at the Singapore port (codes OM1 to OM9).[329] According to ExxonMobil, its product line includes both jet fuel and high-performance lubricants such as jet oils, hydraulic fluids, greases and other aviation products.[330]

In response to Amnesty International's multiple letters, ExxonMobil did not deny the fact that the shipment departed from its refinery in Singapore and explained that "[a]ny potential sale of aviation fuel related to Myanmar would be conducted in accordance with applicable law."[331]

6.1.8 MARINE INSURANCE

Marine insurance plays an essential role in the shipping of aviation fuel; without it, no vessel will transport any good. Hull and machinery insurance covers physical loss or damage to the vessel itself and its machinery, while cargo insurance protects the goods and merchandise at all stages of the distribution chain, including while in transit or in storage.[332] A vessel owner usually procures hull and machinery insurance while the shipper (in this case, seller or supplier) of the goods obtains cargo insurance.

Protection and indemnity (P&I) insurance, the third most common type of marine insurance, covers third-party liabilities encountered in the commercial operation of vessels, including injury or death of persons aboard the vessel or damage caused to infrastructure or other vessels or oil pollution.[333] Most P&I insurance is provided by one of 13 P&I clubs, which is based on the not-for-profit principle of mutuality where members of the club are both the insurers and the insureds.[334] Unlike hull and cargo insurance, P&I insurance covers all members automatically.

Amnesty International identified and wrote to the P&I clubs that provide insurance to each of the vessels identified in this report; five of these are UK based.[335] The P&I clubs that responded explained that this type of insurance protection automatically terminates where a vessel is involved in illegal activity, such as violating sanctions.[336] However, no reference was made to whether P&I clubs consider adverse human rights impact when providing insurance coverage to vessels after an accident.

328 Super Infinity Lloyds Vessel Report, 16 August 2022, p. 8; the source for the quantity is a confidential company source.

329 PSA Marine, Location Codes, psamarine.com/wp-content/uploads/2015/12/LOCATION-CODES.pdf (accessed on 20 September 2022), "Fleet List".

330 ExxonMobil, Divisions, products and services, exxonmobil.com.sg/Company/Overview/Who-we-are/Divisions-products-and-services (accessed on 20 September 2022), "Who we are".

331 Annex 5, ExxonMobil, letter to Amnesty International, 18 October 2022, on file with Amnesty International.

332 Lloyds, "Marine", lloyds.com/conducting-business/risk-locator/business-guidance/marine ; Marine Insight, "Different Types of Marine Insurance & Marine Insurance Policies," marineinsight.com/maritime-law/different-types-of-marine-insurance-marine-insurance-policies/

333 Bethan Moorcraft, "What is protection and indemnity insurance," Insurance Business, 8 April 2019, insurancebusinessmag.com/us/guides/what-is-protection-and-indemnity-insurance-164291.aspx

334 International Group of P&I Clubs, "About", igpandi.org/about/

335 The following P&I clubs provided insurance to the vessels at the time they transported aviation fuel: UK Mutual Steam Ship Assurance Association (Bermuda) Ltd. affiliated to UK P&I (Yu Dong); Japan Shipowners Mutual Protection & Indemnity Association affiliated to Japan P&I Club (Santya); Steamship Mutual Underwriting Association (Bermuda) Ltd. affiliated to Steamship Mutual (Swarna Mala); QBE Asia Pacific (Synergy); The Britannia Steam Ship insurance Association Ltd. associated to Britannia P&I (Super Hero); Shipowners Mutual Protection & Indemnity Association (Luxemburg) affiliated to Shipowners' Club (Bhureemas); and North of England P&I Association affiliated to UK North P&I Club (Super Infinity). See Lloyds vessel reports and IHS Seaweb.

336 See generally Annex 5.



6.2 STEP 2: OFFLOADING, HANDLING AND STORING JET A-1 AT PEAS PORT TERMINAL

Once the vessel carrying Jet A-1 arrives at port, pre-berthing and offloading standard procedures need to take place prior to the discharge of the fuel. For example, the quantity and quality of the fuel have to be tested, the latter usually taking place in a laboratory offsite.[337] In both cases, the testing is conducted by third-party agencies contracted by PEAS.

Once the vessel crew and terminal staff are allowed to discharge, the Jet A-1 is offloaded and temporarily stored at the PEAS terminal. The terminal's storage capacity of 91,000m3,[338] held in 11 tanks can store a variety of products from petroleum and jet fuel to bitumen.[339] Tanks are designed to be switched between gasoline, gas oil and jet fuel.[340] Three tanks are used for Jet A-1 fuel,[341] each with a capacity of 7000m^3.[342]

According to leaked corporate documents and a confirmation from the company, Wilhelmsen Ships Service (WSS) Myanmar Ltd. (Wilhelmsen Myanmar), beneficially owned by the Norwegian maritime group Wilhelmsen Holding ASA (Wilhelmsen)[343] headquartered in Norway, was the shipping agent for a number of Jet A-1 shipments.[344] Between October 2020 and June 2021, Wilhelmsen Myanmar received at least MMK 15.7 million (equivalent to approximately USD 7,500) to manage NEPAS and PUMA shipments.[345]

Wilhelmsen explained that its entity in Myanmar "act[ed] as Owner's Representative on behalf of the vessel owner/operator for the transmission of proforma disbursement accounts and port captaincy on the berth."[346] In simpler terms, owner representatives or vessel agents ensure that in-port arrangements are made and completed efficiently and effectively.[347] Accordingly, Wilhelmsen Myanmar provided essential services to shipments of Jet A-1 that arrived at the PEAS terminal.

337 Marine Online, "Procedures When a Crude Oil Tanker Arrives at Port", 18 July 2017, youtube.com/watch?v=wSZUfFLzyH0; industry expert and source close to the company.

338 Cision PR Newswire, "Puma Energy Asia Sun Opens Myanmar's Largest and Most Modern Petroleum Products Terminal", 8 May 2017, prnewswire.com/news-releases/puma-energy-asia-sun-opens-myanmars-largest-and-most-modern-petroleum-products-terminal-621587493.html

339 Puma Energy Annual Report 2017.

340 Puma Energy Asia Sun BOT Machinery, Schedule 8, page 15.

341 According to a Puma Energy document dated May 2021, one of the bitumen / HFO tanks was undergoing conversion to jet fuel so it is possible that there are four rather than three tanks used for Jet A-1 at the PEAS terminal. Confidential document, Puma Energy Asa Sun Teaser, May 2021, on file with Amnesty International.

342 Justice from Myanmar, leaked document relating to Puma Energy Asia Sun Teaser May 2021, 10 August 2022, on file with Amnesty International

343 Wilhelmsen Ships Service (WSS) Myanmar Ltd., Company Extract, Myanmar Companies Online, last accessed on 15 August 2022.

344 Justice from Myanmar, leaked document relating to coordination service fees paid to Wilhelmsen Ships Service Myanmar Ltd., 5 August 2022, on file with Amnesty International; Wilhelmsen Annual Report 2021, p. 103, wilhelmsen.com/globalassets/investor-relations/annual-report/wwh-annual-report-2021.pdf

345 Justice from Myanmar, leaked financial statements, 5 August 2022, on file with Amnesty International.

346 Annex 5, Wilhelmsen, email to Amnesty International, 22 September 2022, on file with Amnesty International.

347 Wilhelmsen, "Ships Agency", wilhelmsen.com/port-services/ships-agency/

6.3 STEP 3: DISTRIBUTION OF AVIATION FUEL

Tanker trucks or "bowser" trucks are the principal means of transporting Jet A-1 within Myanmar. The PEAS terminal has a bay where these trucks are loaded before they depart on their trip to storage facilities across the country.[348]



PEAS terminal, Thilawa port: *The PEAS terminal has a loading bay where tanker trucks are loaded with the aviation fuel that is distributed to storage facilities across the country.*[349]

According to Amnesty International's research, the main distributor of NEPAS' Jet A-1 and avgas in Myanmar is a transport contractor known as Cargo Link Petroleum. Since 24 June 2022, this has been solely owned by Cargo Link Co. Ltd. (Cargo Link), which is part of the Asia Sun Group.[350] Prior to that, the company was jointly owned by Cargo Link and a Thai company and was called Cargo Link Pongrawe.[351]

The information featured in this section is largely based on two sets of confidential documentary sources to which Amnesty International has had access. The first set comprises 54 invoices dated October 2021 to January 2022 between NEPAS and its transport contractor in Myanmar, Cargo Link Pongrawe.[352]

The second comprises three datasets with detailed information on the delivery by truck of aviation fuel from Thilawa port to NEPAS storage facilities, the delivery by truck of aviation fuel to military air bases and the total amount of aviation fuel delivered to military air bases.[353] In the three documents, the data spans from late December 2021 to early August 2022. Amnesty International believes these documents to be authentic (see Methodology section).

348 Puma Energy Annual Report 2016.

349 Interview of David Holden, Puma Energy Country Manager, Frontier Myanmar, 8 June 2017 youtube.com/watch?v=6f5ljphCkoA

350 Cargo Link Petroleum Logistics Co. Ltd., Company Extract, Myanmar Companies Online, accessed on 18 August 2022.

351 The company was then known as Cargo Link Pongrawe Logistics Co. Ltd., a joint venture between Thai company Pongrawe Co. Ltd. and Cargo Link Co. Ltd.

352 Justice from Myanmar, leaked NEPAS invoices, 5 August 2022, on file with Amnesty International.

353 Anonymous, credible source, three leaked documents showing truck transportation routes and amount of fuel delivered to NEPAS storage facilities and military air bases between December 2021 and August 2022, 17 August 2022, on file with Amnesty International.

According to these documents, Cargo Link Petroleum (formerly Cargo Link Pongrawe) used different tanker trucks to transport aviation fuel between December 2021 and August 2022. Of these, about 50% were used to transport aviation fuel to NEPAS storage facilities; another 50% were used to deliver fuel to military air bases and about 15% of trucks were used for both.

The trucks used for NEPAS storage facility deliveries were almost all owned or managed by Cargo Link Pongrawe or Asia Sun Logistics.[354] Photos of some of these trucks are available on the Facebook account of Cargo Link Pongrawe.[355]

The trucks used for military air force deliveries were affiliated with a number of Myanmar companies, including Asia Sun Group.[356] Amnesty International has obtained three photographs of these trucks, two of them from a former member of the Myanmar air force who was involved in the transport of aviation fuel to air bases, and one from a YouTube video showcasing the use of tanker trucks by Cargo Link Pongrawe.[357]

Annex 2 includes photographs of some of the trucks.



Photographs of tanker trucks used to deliver aviation fuel throughout Myanmar.

354 Myanmar Car Checker, librarymyanmar.com/?p=26. It is important to note that this application is no longer updated and therefore may contain out of date information on car registration. Nevertheless, it provides information of the vehicles at the time they were registered

355 See Annex 2, which includes all of the relevant photographs with links to the original source.

356 Myanmar Car Checker, librarymyanmar.com/?p=26

357 FUSO Myanmar, "Customer Testimonial: Pongrawe Cargo Link Logistics with FUSO TV 3340," see minute 0:10, youtube.com/watch?v=AK-fz94ISaI



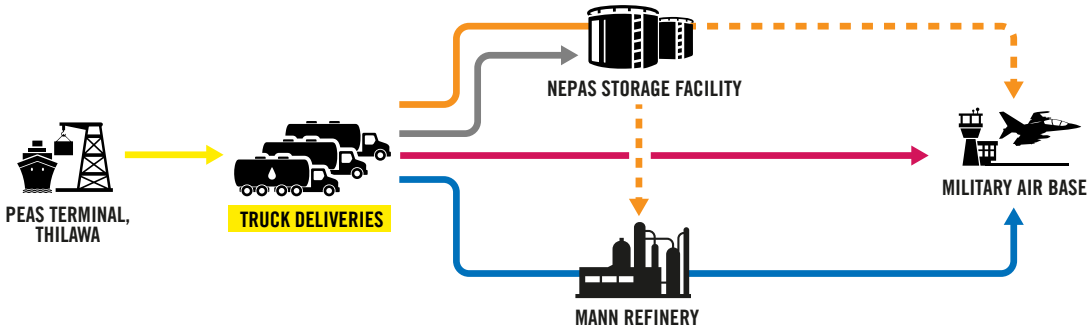
6.4 STEP 4: COMMERCIAL AND MILITARY STORAGE FACILITIES

The documents reviewed show that two separate – but related – types of transportation take place: those involving trucks that go mostly to NEPAS storage facilities at airports and those that go to military air bases.

According to the data analysed, between December 2021 and early August 2022, 37,837,844 litres of Jet A-1 were delivered to NEPAS storage facilities, and 17,024,044 litres were delivered to air bases. These deliveries, which are discussed in further detail below, amount to a total of 54,861,888 litres of Jet A-1.

It is important to note that almost all airports in Myanmar have been considered at some point to be "dual use" because the Myanmar military has used most civilian airports for military purposes, even if only occasionally. This, however, is distinct from the fact that certain airstrips are formally shared by both civilian airports and military air bases. Amnesty International has identified five airports that have commercial and military facilities and where both share the airstrip: Heho Airport and Heho air base, Mandalay International Airport and Tada-U air base; Myeik Airport and Myeik air base; Nay Pyi Taw International Airport and Nay Pyi Taw air base; and Yangon International Airport and Mingaladon air base.[358]

TRUCK DELIVERIES



6.4.1 NEPAS STORAGE FACILITIES

According to Puma Energy, NEPAS provides refuelling services at 11 airports.[359] Through satellite imagery analysis, confirmed in part by promotional material of NEPAS,[360] Amnesty International has identified NEPAS storage facilities at ten airports with storage tanks.[361] This is corroborated in part by the Logistics Capacity Assessment (LCA) tool,[362] hosted by the World Food Programme for the global humanitarian community, which provides detail on the number of airports where refuelling is possible.[363] The remaining airport has

358 This can be observed through satellite imagery.

359 Yangon, Mandalay, Heho, Nay Pyi Taw, Tachileik, Myitkyina, Sittwe, Myeik, Dawei, Kawthaung and Kyauk Pyu. See Puma Aviation brochure, November 2021, pumaenergy.com/documents/35316/82442/Puma+Aviation+Brochure_Nov+2021_Digital+EN.pdf/ea9a82c4-b702-f451-2bd8-6c87c4a38d35?t=1660654028233.

360 NEPAS, "Celebrating NEPAS 5th Year Anniversary," promotional video, 30 October 2020, facebook.com/PumaEnergy/videos/this-month-our-colleagues-in-national-energy-puma-aviation-services-nepas-are-ce/2732151163692013/

361 Satellite imagery was used to confirm NEPAS fuel storage facilities at airports across Myanmar. The verified fuel depots all had similar features that were constructed or updated between 2016 and 2018. As needed, roadways appear to be updated to allow ease of trucks delivering fuel. New similar buildings or new green roofs were also added to the compounds. There also appears to have been some updates to the fuel storage tanks and pipes.

362 The refuelling airports reported by LCA are the same airports with the existence of NEPAS depots of Jet A1, with the exception of Myitkyina airport and Mawlamyine airport which store Jet A1 fuel in drums at the airport.

363 Logistics Company Assessment, dlca.logcluster.org/display/public/DLCA/LCA+Homepage, (accessed on 19 August 2022), "Myanmar".

tanker trucks or drums that store small amounts of fuel for aircraft.[364] Details of the storage depots at each airport are included in Annex 3, including satellite imagery of the storage facilities where applicable.



Sittwe, Myanmar: *Satellite imagery shown above is an example of the changes to fuel storage facilities at airports where NEPAS began delivering fuel. In 2016 (left image), imagery shows the old fuel storage area at Sittwe airport. In 2018 (right image), the road through the facility appears expanded, paved and redesigned in a circular pattern, allowing trucks to move through easily. A new building was constructed, and another building appears to have an updated green roof – both highlighted with blue circles. A fuel storage tank – highlighted in orange – appears updated with new pipes.*

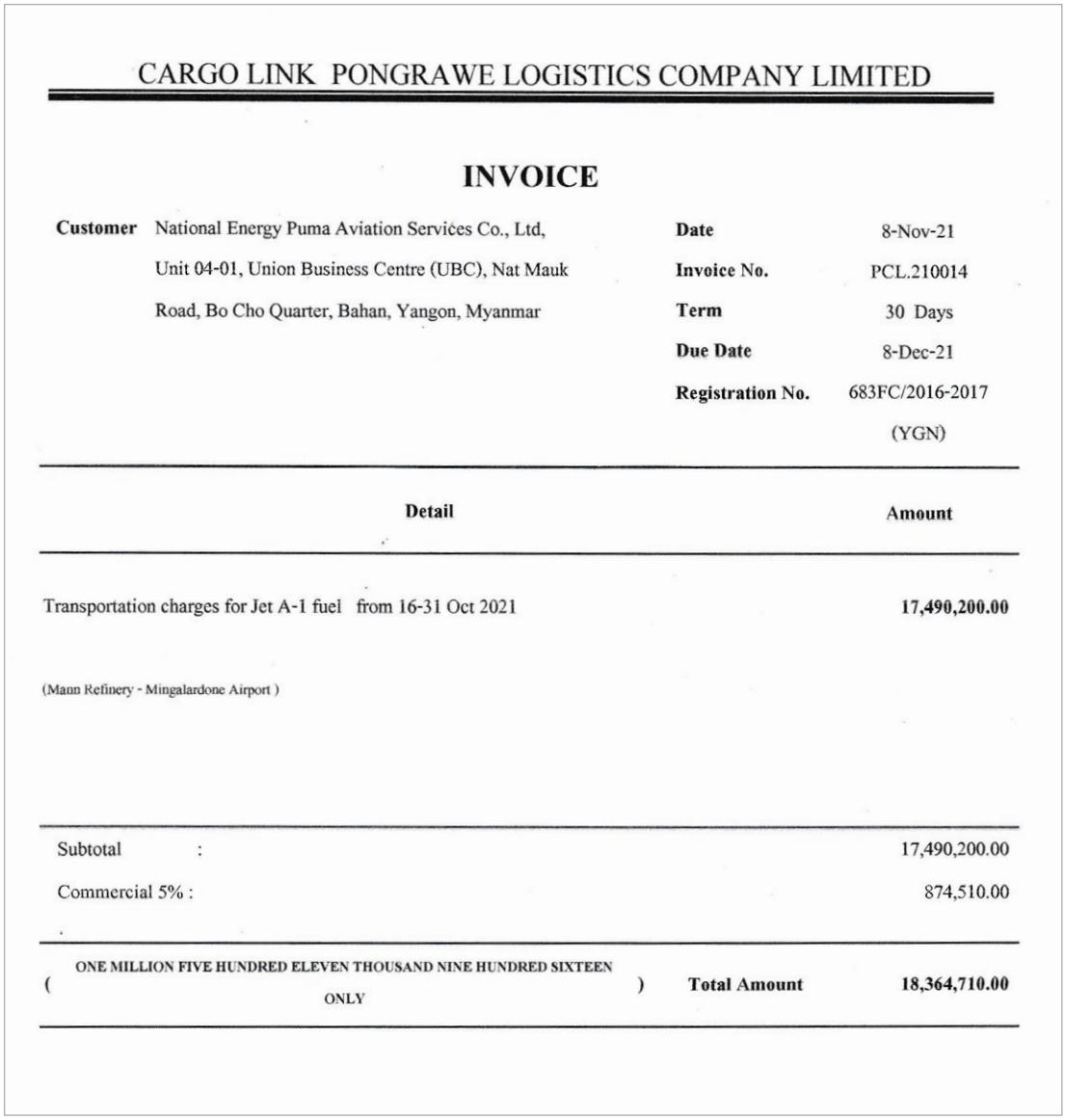
NEPAS pays for the tanker truck transportation of aviation fuel from the PEAS terminal at Thilawa port to NEPAS storage depots. This is confirmed by 54 invoices Amnesty International had access to, which show NEPAS, the "customer", paying Cargo Link Pongrawe, the service provider, a fee for "Transportation charges for Jet A-1 fuel".[365] Each invoice covers the transport of fuel for a period of two weeks between 1 October and 31 December 2021. The invoices charge NEPAS anywhere between MMK 700,000 (approximately USD 335) to MMK 62 million (approximately USD 30,000) for two-week deliveries of Jet A-1.[366] Each invoice specifies the point of origin and the destination of the tanker transports, for instance "Thanlyin/Thilawa – Naypyitaw Airport". In most cases[367], the fuel is delivered from Thilawa port to one of the airports where NEPAS has a storage facility.

364 Logistics Company Assessment, dlca.logcluster.org/display/public/DLCA/LCA+Homepage, (accessed on 19 August 2022), "Myanmar".

365 Justice from Myanmar, leaked NEPAS invoices, 5 August 2022, on file with Amnesty International.

366 The most expensive invoice was for distribution of Jet A-1 from PEAS terminal at Thilawa port to Mandalay Airport from 16-31 December 2021.

367 Two invoices out of 54 are for the transport of empty trucks to Mann refinery; 10 are for deliveries from Mann refinery to Yangon or Mandalay airport. There are also four invoices for deliveries from and to NEPAS storage facilities (Myeik, Sittwe, Tachileik and Dawei airports).



CARGO LINK PONGRAWE LOGISTICS COMPANY LIMITED

INVOICE

Customer	National Energy Puma Aviation Services Co., Ltd,	**Date**	8-Nov-21
	Unit 04-01, Union Business Centre (UBC), Nat Mauk	**Invoice No.**	PCL.210014
	Road, Bo Cho Quarter, Bahan, Yangon, Myanmar	**Term**	30 Days
		Due Date	8-Dec-21
		Registration No.	683FC/2016-2017 (YGN)

Detail	**Amount**
Transportation charges for Jet A-1 fuel from 16-31 Oct 2021	**17,490,200.00**
(Mann Refinery - Mingalardone Airport)	
Subtotal :	17,490,200.00
Commercial 5% :	874,510.00
(ONE MILLION FIVE HUNDRED ELEVEN THOUSAND NINE HUNDRED SIXTEEN ONLY) **Total Amount**	**18,364,710.00**

This is one of the 54 invoices between NEPAS and Cargo Link Pongrawe. In this case, NEPAS paid Cargo Link a total of MMK 18,364,710 for transportation by truck of aviation fuel from Mann refinery to Mingalardone Airport (Yangon airport) from 16-31 October 2021.

Amnesty International also analysed one of the three datasets which provides detailed information on truck delivery of aviation fuel to NEPAS facilities from late December 2021 to August 2022. This dataset confirms that Cargo Link Pongrawe, engaged by NEPAS, continued to transport aviation fuel to NEPAS storage facilities up until at least early August 2022.

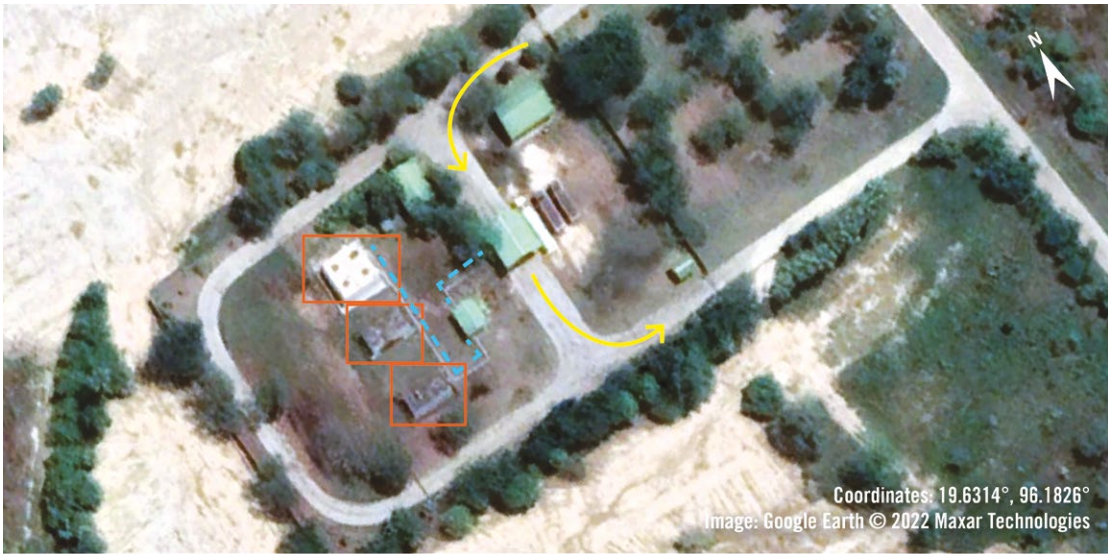
The data also shows that, between 2 January and 6 August 2022, 28 trucks made 1,172 deliveries to five commercial airports: "Mingaladon Airport" (where the Yangon International Airport is located), Mandalay Airport, Heho Airport, Nay Pyi Taw Airport and Tachileik Airport as outlined on the next page:

COMMERCIAL AIRPORT	LITRES	% OF TOTAL
Yangon Airport	24,644,641	65%
Mandalay Airport	10,772,953	28%
Heho Airport	930,114	2.5%
Nay Pyi Taw Airport	930,050	2.5%
Tachileik Airport	560,086	1.5%

6.4.2 MILITARY AIR BASES

The Myanmar air force has fuel storage facilities at most of its 16 air bases.[368] It is very likely that it also stores fuel at the Mann refinery (see Box 3 above). Through satellite imagery analysis, Amnesty International has pinpointed the locations of probable fuel storage facilities at air bases and joint use airports in Myanmar; and identified those air bases which appear not to have any large-scale storage (and where tanker trucks or drums may be the only way of storing fuel). Amnesty International has identified ten air bases that have identifiable storage tanks.

Annex 4 includes details of the storage facilities at each air base and, where one has been identified, a satellite image of the facility.



Nay Pyi Taw, Myanmar: *Satellite imagery shows the fuel storage facility adjacent to the Nay Pyi Taw military base. The fuel storage tanks are highlighted in orange squares, pipes are traced with a blue dotted line and roadway design shown with yellow arrows.*

368 Maung Aung Myoe, "Organisation and Force Structure", Building the Tatmadaw: Myanmar Armed Forces Since 1948, January 2009, Chapter 3, p. 88-91; Office of the Commander-in-Chief of Defence Services, ***Two training flights broke down in Magway Air Base Headquarters***, cincds.gov.mm/node/682; Myanmar Digital News, "Nay and Air Training Schools Open for Youths in Myeik", 24 April 2019, mdn.gov.mm/my/mittmiuttng-rekeaangluungynnglekeaangluungysngttnmaaphnglcpiukh; New China Xinhua News, "A Fighter Jet's Engine Broke Down from Tatmadaw (Air), Pilot Dead", 16 February, xinhuamyanmar.com/news/myanmar/environment-disasters-accidents/2201402010-2/; Office of the Commander-in-Chief of Defence Services, "Award Giving Ceremony and Final of Table Tennis Tournament Commander-in-Chief (Air)", cincds.gov.mm/node/3696?d=1; Democratic Voice of Burma, "Monywa Air base attacked by artillery", 19 January 2022, burmese.dvb.no/archives/517917; Myanmar Now, "Combined PDF forces attacked Artillery, Air Base and Police Station in Kyaukhtu", 18 April 2022, myanmar-now.org/mm/news/11039; Democratic Voice of Burma, "Monywa Air Base Attacked with Missiles", 19 February 2022, burmese.dvb.no/archives/517917

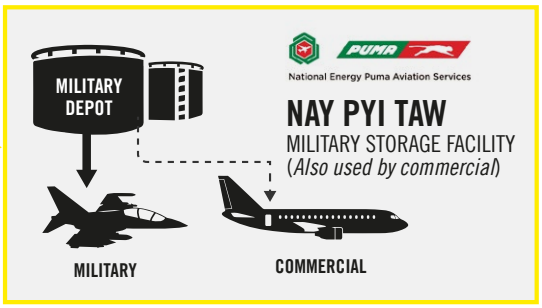
Truck deliveries involving NEPAS

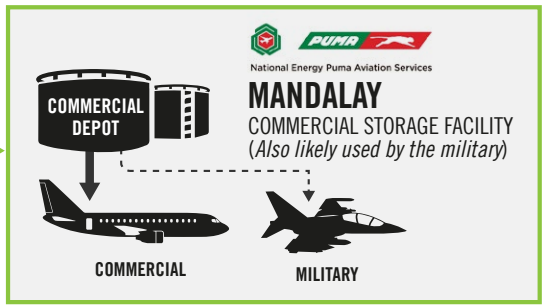


DISTRIBUTION TRUCKS

Between December 2021 and August 2022, Amnesty International obtained information indicating that tanker trucks delivered aviation fuel to storage facilities at airports and air bases. This diagram illustrates the link.













- Deliveries to commercial storage facility
- Deliveries to commercial storage facility & military air base
- Deliveries to Nay Pyi Taw Airport
- Deliveries to Mandalay Airport
- Deliveries to Heho Airport
- Deliveries to Mann refinery



The data included in two documents showing deliveries of aviation fuel to military air bases, between 2 January and 6 August 2022, over 17 million litres of Jet A-1 were delivered to ten air bases. These are listed below in order of the quantity of fuel delivered to each facility (from most to least):

AIR BASE	LITRES
Taungoo air base	4,712,672
Nay Pyi Taw air base	4,585,992
Hmawbi air base	3,247,158
Meikhtila air bases (FTB and GTB)	2,256,633
Pathein air base	1,217,732
Myeik air base	392,448
Nansang air base	346,054
Monywa air base	90,920
Myitkyina air base	90,920
Magway air base	83,515

Separately, trips where fuel was delivered to three NEPAS storage facilities for the benefit of the military amounted to over 3 million litres of Jet A-1.

NEPAS STORAGE FACILITIES	LITRES
Yangon (NEPAS)	2,099,616
Mandalay (NEPAS)	777,599
Heho (NEPAS)	134,028

6.4.3 LINKS BETWEEN NEPAS STORAGE FACILITIES & MILITARY AIR BASES

There is a direct link between deliveries made to NEPAS storage facilities at Nay Pyi Taw, Mandalay, Heho and Yangon airports and use of aviation fuel by the Myanmar military at those and other sites.

6.4.3.1 NAY PYI TAW

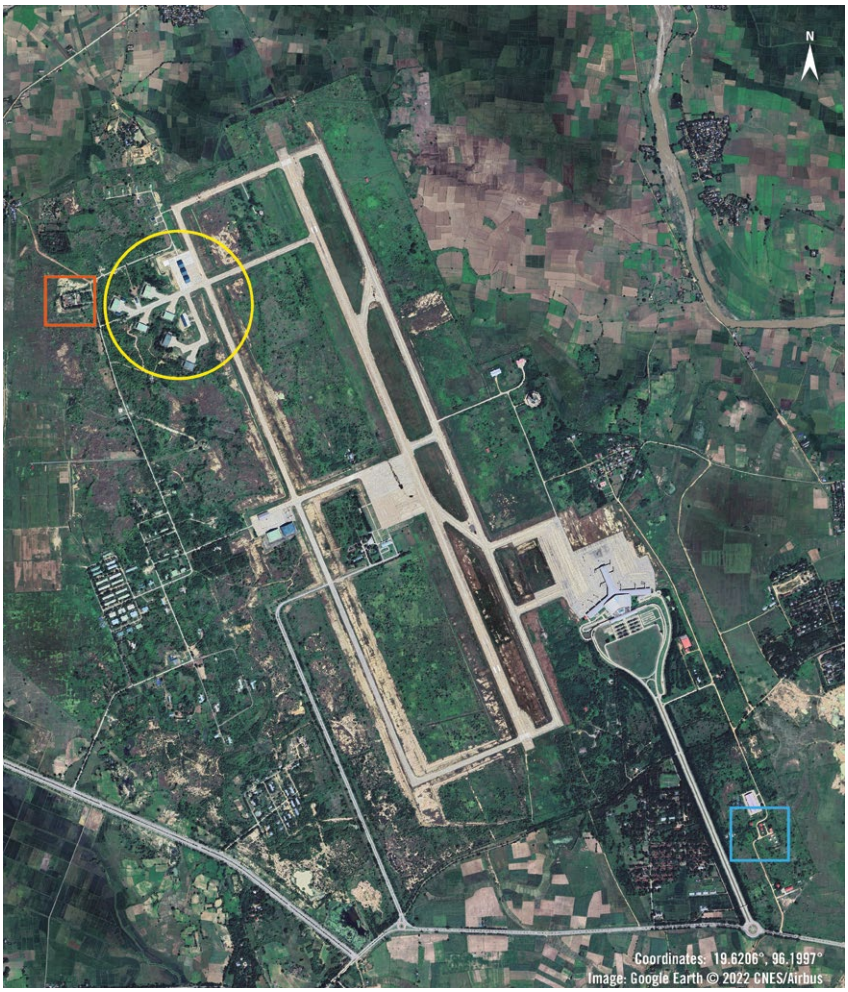
Nay Pyi Taw is the capital of Myanmar and the seat of the military authorities. Both its commercial airport and air base share the name "Nay Pyi Taw"; they also share an airstrip.

The document obtained by Amnesty International that provides information on deliveries to NEPAS storage facilities includes 28 deliveries of Jet A-1 to Nay Pyi Taw between January and August 2022.[369] The document listing deliveries to military air bases includes 100 deliveries to Nay Pyi Taw between December 2021 and July 2022.

An analysis of available satellite imagery from 2021 and 2022 indicates that there is only one active storage facility at Nay Pyi Taw airport, the one adjacent to the military air base.[370]

369 Six of the 54 NEPAS invoices are for deliveries of Jet A-1 for to Nay Pyi Taw Airport, dated between October and December 2021.

370 This is based on the following observations: no vehicles were spotted around this storage facility in 2021 and 2022 (based on the available imagery), and the road to the storage facility does not appear to be paved (only a dirt road). On the other hand, the storage area adjacent to the air base has consistent vehicle activity visible from December 2021 to April 2022.



Nay Pyi Taw, Myanmar: *Satellite imagery shows Nay Pyi Taw airport and military air base. The Myanmar air base is situated northwest of the joint airstrip, highlighted with a yellow circle. Two fuel storage facilities are visible: one is located west of the military air base hangars (highlighted with an orange rectangle) and one, the purported NEPAS storage facility, close to the entrance to the airport (highlighted with a blue rectangle). Activity is only visible in imagery at the depot adjacent to the military air base (in the orange rectangle).*

The fact that there is only one active storage facility suggests that all deliveries to this airport, whether marked for civilian or military usage, went to the same storage facility, which is necessarily therefore used by both commercial airlines and military authorities.

Further, both satellite imagery[371] and historical flight data[372] show that relatively few commercial aircraft use Nay Pyi Taw airport as compared to other commercial airports in Myanmar. In August 2022, for example, only five flights were recorded to have arrived or departed from the airport – four of which were domestic and only one was international.[373] This is further indication that most of the Jet A-1 delivered by NEPAS to Nay Pyi Taw was likely used by the military. Puma Energy did not respond to Amnesty International's queries regarding deliveries to Nay Pyi Taw.

371 Based on over 60 satellite images observed from 30 January 2021 to 4 August 2022, there were never more than 5 probable commercial aircraft observed in the civilian areas of the airport. The images analysed were often taken between 1000 and 1200, local time.

372 Department of Civil Aviation, Passenger and Freight Traffic by Airport 2021, 2022, dca.gov.mm (accessed on 20 September 2022), "Air Transport: Statistical Data"; In 2021, the total number of international passengers were 94, and domestic passengers were 3348 at Nay Pyi Taw International Airport. The number of passengers were comparably lower than Yangon International Airport which saw the total number of international passengers at 193,155, and domestic passengers at 531,921.

373 These were from Sittwe except a one-way flight from Novosibirsk, Russia. Flight 8M5006, was a one-way trip from Novosibirsk, Russia, to Nay Pyi Taw operated by Myanmar Airways International. See FlightRadar 24, *Flight history for Myanmar Airways International flight 8M5006*, flightradar24.com/data/flights/8m5006#.



Nay Pyi Taw, Myanmar: *Satellite imagery shows the Nay Pyi Taw fuel depot adjacent to the air base on 20 March 2022. At that time, there were five trucks visible inside the compound – highlighted in the orange box. Two of the trucks were likely based at the facility but the other three were not continuously seen at the facility. Records show there were deliveries of civilian and military fuel on this day.*

6.4.3.2 MANDALAY

Mandalay has an international airport with a large NEPAS storage facility.[374] Tada-U Air base, located at the same airport, shares an airstrip with the Mandalay International Airport.

Based on satellite imagery, a storage facility with infrastructure similar to that sighted in other air bases could not be confirmed in Tada-U. Further, imagery accessed by Amnesty International in 2022 (19 images between January and August 2022) show regular truck activity in and around the NEPAS storage facility; however, only one image shows a tanker truck at the military air base. It is reasonable to conclude that there is a high likelihood that the military accesses fuel stored at the NEPAS facility.

374 According to the Logistics Capacity Assessment of the Log Cluster, Mandalay International Airport has four fuel storage tanks of 600,000L each and a subterranean fuelling system for six contact gates, twelve fuelling points, and refuelling by bowsers (tank trucks, 1x7000 plus 3x4000 gallon capacity each) for the remote parking stands. Mandalay airport has an estimated daily demand of 77,000 litre Jet-A1. Logistics Capacity Assessment, 2.2.2 Myanmar Mandalay International Airport, dlca.logcluster.org/display/public/DLCA/2.2.2+Myanmar+Mandalay+International+Airport, (accessed on 20 July 2022), "Myanmar Aviation".



NEPAS storage facility at Mandalay airport.

The dataset with deliveries to NEPAS storage facilities includes 256 deliveries of Jet A-1 to Mandalay between January and August 2022. The dataset with deliveries to air bases includes 15 deliveries to Mandalay ("MDY (NEPAS)") between December 2021 and July 2022.

In addition, the air force dataset includes deliveries of Jet A-1 from Mandalay's NEPAS storage facility to at least two other air bases: MyitKyina and Meikhtila (flying training base).

Separately, Amnesty International interviewed a pilot of the Myanmar air force who served at Nansang air base and defected in February 2022.[375] He explained that while based in Nansang, he was aware that fuel would be picked up by truck by the air force at Mandalay airport. From there, it would go to the Meikhtila Ground Force compound and then be sent to Nansang air base. Amnesty International also interviewed a flight sergeant of the Myanmar air force who was based in Nansang from May 2018 to May 2021.[376] He stated that since the military coup, aviation fuel is delivered from Tada-U in Mandalay to Nansang air base.

375 Interview by voice call, 8 July 2022.

376 Interview by voice call, 22 September 2022.



This indicates that a part of the Jet A-1 delivered to the NEPAS storage facility at the Mandalay International Airport is either used in Tada-U by the military or is then delivered to military bases in other locations, including Nansang, MyitKyina and Meikhtila. Puma Energy did not respond to Amnesty International's queries regarding deliveries to Mandalay.

6.4.3.3 HEHO AIRPORT

Heho airport is a commercial airport with no air base at or near the airport. The closest air base is Nansang, approximately 100km away. Heho has reportedly been used by the military since the February 2021 coup and is therefore considered to be dual use.[377]

The NEPAS storage facility dataset Amnesty International had access to includes 22 deliveries of Jet A-1 to Heho Airport between January and August 2022. The military air base dataset includes three deliveries to "Heho (NEPAS)" between December 2021 and July 2022.

Similarly, Puma Energy did not provide any information on specific deliveries to Heho.

6.4.3.4 YANGON INTERNATIONAL AIRPORT

Yangon International Airport is the largest airport in the country. In 2021, the total number of international passengers was 193,155, and domestic passengers at 531,921.[378] The Mingaladon Air base, which is located on site, shares the airstrip with the commercial airport.

The document with deliveries to NEPAS storage facilities includes 823 deliveries of Jet A-1 to Yangon Airport between January and August 2022. The dataset listing deliveries to military air bases includes 39 to the Yangon Airport ("YGN (NEPAS)") and 19 from Yangon to Mandalay and Heho airports between December 2021 and July 2022.

The purpose of these deliveries is unclear. Puma Energy did not provide any information on these deliveries.

6.3.4.5 MANN REFINERY

A final link between the datasets of deliveries to NEPAS storage facilities and air bases is Mann refinery. As noted above, the refinery is controlled by the military and likely acts as a storage facility of aviation fuel for military use (see Box 3).

Of the 54 NEPAS invoices, twelve involve Mann refinery: two are for the transport of empty trucks from Yangon to Mann refinery; 10 are for deliveries of fuel from Mann refinery to Mandalay and Yangon airports.

The dataset with deliveries of fuel to air bases also includes a variety of trips involving Mann. For example, one trip specifies the destinations "TG-Mann-Taungoo-Thilawa"; another one involves "TG [Taungoo]-Mann-TG". Further, the destinations of trips departing from or making a stop at Mann refinery include: Meikhtila, Hmawbi, Nay Pyi Taw, Taungoo and Monywa Air bases. Of these five, Amnesty International has been able to link Hmawbi and Taungoo air bases to air strikes that amounted to war crimes.

Puma Energy did not answer Amnesty International's questions on deliveries to and from Mann refinery.

377 Interview by voice call with a retired police officer, 19 September 2022.

378 Department of Civil Aviation, Passenger and Freight Traffic by Airport 2021, 2022, dca.gov.mm (accessed on 20 September 2022), "Air Transport: Statistical Data".



6.5 STEP 5: REFUELLING COMMERCIAL AND MILITARY AIRCRAFT

Once aviation fuel arrives at storage facilities at commercial airports or military air bases, the fuel is stored for an indeterminate amount of time.

In the case of deliveries to commercial airports, fuel is used to supply domestic airlines. There are 65 airports and airstrips in Myanmar; 32 airports are reportedly operational.[379] There are three operational international airports, Yangon, Mandalay and Nay Pyi Taw.[380] Although on 17 April 2022, Myanmar resumed international flights "with the aim to boost international tourism industry"[381], the number of international airlines flying to Myanmar is down to 13[382] – less than half the number of airlines operating in 2019.

Aviation fuel is also relied upon for a range of humanitarian aid tasks. Road transport is by far the primary means of transporting humanitarian aid in Myanmar.[383] Some aid transport also takes place by sea/river. However, humanitarian organisations rely on air transport for the movement of their staff, for medical and security evacuations and for monitoring of aid delivery conducted by donors.

At air bases, aircraft is refuelled as and when the need arises to use such aircraft for training, combat, logistics and other military operations.

379 An internal document Amnesty International obtained on 4 August 2022 also indicated that 28 airfields/airports are currently in use, including two international airports – Yangon and Mandalay International airports.

380 Department of Civil Aviation, Passenger and Freight Traffic by Airport 2021, 2022, dca.gov.mm (accessed on 20 September 2022), "Air Transport: Statistical Data"; In 2021, the total number of international passengers were 94, and domestic passengers were 3348 at Nay Pyi Taw International Airport. The number of passengers were comparably lower than Yangon International Airport which saw the total number of international passengers at 193,155, and domestic passengers at 531,921.

381 Eleven Media Group, "Myanmar to resume international flights on April 17th: following government directives", 19 March 2022, elevenmyanmar.com/news/myanmar-to-resume-international-flights-on-april-17th-follow-government-directives.

382 Interview by phone call with "Su" (name changed for security reasons), travel industry staff member, 29 July 2022, Yangon.

383 Amnesty International was in contact with 14 international and local humanitarian aid organisations in Myanmar between 25 August and 10 October 2022. The names of these organisations are not included as per their request.

6.6 STEP 6: CONDUCTING AIR STRIKES

The Myanmar military has increasingly relied on its air force in the aftermath of the military coup, regularly carrying out air strikes with fighter jets and attack helicopters. The military uses different air bases depending on the particular state or region that it is surveilling or attacking. In order to power its aircraft involved in such operations, it relies on aviation fuel delivered to its air bases.

Amnesty International has identified at least five air bases from where military aircraft involved in attacks departed between March 2021 and August 2022: Hmawbi air base, Magway air base, Nansang air base, Tada-U air base and Taungoo air base. Of these, Amnesty International has been able to directly link four of them to attacks that amount to war crimes: Hmawbi, Magway, Tada-U and Taungoo.

Amnesty International obtained data showing that, from January to August 2022, tanker trucks delivered 4,712,672 litres of Jet A-1 to Taungoo air base; 3,247,158 litres to Hmawbi air base; and 83,515 litres to Magway air base. In total, this represents 47% of all of the Jet A-1 delivered to military air bases between January and August 2022. Separately, tanker trucks delivered 10,772,953 litres of Jet A-1 to the NEPAS storage facility in Mandalay airport, 777,599 litres of which were marked for military purposes. As noted above, Tada-U air base is believed to rely on the NEPAS storage facility in Mandalay's airport.

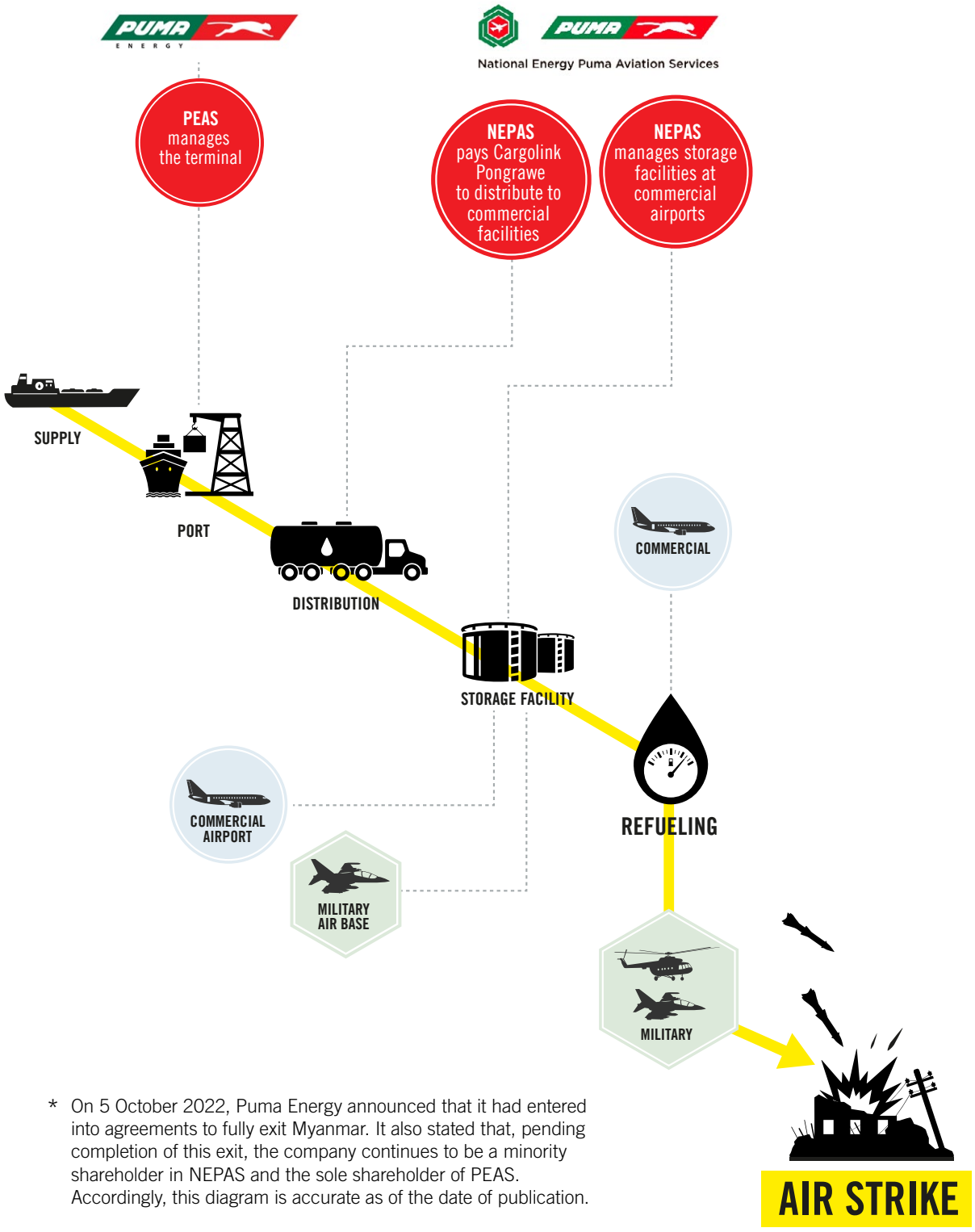


Tada-U, Myanmar: *Satellite imagery shows Tada-U air force base at Mandalay Airport on 27 April 2022. Many jets - highlighted with orange squares - including Yak-130s and MiG-29s are visible on the apron and in the hangars.*

The aviation fuel supplied, imported, stored and distributed by a number of companies featured in the report was essential to the military in carrying out these attacks. The attacks linked to these four air bases have resulted in the death and injury of civilian women, men, and children and caused the displacement of entire communities in conflict-affected areas across Myanmar. They have also destroyed homes, religious buildings, schools, medical facilities and a camp for displaced persons, all while sparking widespread fear.



Supply chain fuelling war crimes*



* On 5 October 2022, Puma Energy announced that it had entered into agreements to fully exit Myanmar. It also stated that, pending completion of this exit, the company continues to be a minority shareholder in NEPAS and the sole shareholder of PEAS. Accordingly, this diagram is accurate as of the date of publication.

7. COMPANIES' LINKS TO HUMAN RIGHTS VIOLATIONS AND CRIMES UNDER INTERNATIONAL LAW

7.1 CORPORATE RESPONSIBILITY TO RESPECT HUMAN RIGHTS AND INTERNATIONAL CRIMINAL LAW

Evidence presented in this report demonstrates that several companies involved in the supply of aviation fuel to Myanmar's military are contributing to war crimes as per the UN Guiding Principles. Amnesty International recognizes that businesses operating in Myanmar since the military coup of February 2021 have faced challenging circumstances: they have had to balance competing risks and interests, from protecting the lives and livelihoods of their employees to assessing how to adapt or cease operations without losing their investments. However, there can be no justification for being linked to a supply chain that fuels war crimes.

As noted earlier, the UN Guiding Principles establish that if a business is contributing to, or may contribute to, an adverse impact, it should take appropriate measures to cease, prevent, and remedy its contribution. Likewise, if the business is directly linked to the negative impact through a business partnership, it should exercise its leverage to mitigate adverse human rights impact to the greatest extent possible and in certain circumstances, disengage from the business partnership. In both cases, the withdrawal must be conducted responsibly.

The sections below summarize the communications between Amnesty International and the companies featured in this report, with a particular focus on Puma Energy as the most important foreign company involved in this supply chain, and the steps taken in the context of human rights due diligence and responsible withdrawal.

In all cases, Amnesty International provided the companies with the opportunity to respond to its findings as well as answer a series of questions.

At the time of writing, twelve companies had responded: Chevron, ExxonMobil, Japan P&I Club, Nayara Energy, North P&I Club, Puma Energy, QBE Insurance Group, Rosneft, Thai Oil, Trafigura, Vopak and Wilhelmsen. Eleven companies had not replied.

Amnesty International contacted MPE but also did not receive a response. Since the February 2021 coup, the military has controlled MPE. This, coupled with the role the company played in controlling NEPAS, evidently implicates MPE to the delivery of aviation fuel to the military air bases identified in this report. Consequently, Amnesty International's findings show clearly that MPE contributed to war crimes committed by the Myanmar military.

Below is a summary of the communications Amnesty International has had with these companies.

7.2 COMPANY BEHAVIOR

In addition to Puma Energy and its two JV partners – military controlled MPE and the Asia Sun Group – this report features four categories of companies and describes the role they play in the supply chain of aviation fuel:

- international suppliers of Jet A-1;
- owners of the vessels that transport the aviation fuel;
- marine insurers that provide third party liability protection to vessels; and
- shipping agents that manage and coordinate aviation fuel shipments.

7.2.1 PUMA ENERGY

Since 2015, the main foreign business actor involved in the supply chain of aviation fuel has been Puma Energy. Despite their stated commitment to human rights,[384] they have contributed to human rights harm and are linked to war crimes committed by the Myanmar military. Its recent announcement that Puma Energy is departing Myanmar does not change the impact of their role up to now, nor does it affect their obligations pursuant to that.

7.2.1.1 PUMA ENERGY'S HUMAN RIGHTS COMMITMENT

Puma Energy has a human rights policy that states its "commitment to human rights" and establishes its "support [of] the UN Guiding Principles on Business and Human Rights and the alignment of our policy to these international standards."[385] In line with the UN Guiding Principles, Puma Energy states that the company "assess[es] actual and potential human rights impacts of our activities and business relationships and seek[s] to avoid causing or contributing to adverse human rights and address such impacts when they occur."[386] Notably, the policy also stresses that the company "[p]revent[s] or mitigate[s] adverse human rights impacts that are caused by our business relationships that are directly linked to our activities, across any facet of the business value chain."[387]

According to the company, this policy applies to "business partners, suppliers and all individuals who are directly employed by the organization, regardless of the type of contractual arrangement […] and to any contingent or third-party individuals/workers who, by virtue of their contractual agreements with Puma Energy, work under the direct supervision or control of the organization."[388]

384 Puma Energy, "Human Rights Statement", undated, (hereinafter Puma Energy Human Rights Statement), https://pumaenergy.com/documents/35312/1608529/HR-GBL-016+-+Human+Rights+Statement+300622.pdf/10a38575-763f-4cd0-b48b-12b02311a4a3?t=1656652339454

385 Puma Energy Human Rights Statement, p. 3, pumaenergy.com/documents/35312/1608529/HR-GBL-016+-+Human+Rights+Statement+300622.pdf/10a38575-763f-4cd0-b48b-12b02311a4a3?t=1656652339454

386 Puma Energy Human Rights Statement, p. 4.

387 Puma Energy Human Rights Statement, p. 4.

388 Puma Energy Human Rights Statement, p. 3.

7.2.1.2 LINKS TO THE MYANMAR MILITARY





PARTNERSHIP WITH MPPE/MPE

In 2015, Puma Energy entered into a joint venture with state-owned MPPE, establishing NEPAS, which held the exclusive licence to import and distribute aviation fuel in Myanmar at least until 2019. After MPPE was restructured in May 2020, MPE, another state-owned entity, became NEPAS' majority shareholder.

Since February 2021, MPE has been controlled by the military. Several sources close to Puma Energy explained to Amnesty International that on the day of the military coup, armed soldiers entered the PEAS terminal at Thilawa port and have remained there ever since. Puma Energy itself has acknowledged that since February 2021, NEPAS operations resumed under the direction of majority shareholder MPE.[389]

Accordingly, since February 2021, Puma Energy's main partner in Myanmar is a military-controlled state-owned enterprise.

PARTNERSHIP WITH ASIA SUN GROUP

Puma Energy entered into joint ventures with two companies of the Asia Sun Group: Asia Sun Energy (original JV partner of PEAS) and Asia Sun Aviation (current JV partner in NEPAS). In addition, Puma Energy engaged Cargo Link Pongrawe (now Cargo Link Petroleum), also part of the Asia Sun Group, for the distribution of aviation fuel in Myanmar. Puma Energy is therefore linked to various Asia Sun Group companies in various steps of the supply chain of aviation fuel.

This partnership is, however, highly problematic. Based on the evidence presented in this report, the Asia Sun Group is directly linked to the military and appears to act as its proxy in order to import aviation fuel. Asia Sun Trading, for example, was the consignee of two shipments of avgas that arrived through the Myeik port. One of these was directly delivered to the Myanmar air force by Asia Sun Trading. In another instance, Asia Sun Trading was the consignee of a Jet A-1 shipment supplied by Singapore Petroleum Company, wholly-owned by PetroChina, that arrived at the PEAS terminal in Thilawa port in December 2021. Documents obtained by Amnesty International indicate that this shipment was also delivered directly to the Myanmar military. Finally, as described in detail above, Asia Sun Group (through Cargo Link Pongrawe) is responsible for deliveries of aviation fuel to civilian and military air bases across Myanmar.

Given the nature of Puma Energy's joint ventures in Myanmar, Puma Energy must have – or should have – been aware of the links between Asia Sun Group and the Myanmar military.

389 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

SUPPLY OF AVIATION FUEL TO THE MILITARY BEFORE FEBRUARY 2021

Prior to the military coup, Puma Energy sold aviation fuel to the Myanmar military.[390] In its letter of 5 October 2022, Puma Energy acknowledged this fact by stating that, following the military coup, Puma Energy "exercised its influence so that NEPAS terminated supply to the MAF [Myanmar Air Force]."[391] This clearly indicates that before the coup NEPAS indeed supplied fuel to the military.

Although this report focuses on the company links to war crimes committed by the Myanmar military since the February 2021 coup, Amnesty International has extensively documented crimes under international law and other human rights violations committed by the Myanmar military between 2015 and 2021.[392] Although the military's use of air strikes has increased significantly since the coup, in several instances before the coup, Amnesty International documented the role of Myanmar military air assets in the commission of these crimes; these included attacks by fighter jets and attack helicopters that killed or injured civilians as well as the transport by helicopter of soldiers that seem very likely to have been involved in a massacre of Rohingya women, men and children as well as village burning.[393] So even before the military coup, Puma Energy was linked to the commission of crimes under international law by the Myanmar military, given that it has supplied aviation fuel to the military since it entered the country (and only announced it would not do so after the coup).

SUPPLY OF AVIATION FUEL TO THE MILITARY AFTER FEBRUARY 2021

According to Puma Energy, it "has not supplied, sold or distributed any fuel or products to the Myanmar Air Force … since the coup on 1st February 2021".[394]

However, as set out in this report, Puma Energy's Myanmar affiliates, PEAS and NEPAS, played a role in supplying aviation fuel to the Myanmar military. A summary of these links is set forth below:

- Import of aviation fuel: NEPAS, of which Puma Energy is a 34% beneficial shareholder, was the consignee of at least five shipments of Jet A-1 that entered Myanmar between February 2021 and August 2022.
- Managing the port of entry: Despite the military presence, PEAS continued to manage the terminal at the Thilawa port where the majority of aviation fuel enters Myanmar. Operating the terminal includes managing a wide range of tasks such as testing the quantity and quality of the fuel on arrival; offloading, handling and storing the fuel at the terminal; coordinating with shipping agencies and third party contractors involved in the shipments of Jet A-1; and other tasks. Further, the storage tanks at the PEAS terminal continued to temporarily store Jet A-1 fuel after it arrived and before it was delivered to commercial and military locations. Amnesty International has obtained

390 This was confirmed by two sources close to the company and three former members of the air force, one of whom was involved in the transportation of aviation fuel from the PEAS terminal in Thilawa to various air bases. Puma Energy also stated in its Aviation Business brochure that it serviced "government customers not fuelling at public airports and supplied avgas and aviation lubricants. (Puma Aviation brochure, p. 29.)

391 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

392 Amnesty International, *'We Are At Breaking Point' – Rohingya: Persecuted in Myanmar, Neglected in Bangladesh* (Index: ASA 16/5362/2016), 19 December 2016, https://www.amnesty.org/en/documents/asa16/5362/2016/en/ ; *'All The Civilians Suffer': Conflict, displacement and abuse in northern Myanmar* (Index: ASA 16/6429/2017), 14 June 2017, https://www.amnesty.org/en/documents/asa16/6429/2017/en/ ; Amnesty International, *'Caged Without A Roof': Apartheid In Myanmar's Rakhine State* (Index: ASA 16/7484/2017), 21 November 2017, https://www.amnesty.org/en/documents/asa16/7484/2017/en/ ; Amnesty International, *'We Will Destroy Everything': Military Responsibility for Crimes Against Humanity in Rakhine State* (Index: ASA 16/8630/2018), 27 June 2018, https://www.amnesty.org/en/documents/asa16/8630/2018/en/ ; Amnesty International, *'No One Can Protect Us': War crimes and abuses in Myanmar's Rakhine State* (Index: ASA 16/0417/2019), 29 May 2019, https://www.amnesty.org/en/documents/asa16/0417/2019/en/; Amnesty International, *'Caught In The Middle': Abuses against civilians amid conflict in Myanmar's northern Shan State* (Index: ASA 16/1142/2019), 24 October 2019, https://www.amnesty.org/en/documents/asa16/1142/2019/en/

393 Amnesty International, "Myanmar: Indiscriminate air strikes kill civilians as Rakhine conflict worsens", 8 July 2020, amnesty.org/en/latest/news/2020/07/myanmar-indiscriminate-air strikes-kill-civilians-rakhine/; Amnesty International, *"We will destroy everything": Military responsibility for crimes against humanity in Rakhine State, Myanmar* (Index: ASA 16/8630/2018), 27 June 2018, amnesty.org/en/documents/asa16/8630/2018/en/, pp. 14, 52, 57, 74, 148-149; and Amnesty International, *"We Are at Breaking Point"*, pp. 8, 17-19. In addition to Amnesty International, the UN documented helicopter attacks during the 2016 operations against the Rohingya population. See OHCHR, *Report of OHCHR mission to Bangladesh, Interviews with Rohingyas fleeing from Myanmar since 9 October 2016*, 3 February 2017, pp. 14-15, 39.

394 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

documentation relating to two shipments that were offloaded at the PEAS terminal and that were directly delivered to the military "for use in Tatmadaw (Air Force)'s Aircrafts and Helicopters."

- Transport of aviation fuel: NEPAS is responsible for the transportation of aviation fuel from the PEAS terminal to storage facilities located in airports across Myanmar. At least until early January 2022, NEPAS continued to engage Cargo Link Petroleum (formerly Cargo Link Pongrawe), the Asia Sun Group company that transports aviation fuel to commercial and military storage facilities.[395] NEPAS paid Cargo Link for delivery of Jet A-1 to various locations, including from Mann refinery, a military controlled location from which fuel is then delivered to air bases linked to war crimes.
- Managing NEPAS storage facilities: NEPAS managed storage facilities or refuelling services in more than 10 airports across Myanmar. As explained above, a few of these storage facilities are linked to the Myanmar military, either because military aircraft refuel at that same facility or because fuel is delivered from those storage depots to air bases. Of these, Tada-U, which shares an airstrip and storage facility with Mandalay International Airport, is directly linked to air strikes amounting to war crimes.

In addition, Puma Energy informed Amnesty International that it had "become aware of reports of the military forcibly demanding fuel at selected NEPAS airport facilities. These reported incidents undermined our confidence in NEPAS's ability to maintain the controls that were put in place."[396] By facilitating the Myanmar military's access to aviation fuel, Puma Energy contributed to adverse human rights impacts.

7.2.1.3 RESPECTING HUMAN RIGHTS



CONDUCTING DUE DILIGENCE

Due diligence is an important instrument for companies to identify the human rights impacts of their operations and of their business relationships. Puma Energy in its own human rights policy states that they "[e]ffectively identify and respond to human rights risks of our activities" and "implement controls that ensure human rights risks are avoided or mitigated."[397] Due diligence must be conducted on an ongoing basis.

In its communications, Puma Energy provides no information on the human rights due diligence conducted prior to entering into partnerships with MPPE and the Asia Sun Group at the time of PEAS' and NEPAS' incorporation. It also does not provide details on ongoing efforts to identify adverse human rights impact (before February 2021). However, during its years of operation, Puma Energy necessarily must have been aware of the various crimes committed by the Myanmar military. Any level of due diligence would have exposed this problematic link. And yet, NEPAS supplied aviation fuel to the Myanmar military at least until February 2021.

Following the military coup of February 2021, "NEPAS put in place controls designed to ensure the segregation of military and civilian supply of aviation fuel."[398] When asked by Amnesty International, Puma Energy did not provide any details on what these controls entailed.

According to the company, "[i]n early 2022, in light of the deteriorating human rights situation in Myanmar, Puma Energy took a decision to review our ongoing presence in Myanmar and commissioned a confidential, independent Human Rights Impact Assessment to help inform our decision and how best to mitigate any potential human rights risks."[399] The assessment concluded, in part, that "it would

395 Justice from Myanmar, leaked NEPAS invoices, 5 August 2022, on file with Amnesty International.

396 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International

397 Puma Energy Human Rights Statement", p. 4.

398 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

399 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

prove increasingly difficult to continue to exert even limited influence on MPE and maintain controls to restrict supply to civilian only airlines".[400] Puma Energy has not shared the assessment with Amnesty International which raises questions regarding why the report was not commissioned earlier and why it took the company more than a year and a half to decide to exit Myanmar.

RESPONSIBLE WITHDRAWAL

Puma Energy explained that after conducting the human rights assessment, the company's Board arrived to the "conclusion that the only option was for Puma Energy to fully exit its Myanmar investment and to do so in a manner that prioritised safety and security of PEAS and NEPAS employees. After considering the available options and consulting with relevant stakeholders, it was identified that the transfer of the businesses was the safest route to ensure employee security and to effect a responsible exist."[401]

Responsible withdrawal requires that companies identify, mitigate and prevent the potential and actual adverse impacts of its disengagement. It also requires that the company meaningfully engages with relevant stakeholders, provides timely and accurate information on all material elements of such withdrawal and ensures the protection of its staff while the process is ongoing, amongst other steps.

First, Puma Energy has not provided any information on the stakeholders it has met or the steps taken towards meaningful engagement with them. For example, Amnesty International is not aware of any consultations with representatives of the Myanmar communities affected by air strikes.

Second, Puma Energy should be transparent about its plans to withdraw, providing timely and accurate information on it. However, the only public announcement made by Puma Energy regarding its departure that Amnesty International is aware of is one sentence long.[402] In addition, Puma Energy has not provided a date of its departure. It has informed Amnesty International that pending that date, it continues to own PEAS and have a minority stake in NEPAS. But it is unclear how long Puma Energy will remain in Myanmar.

Third, in communications with Amnesty International, Puma Energy has stressed that it has "always sought to prioritize the safety and security of PEAS and NEPAS employees."[403] Protecting one's staff, especially in situations where there is a heightened risk of adverse human rights impact when withdrawing, is essential. However, Puma Energy has not provided much information on what this has entailed.

In cases where an enterprise decides to sell its assets, it must assess the human rights capability of the buyer. Puma Energy has stated that it intends to sell its assets to a "locally owned private company"[404] and that it "secur[ed] undertakings from the investor that it would comply with Human Rights laws, implement relevant policies and procedures, as well as not use the assets or services to commit human rights violations."[405] However, as no information has been provided on the buyer or the terms of the sale, it is impossible to determine whether Puma Energy has in fact thoroughly assessed the human rights capability of the buyer.

In sum, Puma Energy's decision to exit Myanmar – and steps taken in furtherance of this departure – have not been transparent. Material information on this withdrawal needs to be shared with all stakeholders and, to the extent that it does not put others in danger, with the wider public.

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400 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

401 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

402 The announcement provided: "Following a board decision to fully exit Myanmar earlier this year, Puma Energy has signed an agreement to sell its stake in Puma Energy Asia Sun (PEAS) and minority share in National Energy Puma Aviation Services (NEPAS) to a locally owned private company." See Puma Energy, "Puma Energy to exit Myanmar," 5 October 2022, pumaenergy.com/es/newsroom/newsdetails?articleId=1768542

403 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

404 Annex 5, Puma Energy, letter to Amnesty International, 5 October 2022, on file with Amnesty International.

405 Annex 5, Puma Energy, letter to Amnesty International, 12 October 2022, on file with Amnesty International.

REMEDIATION

The UN Guiding Principles indicate that companies should remediate any human rights abuse to which they have contributed. Remedy should include guarantees of non-repetition as well as satisfaction, compensation and other measures of reparation as appropriate to the circumstances and the wishes of those affected. Puma Energy has not provided any information on whether it is considering providing remediation in relation to the harm it has contributed as a result of PEAS' and NEPAS' roles played in the supply of aviation fuel to the Myanmar military.

7.2.2 ASIA SUN GROUP

Amnesty International contacted Asia Sun Group and the individuals behind the group of companies twice in August and October 2022 but did not receive a response.

The evidence presented in this report clearly shows that Asia Sun Group is directly working with the military and may be serving as their proxy in order to import avgas and Jet A-1. Further, Cargo Link Petroleum (formerly Cargo Link Pongrawe), wholly-owned by the individuals behind Asia Sun Group, distributed aviation fuel to military air bases from December 2021 to at least August 2022. At least four of these air bases are linked to attacks that amount to war crimes, and all air bases are controlled by / associated with the Myanmar military, which has been implicated by Amnesty International, the UN, and others in war crimes, crimes against humanity and other serious human rights violations.

Based on the findings set out in this report, the Asia Sun Group has contributed to war crimes in Myanmar. It must cease its involvement in the supply chain of aviation fuel immediately.

7.2.3 SUPPLIERS

Amnesty International identified the suppliers of Jet A-1 delivered to Myanmar between February 2021 and August 2022 by tracking the point of departure of the vessels transporting the fuel prior to them arriving at the PEAS terminal in Thilawa port, Myanmar. Amnesty International contacted both the company operating the marine terminal or berth from where the vessel departed and the shareholders of that company. Five locations and 11 companies were identified:

- SRC's marine terminal in Jurong Island, Singapore
  - Shareholders:
  - Singapore Petroleum Company (wholly-owned by PetroChina)
  - Chevron
- Vadinar Oil terminal at the Nayara Energy refinery in Jamnagar, Gujarat, India
  - Shareholders:
  - Rosneft
  - Trafigura
  - UPC Investment Group
- Thai Oil marine terminal in Sriracha, Thailand
  - Shareholder: Thai Oil
- ExxonMobil berth in Jurong Island, Singapore
  - Shareholder: ExxonMobil
- Pengerang International Terminal (PITSB), in Pengerang, Malaysia
  - Shareholders:
  - Vopak
  - Dialog Group Berhad

Of these, seven companies responded to Amnesty International communications: Chevron, ExxonMobil, Nayara Energy, Rosneft, Thai Oil, Trafigura and Vopak.

NAYARA ENERGY AND TRAFIGURA

Nayara Energy and Trafigura both said they had not been involved in any shipment of Jet A-1 to Myanmar since the military coup of February 2021.[406] Nayara Energy said that it could not provide any information about the shipment identified by Amnesty International, due to "client confidentiality obligations." But also stated that "out of an abundance of caution and in line with its commitments …, Nayara Energy is committed to not supplying fuel to any parties in Myanmar".[407]

VOPAK

Vopak is the majority shareholder of the JV that manages the PITSB terminal in Pengerang, Malaysia, from where the Super Hero departed towards Myanmar in August 2022. While the company confirmed that the aviation fuel was loaded at the Pengerang terminal, it explained that Vopak's role as PITSB's shareholder is the "safe storage of our customers' products while it is in our terminals."[408] It did not disclose the name of its customer, the supplier of the aviation fuel.

Despite the statements from the company, the PITSB terminal facilitated the sale of the aviation fuel by storing the fuel and then handling it when it was onloaded onto the Super Hero. PITSB has a responsibility to conduct human rights due diligence in relation to its operations, which includes its customers and the products that it stores and handles, such as the aviation fuel that was delivered by the Super Hero.

EXXONMOBIL

ExxonMobil is linked to a vessel that onloaded fuel at ExxonMobil's berth (OM5) in Singapore and subsequently travelled to Myanmar where it offloaded it at the PEAS terminal in Thilawa port. When asked about this shipment, ExxonMobil only said that "[a]ny potential sale of aviation fuel related to Myanmar would be conducted in accordance with applicable law".[409] Despite not acknowledging that the shipment took place, this statement is not a denial either. Accordingly, and given the evidence obtained through vessel tracking data of the links between the Super Infinity's shipment and ExxonMobil's terminal in Singapore, it is reasonable to conclude that the company played a role in supplying the aviation fuel to Myanmar.

CHEVRON, ROSNEFT AND THAI OIL

Chevron, Rosneft and Thai Oil acknowledged having supplied Jet A-1 to a customer in Myanmar, although only Rosneft mentioned the name of its customer.[410] According to Amnesty International's findings, Chevron's and Rosneft's customer was NEPAS while Thai Oil's customer was Asia Sun Trading. In the three cases, the suppliers stated that the customer gave them assurances that the fuel would be used for commercial purposes only.[411]

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406 Annex 5, Nayara Energy, letter to Amnesty International, 6 September 2022, on file with Amnesty International; Trafigura, letter to Amnesty International,5 September 2022, on file with Amnesty International.

407 Annex 5, Nayara Energy, letter to Amnesty International, 6 September 2022, on file with Amnesty International.

408 Annex 5, Vopak, letter to Amnesty International, 11 October 2022, on file with Amnesty International.

409 Annex 5, ExxonMobil, letter to Amnesty International, 18 October 2022, on file with Amnesty International.

410 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.

411 Annex 5, Chevron, letter to Amnesty International, 5 September 2022; Rosneft, email to Amnesty International, 1 September 2022; Thai Oil, letter to Amnesty International, 22 September 2022; all on file with Amnesty International.

Chevron provided that it "only sold one parcel of Jet A-1 fuel to a customer in Singapore that was ultimately delivered to Myanmar. This was loaded at SRC in Singapore and shipped on board the Super Hero in February 2022 for delivery in Myanmar. The customer in Singapore provided assurance that the Jet A-1 fuel was for commercial purposes only."[412] In a subsequent communication, Chevron added that it "ascertained that the jet fuel was to be supplied by the importer of the jet fuel to a commercial airline under a term supply contract".[413]

Rosneft was more explicit about the aviation fuel it sold, stating that "the shipment you mentioned earlier had been offloaded at the Puma Energy Asia Sun Co. Ltd. terminal in Thilawa area port to the benefit of National Energy Puma Aviation Services — the end user of the fuel."[414] The company later added: "We are confident of impeccable end-user reputation and we have no doubts about an accurate operation by Puma Aviation. The shipment you mentioned was used, exclusively and entirely, for civil aviation last year and bears no relation to your assumptions."[415] Amnesty International followed up with Rosneft asking them to clarify on what basis they could confirm that the aviation fuel sold by them was "exclusively and entirely" used for "civil aviation". Rosneft did not respond to this point but reaffirmed its assertion that they "sell to credible market buyers who have an impeccable reputation, operate in line with global standards and adhere to all international legal requirements."[416]

Rosneft also explained to Amnesty International that "Myanmar's aviation fuel consumption averages some 100,000 tonnes per year. For your information, we would also like to advise you of Myanmar's own capacity (1.1 million tonnes) producing all types of fuel, including jet fuel. This, among other things, confirms the fallacy of your conclusion about the use of products for military purposes."[417] Amnesty International followed up to obtain a source for this information, but Rosneft did not provide it. Further, as stated above, media reports indicate that currently Myanmar does not produce aviation fuel domestically.

Thai Oil also relied on its customer's assurances: "prior to the supply of the fuel, our responsible unit obtained binding written contractual warranties and undertakings from its customer in Myanmar that the fuel being purchased and delivered is and will be solely and ultimately for the purpose of commercial and civilian use in Myanmar, and that in no event will the fuel be used for any military purpose whether in Myanmar or otherwise."[418]

SINGAPORE PETROLEUM COMPANY

Singapore Petroleum Company, wholly-owned by PetroChina, did not respond to Amnesty International's letters. Nevertheless, Amnesty International was able to definitively link it to at least one shipment of aviation fuel transported from the SRC terminal in Singapore to the PEAS terminal in Thilawa in December 2021. Amnesty International obtained two documents: a proforma invoice between the company and Asia Sun Trading, its customer, for the sale of a USD 18 million shipment of Jet A-1; and a letter from the Ministry of Defense to the Myanma Port Authority, which stated that the fuel sold by Singapore Petroleum Company to Asia Sun Trading in December 2021 was "required for use in Tatmadaw (Air Force)'s Aircraft and Helicopters."

In light of this, the company's lack of response raises significant questions, including whether the company knew that the fuel it sold was to be delivered to the Myanmar military.

412 Annex 5, Chevron, letter to Amnesty International, 5 September 2022, on file with Amnesty International.
413 Annex 5, Chevron, letter to Amnesty International, 18 October 2022, on file with Amnesty International.
414 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.
415 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.
416 Annex 5, Rosneft, email to Amnesty International, 13 October 2022, on file with Amnesty International.
417 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International
418 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International.

7.2.3.1 RESPECTING HUMAN RIGHTS BY CONDUCTING DUE DILIGENCE

Chevron and Thai Oil referred to the due diligence they conduct on counterparties; Rosneft made no mention of due diligence. But in the three cases the suppliers did not provide any details on diligence conducted to assess the adverse human rights impact of their aviation fuel sale.

Chevron, for example, stated that it "conducts counterparty due diligence, including validation that counterparties are not denied parties under US, EU, UK, and UN sanctions among other global sanctions programs. Chevron actively seeks warranties that the product is purchased for commercial use only and the understanding is the product shall not be supplied to the Myanmar military."[419] Although Chevron said that its aviation fuel was provided to a commercial airline,[420] the company did not state whether this commercial airline is or was in any way linked to the Myanmar military, either by association, control or ownership; and if so, whether that sale led to adverse human rights impact. Further, as this report shows, even fuel destined to storage facilities in commercial airports are at risk of being misappropriated by the Myanmar military.

Thai Oil was more detailed in describing the diligence it conducted on Asia Sun Trading, its customer: "before agreeing to the sale of the fuel … our responsible unit conducted diligence on the proposed purchaser to ensure that neither it nor any of its affiliates were the subject of US, EU, UK or other trade or financial sanctions or associated with human rights violations… Our responsible unit are unable to divulge to you the name of the purchaser for commercial confidentiality reasons, but can assure you that … the diligence check did not identify any issues related to potential human rights violations."[421] According to Thai Oil, the company relies on "World-Check One database, which flags issues to sanctions, corruption, import and export restrictions, law enforcement and human rights concerns."[422]

Thai Oil also relied on "a specific legally binding representation (and contractual indemnity) that the fuel was purchased solely and ultimately for commercial / civilian use". [423] However, the letter from Asia Sun Trading in which the company states that it imported Jet A-1 from Thai Oil "for use by the Tatmadaw (Air Force)" indicates that the due diligence conducted by Thai Oil was insufficient. Although Thai Oil believes it takes "compliance and corporate social responsibility obligations very seriously"[424] its sale of aviation fuel to Asia Sun links it to human rights harm.

In recognition of this problematic link, on 14 October 2022, Thai Oil informed Amnesty International that "to avoid any doubt about the compliance of good corporate governance policy, our business unit has decided to hold a selling of Jet A-1 to Myanmar until no such concerned issue."[425]

Rosneft did not refer to any due diligence conducted; instead, it urged Amnesty International "to conduct a detailed review of the information you received, considering its importance to business and peacekeeping. We believe that you should again check shipments and flights schedules and other available data and information."[426] It also relied on what the company refers to as the "impeccable end-user reputation and we have no doubts about an accurate operation by Puma Aviation." However, as this report shows and Puma Energy's own admission confirms, sales to Puma Energy's Myanmar affiliate NEPAS raised significant human rights risks given that a portion of fuel meant to be delivered for civilian use at commercial airports was thereafter used by the Myanmar military.

419 Annex 5, Chevron, letter to Amnesty International, 5 September 2022, on file with Amnesty International.
420 Annex 5, Chevron, letter to Amnesty International, 18 October 2022, on file with Amnesty International.
421 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International
422 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International
423 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International
424 Annex 5, Thai Oil, letter to Amnesty International, 22 September 2022, on file with Amnesty International
425 Annex 5, Thai Oil, email to Amnesty International, 14 October 2022, on file with Amnesty International
426 Annex 5, Rosneft, email to Amnesty International, 1 September 2022, on file with Amnesty International.

In the case of ExxonMobil, in addition to stating that "[a]ny potential sale of aviation fuel related to Myanmar would be conducted in accordance with applicable law" it described these laws as being "governmental laws and regulations, including trade sanctions and export control regulations."[427] The company also explained that it "actively promotes respect for human rights, and we condemn human rights violations in any form."[428] However, the fact that the company did not provide any details on the shipment that Amnesty International identified and also did not deny it, raises a number of questions regarding not only its involvement but any steps it took to ensure that this shipment would not be linked to adverse human rights harm.

Thai Oil's example and the findings set out in this report regarding the overlap between NEPAS commercial storage facilities and the supply of fuel to military air bases linked to war crimes collectively show that selling aviation fuel to a counterparty in Myanmar is simply too high; human rights harm will continue to result from similar sales.

7.2.4 VESSEL OWNERS, SHIPPING AGENTS AND MARINE INSURERS

VESSEL OWNER

Although every vessel featured in this report has its respective owner, Amnesty International has only disclosed the owner of two of these vessels, Super Hero and Super Infinity, as they are linked to three separate shipments of Jet A-1 to Myanmar. Korean shipping company Pan Ocean is the owner of the two vessels.

Pan Ocean did not respond to any of Amnesty International's letters. It is therefore impossible to ascertain whether the company conducted any human rights due diligence prior to leasing its vessels, whether it was aware that at least one of its shipments was delivered to the Myanmar military on arrival and whether it plans to allow other vessels it owns to deliver aviation fuel to Myanmar in the future. However, as the owner of two vessels implicated in three separate shipments of aviation fuel to Myanmar, Pan Ocean must ensure that no other vessel it owns is involved in shipments that can lead to human rights harm.

SHIPPING AGENT

Although several shipping agents were likely used to manage the various Jet A-1 shipments that arrived at PEAS terminal in Thilawa port, only one shipping agent is featured in the report, Wilhelmsen Myanmar. This is because we have stronger evidence linking this company to shipments managed by PEAS and NEPAS.

Wilhelmsen acknowledged that its entity in Myanmar acted as "Owner's Protective Agent for tankers discharging aviation fuel at the PEAS terminal in Thilawa port with HS Code: 10198210 Aviation Turbine Fuel (Jet A-1)".[429] It said that "[i]n this capacity, WSS Myanmar act as Owner's Representative on behalf of the vessel owner/operator for the transmission of proforma disbursement accounts and port captaincy on the berth."[430]

Although Wilhelmsen did not specify which shipments of Jet A-1 it was involved in, it stated that "[t]he aviation fuel imported to PEAS Terminal for NEPAS is clearly described for domestic airline sales only."[431] As this report shows, however, even if the import is "described" as being for commercial use, the aviation fuel may in fact be ultimately used by the Myanmar military.

427 Annex 5, ExxonMobil, letter to Amnesty International, 18 October 2022, on file with Amnesty International.
428 Annex 5, ExxonMobil, letter to Amnesty International, 18 October 2022, on file with Amnesty International.
429 Annex 5, Wilhelmsen, email to Amnesty International, 21 September 2022, on file with Amnesty International.
430 Annex 5, Wilhelmsen, email to Amnesty International, 21 September 2022, on file with Amnesty International.
431 Annex 5, Wilhelmsen, email to Amnesty International, 21 September 2022, on file with Amnesty International.

In response to Amnesty International's findings, which were shared with Wilhelmsen prior to the publication of this report, the company stated on 18 October 2022 that it was going to stop handling jet fuel in Myanmar:

> ***"Having thoroughly reviewed the latest information provided by Amnesty International with our case handling team, our ships agency colleagues in Myanmar, and senior management, we have determined that Wilhelmsen Ships Service Myanmar will not risk contributing in any way towards the human rights violations outlined by your report.***

> ***Therefore, Wilhelmsen Ships Service Myanmar will immediately cease to provide agency services of any kind for vessel or cargo owners discharging Jet A-1 aviation fuel at ports in Myanmar, irrespective of designations regarding end use. This will remain the case until further notice."***[432]

MARINE INSURERS

Amnesty International identified and wrote to the P&I Clubs that provide insurance to each of the vessels identified in this report; five of these are UK based.[433] The P&I clubs that responded[434] did so by making reference to generic P&I policies which indicate that insurance protection automatically terminates where a vessel is involved in illegal activity, such as violating sanctions.[435] They did not make any reference to whether P&I clubs consider adverse human rights impact when providing insurance coverage to vessels. Further, none of the P&I clubs that responded even acknowledged the vessels involved in shipments of aviation fuel to which they provide P&I coverage.

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432 Annex 5, Wilhelmsen, email to Amnesty International, 18 October 2022, on file with Amnesty International.

433 The following P&I clubs provided insurance to the vessels at the time they transported aviation fuel: UK Mutual Steam Ship Assurance Association (Bermuda) Ltd. affiliated to UK P&I (Yu Dong); Japan Shipowners Mutual Protection & Indemnity Association affiliated to Japan P&I Club (Santya); Steamship Mutual Underwriting Association (Bermuda) Ltd. affiliated to Steamship Mutual (Swarna Mala); QBE Asia Pacific (Synergy); The Britannia Steam Ship insurance Association Ltd. associated to Britannia P&I (Super Hero); Shipowners Mutual Protection & Indemnity Association (Luxemburg) affiliated to Shipowners' Club (Bhureemas); and North of England P&I Association affiliated to UK North P&I Club (Super Infinity). See Lloyds vessel reports and IHS Seaweb.

434 Annex 5, Japan P&I Club, email to Amnesty International, 19 October 2022; QBE Asia Pacific, letter to Amnesty International, 20 October 2022; UK North P&I Club, email to Amnesty International, 18 October 2022, all on file with Amnesty International.

435 See generally Annex 5.

8. CONCLUSION AND RECOMMENDATIONS

8.1 CONCLUSION

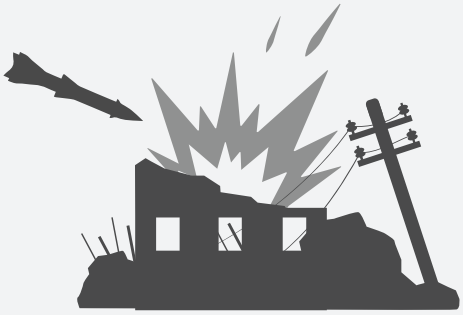
This report documents the pattern of unlawful military air strikes conducted by the Myanmar military, many of which amount to war crimes. These air attacks have resulted in the death and injury of civilian women, men and children and caused the displacement of entire communities in conflict-affected areas across Myanmar. They have also destroyed homes, religious buildings, schools, medical facilities and a camp for displaced persons, all while sparking widespread fear.

Without the provision of aviation fuel, the Myanmar military would have no means to power the aircraft responsible for such air attacks. And yet companies continue to be involved in this deadly supply chain, one that links international and domestic companies to the Myanmar military, which has been implicated by Amnesty International, the UN, and others in war crimes, crimes against humanity and other serious human rights violations.

Until 5 October 2022, the main foreign business actor involved in the supply chain of aviation fuel to the Myanmar military was Puma Energy. Following the company's announcement that it has decided to cease operations in Myanmar (although no date has been provided of when this will happen), the company informed Amnesty International that it had become "aware of reports of incidents where the MAF had been able to breach controls that were put in place to maintain the segregation of civilian supply." This indicates that there is a comingling of civilian and military aviation fuel, which Puma Energy itself was unable to prevent. This also shows that all the companies involved in the supply chain – such as suppliers, vessel owners, shipping agents and maritime insurers – have relied on a misguided assumption, that one can provide aviation fuel to counterparties in Myanmar without the risk of it being used by the Myanmar military.

Puma Energy, in addition to ensuring a responsible withdrawal, must remedy the harm to which it has contributed. All other companies involved in this supply chain must stop facilitating the provision of aviation fuel to Myanmar and, where applicable, responsibly disengage.

Finally, states must act as well. They have a duty to protect against human rights abuses by all actors, including companies. They must ensure that no aviation fuel is supplied to the Myanmar military. The only way to do so it to stop all aviation fuel supplies to the country. This may mean that civilian services are also affected, but as evidenced by this report, and admitted by Puma Energy itself, the Myanmar military has seized aviation fuel destined for civilian use. Until or unless states can put in place a mechanism to ensure that aviation fuel is not used by the military in air attacks that result in serious violations of international human rights law, all states must impose a suspension of aviation fuel supplies to Myanmar.



8.2 RECOMMENDATIONS

TO PUMA ENERGY

- As a matter of urgency, suspend the supply, directly or indirectly, of aviation fuel to the Myanmar military;
- Responsibly withdraw from its operations in Myanmar by meaningfully engaging with relevant stakeholders prior to disengagement; providing detailed information regarding disengagement to these stakeholders, which include the NUG and relevant civil society groups; providing reasonable notice to communities, suppliers, workers and other partners affected by the pending disengagement; providing capacity-building to mitigate the loss of employment; and ensuring the security of remaining staff who cannot be evacuated;
- While the withdrawal process is ongoing, demonstrate ongoing efforts to mitigate the impact caused by its operations;
- Ensure that its withdrawal from Myanmar is conducted in a way that is least beneficial to MPE and the military that controls it;
- Contribute to the remediation of previous adverse impacts to which it has contributed, even if Puma Energy disengages from the business relationship through which it contributed to the impact. This should begin with consultations with representatives of the Myanmar communities that have been affected by air strikes to find appropriate measures of reparation.

TO ASIA SUN GROUP

- As a matter of urgency, suspend the supply of aviation fuel to the Myanmar military;
- Contribute to the remediation of all previous adverse impacts to which it has contributed, even if Asia Sun disengages from the business relationship through which it contributed to the impact.

TO SUPPLIERS, VESSEL OWNERS, SHIPPING AGENTS AND FINANCIAL INSTITUTIONS INVOLVED IN THE SUPPLY CHAIN OF AVIATION FUEL IN MYANMAR

- Immediately suspend the direct and indirect supply, sale, and transfer, including transit, trans-shipment and brokering of aviation fuel to Myanmar;

TO ALL OTHER COMPANIES, LOCAL AND FOREIGN, INVOLVED, DIRECTLY OR INDIRECTLY, IN THE PROVISION OF AVIATION FUEL TO THE MYANMAR MILITARY

- Immediately suspend the direct and indirect supply, sale, and transfer, including transit, trans-shipment and brokering of aviation fuel;
- Urgently conduct human rights due diligence on business partnerships that play a role in the supply chain of aviation fuel to the Myanmar military, including but not limited to logistics companies such as land and naval transport to Myanmar and inside Myanmar, underwriters and insurance brokers that protect the vessels and the cargo being transported; and use available leverage to prevent negative human rights impacts caused by business partners, or responsibly end those business relationships;
- For financial institutions, thoroughly assess and if necessary, block or suspend payments that are directed for transactions related to the supply of aviation fuel import to Myanmar;
- For insurance companies, decline to provide insurance services to any fuel tankers engaged in the transport of aviation fuel into Myanmar from any country of origin;

TO THE STATE ADMINISTRATION COUNCIL (SAC)

- End the use of unguided air strikes in civilian areas. Even when there are military objectives in the vicinity, the military's employment of very large "dumb" bombs and unguided rockets have caused significant civilian casualties;
- Immediately end and prevent further crimes under international law and other human rights and humanitarian law violations. Adhere strictly to the provisions of international humanitarian law, including the Geneva Conventions of 1949;

TO THE NATIONAL UNITY GOVERNMENT (NUG)

- Continue efforts to support justice and accountability for crimes under international law committed across Myanmar, in line with the NUG's Article 12(3) declaration that was announced in August 2021, including by cooperating fully with the ICC Prosecutor's investigation into alleged crimes within the ICC's jurisdiction in the Situation in Bangladesh/Myanmar as well as with the Independent Investigative Mechanism for Myanmar (IIMM), the Special Rapporteur on the situation of human rights in Myanmar, and OHCHR;

TO MEMBER STATES OF THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN):

- Direct the ASEAN Intergovernmental Commission on Human Rights (AICHR) to develop a common approach to ensure that all engagement with Myanmar considers and addresses human rights concerns, in accordance with the AICHR's mandate in Section 4.11 of its Terms of Reference. This common approach shall be adopted by the ASEAN and shall guide the regional body in all of its engagement in Myanmar, including in relation to the Rakhine State, and include policies and public advocacy stances;
- Investigate business entities based and/or incorporated in ASEAN Member States involved in the supply chain of aviation fuel to the Myanmar military;
- Prohibit the use of ports for the oil and chemical tankers that are used to transport aviation fuel to Myanmar;
- Prohibit/ban the use of border trade (via land transport) intended for aviation fuel export/import;
- Mandate that financial institutions apply greater scrutiny to transactions related to aviation fuel, suspending and blocking such transactions as appropriately deemed;
- Publicly call on the international community to support ASEAN priorities by establishing bans on the export of aviation fuel to Myanmar;

TO THE GOVERNMENT OF SWITZERLAND

- Investigate Puma Energy over their role in the supply of aviation fuel to the Myanmar military between 2015 and present day;

TO THE UN SECURITY COUNCIL

- Impose a comprehensive global arms embargo on Myanmar that covers all weapons, munitions, and other military and security equipment, and the provision of training and other military and security assistance;
- Impose a suspension of the direct and indirect supply, sale or transfer, including transit, trans-shipment and brokering of aviation fuel to Myanmar until effective mechanisms are in place to ensure that aviation fuel will not be used to commit serious violations of international human rights law or IHL;
- Impose targeted financial sanctions against senior officials suspected of responsibility for crimes under international law and serious violations, in the context of repression of dissent to the 1 February 2021 coup and since then;
- Refer the situation in Myanmar as a whole to the International Criminal Court;
- Adopt a resolution or resolutions, as necessary, that calls for international action to end the crisis in Myanmar, sending an unambiguous message to the Myanmar military to immediately end crimes under international law and other human rights violations and to allow unrestricted access for humanitarian aid, independent investigators, including the IIMM;

TO ALL STATES

- Impose a comprehensive global arms embargo on Myanmar that covers all weapons, munitions, and other military and security equipment, and the provision of training and other military and security assistance;
- Impose a suspension of the direct and indirect supply, sale or transfer, including transit, trans-shipment and brokering of aviation fuel to Myanmar until effective mechanisms are in place to ensure that aviation fuel will not be used to commit serious violations of international human rights law or IHL;
- When imposing a suspension on the supply of aviation, monitor the adverse impact of such suspension and take any possible steps to mitigate the impact, including by increasing financial support to those involved in humanitarian assistance and operations to address any increase in cost to these activities;
- Ensure implementation of the recommendations included in the UN Fact-Finding Mission's 2019 report on the economic interests of the Myanmar military (A/HRC/42/CRP.3), and any relevant updates to this report, including through further investigations by the OHCHR and the Special Rapporteur on the situation of human rights in Myanmar;
- Use all bilateral, multilateral, and regional platforms at your disposal to urge the Myanmar security forces to immediately end crimes under international law and other human rights violations, including targeted financial sanctions against senior officials and entities suspected of responsibility for crimes under international law and serious violations and bilateral arms embargoes;
- Exercise universal and other forms of jurisdiction to investigate any person who may reasonably be suspected of committing crimes against humanity, war crimes or other crimes under international law in Myanmar. Where there is sufficient admissible evidence, prosecute the suspect in proceedings that meet international standards of fairness and that do not involve seeking or imposing the death penalty, or extradite the suspect to a jurisdiction that will do so.



ANNEX 1: VESSELS



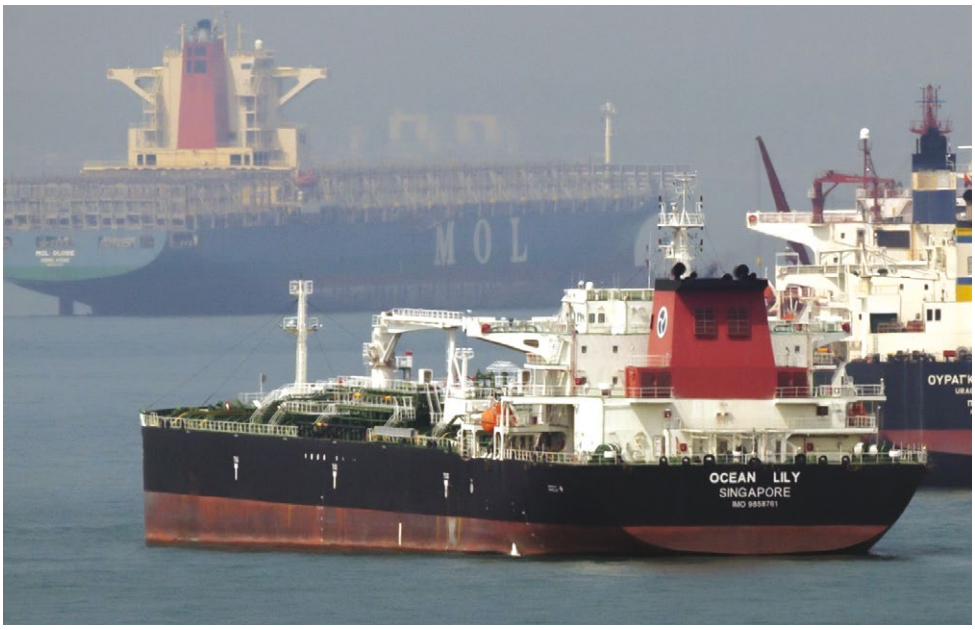
Yu Dong (IMO 9846366)



Santya (IMO 9667277)



Swarna Mala (IMO 9421403) © Patrick Deenik



Synergy (formerly Ocean Lily) (IMO 9858761) © @SGShipspotter



Super Hero (IMO 9341330)



Bhureemas (IMO 9547568)



Super Infinity (IMO 9341342)

ANNEX 2: AVIATION FUEL TANKER TRUCKS



6K-8053



3P-4493



1M-8696



1M-8703



1M-8696, 1M-8705



1M-8702 and others



2P-4316

ANNEX 3: NEPAS STORAGE DEPOTS

Satellite imagery was used to confirm NEPAS fuel storage facilities at airports across Myanmar. The verified fuel depots all had similar features that were constructed or updated between 2016 and 2018. As needed, roadways appear to be updated to allow ease of trucks delivering fuel. New similar buildings or new green roofs were also added to the compounds. There also appears to have been some updates to the fuel storage tanks and pipes.



Sittwe, Myanmar: S*atellite imagery shown above is an example of the changes to fuel storage facilities at airports where NEPAS began delivering fuel. In 2016 (left image), imagery shows the old fuel storage area at Sittwe airport. In 2018 (right image), the road through the facility appears updated to allow trucks to move through easily. A new building was constructed and another building appears to have an updated green roof – both highlighted with blue circles. A fuel storage tank – highlighted in orange – appears updated with new pipes.*



Dawei, Myanmar



Heho, Myanmar



Kawthaung, Myanmar



Kyaukphyu, Myanmar



Mandalay, Myanmar



Myeik, Myanmar



MyitKyina, Myanmar



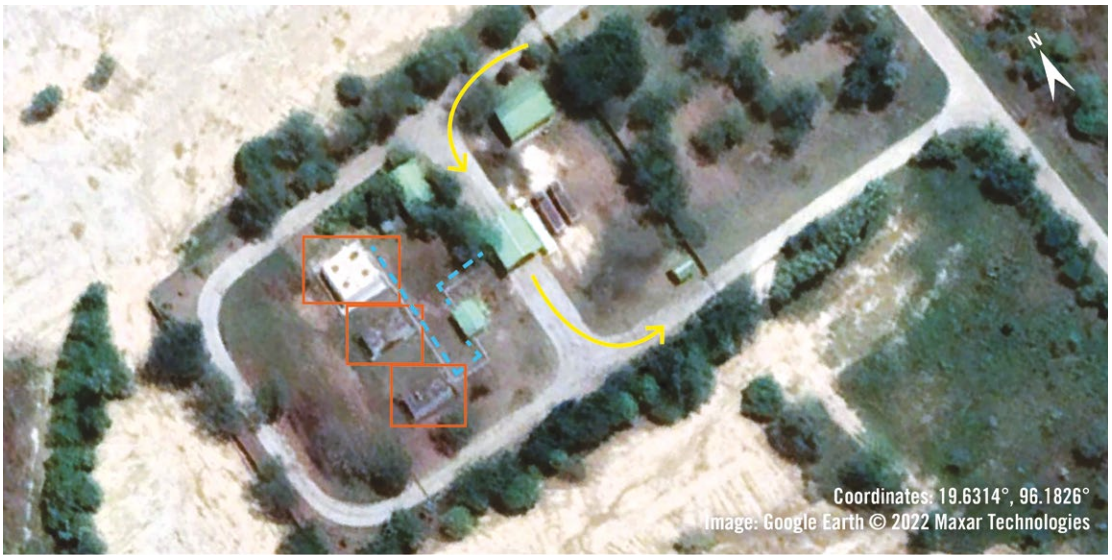
Tachileik, Myanmar



Yangon, Myanmar

ANNEX 4: MILITARY AIR BASE FUEL STORAGE FACILITIES

Satellite imagery was used to pinpoint the locations of probable fuel storage facilities at air bases and joint use airports in Myanmar. Many of the facilities have distinctive features that are similar to known fuel depots, such as fuel storage tanks, pipes connecting tanks and buildings, and roadway designs allowing trucks to move through easily. Fuel truck activity and updates are visible at some of the air base facilities in the last years, suggesting they are still being used for jet fuel storage.



Nay Pyi Taw, Myanmar: *Satellite imagery shows the fuel storage facility adjacent to the Nay Pyi Taw military base. The fuel storage tanks are highlighted in orange squares, pipes are traced with a blue dotted line and roadway design shown with yellow arrows.*



Homalin, Myanmar



Hmawbi, Myanmar



Magway, Myanmar



Myeik, Myanmar



Nansang, Myanmar



Nampong, Myanmar



Pathein, Myanmar



Shante, Myanmar



Taungoo, Myanmar

ANNEX 5: COMPANY LETTERS



Law Tat Win
Singapore Country Chairman

5 September 2022

Via E-mail

[redacted]
Amnesty International
1 Easton Street,
London, WC1X 0DW
United Kingdom

Dear [redacted]

I refer to your letter sent to Chevron Singapore Pte Ltd ("Chevron") via email dated 24 August 2022.

Thank you for your email and for the opportunity for us to reply.

Chevron's response is set out below.

SRC is Chevron's non-operated joint venture refinery in Singapore. Since February 2021, Chevron only sold one parcel of Jet A-1 fuel to a customer in Singapore that was ultimately delivered to Myanmar. This was loaded at SRC in Singapore and shipped on board the MT Super Hero in February 2022 for delivery into Myanmar. The customer in Singapore provided assurance that the Jet A-1 fuel was for commercial purposes only.

Chevron has not provided jet fuel to the Myanmar military since February 2021.

Chevron always cooperates with authorities to ensure we are compliant and abiding by laws and regulations applicable to our operations, including trade sanctions. Chevron conducts counterparty due diligence, including validation that counterparties are not denied parties under US, EU, UK, and UN sanctions among other global sanctions programs. Chevron actively seeks warranties that the product is purchased for commercial use only and the understanding is the product shall not be supplied to the Myanmar military.

For additional information on Chevron's view on Myanmar, see Chevron's View on Myanmar — Chevron.com.

Sincerely,

Law Tat Win

Singapore Country Office
Chevron Singapore Pte. Ltd.
3 Fraser Street, #12-28 DUO Tower
Tel 6318 1000
SingaporeComms@chevron.com



Law Tat Win
Country Chairman, Singapore Country Office

September 22, 2022

Via E-mail

[redacted]
[redacted]
Amnesty International
1 Easton Street,
London, WC1X 0DW
United Kingdom

[redacted] :

I refer to your follow-up email dated 14 September 2022.

As a matter of policy, we do not comment on supply and trading matters as these transactions are concluded in confidence.

Sincerely,

Law Tat Win

Chevron Singapore Pte. Ltd.
3 Fraser Street, DUO Tower #12-28, Singapore 189352
Tel +65 6318 1000
SingaporeComms@chevron.com

Law Tat Win
Country Chairman, Singapore Country Office

October 18, 2022

Via E-mail

[redacted]
Amnesty International
1 Easton Street,
London, WC1X 0DW
United Kingdom

[redacted]

Thank you for your letter of 12 October 2022.

We reiterate that the jet fuel supplied into Myanmar on board the MT "Super Hero" was for commercial purpose.

Contrary to your allegation that we may not have assessed adverse human rights impact of this supply of jet fuel, we confirm that due diligence was undertaken, and we ascertained that the jet fuel was to be supplied by the importer of the jet fuel to a commercial airline under a term supply contract.

We trust the above clarifies. Thank you.

Sincerely,
Law Tat Win

Chevron Singapore Pte. Ltd.
3 Fraser Street, DUO Tower #12-28, Singapore 189352
Tel +65 6318 1000
SingaporeComms@chevron.com

ExxonMobil Asia Pacific Pte. Ltd.
1 HarbourFront Place
#06-00 HarbourFront Tower One
Singapore 098633
(65) 6885 8000 Main Line

ExxonMobil

18 October 2022

[redacted]
Amnesty International
1 Easton Street
London, WC1X 0DW
United Kingdom

[redacted]

ExxonMobil Asia Pacific Pte. Ltd. ("ExxonMobil") writes in response to your recent correspondence regarding potential sales of aviation fuel to Myanmar. Thank you for your inquiry and your long-standing advocacy for human rights.

ExxonMobil complies with all applicable governmental laws and regulations, including trade sanctions and export controls regulations. Any potential sale of aviation fuel related to Myanmar would be conducted in accordance with applicable law.

ExxonMobil actively promotes respect for human rights, and we condemn human rights violations in any form. We are committed to respecting human rights as a fundamental principle in our operations, reinforced through training and integrated into our policies and practices.

We maintain a corporate-wide commitment to safeguarding the health and security of our employees and the public, responsibly managing our social impacts, and upholding respect for human rights in our operations.

Our practices reflect the spirit and intent of the United Nations' Universal Declaration of Human Rights and are guided by elements of the United Nations' Guiding Principles on Business and Human Rights.

Information regarding ExxonMobil's policies and activities can be found on our website www.exxonmobil.com.

Sincerely,

Geraldine Chin
Chairman and Managing Director

Company No: 196800312N
An **ExxonMobil** Subsidiary

[redacted]

From: 井ノ久保総一郎 [redacted]
Sent: 19 October 2022 08:15
To: [redacted]
Cc:
Subject: Re: Vessel transporting aviation fuel to Myanmar

⚠ **CAUTION External Sender** Exercise caution opening links or attachments. Do not provide login details.

[redacted]

Thank you for your letter of 14 October.
The Japan P&I Club is one of 13 members of the International Group of P&I Clubs, all of which provide third party liability insurance on a not for profit basis to their shipowner Members. That cover provides protection to those who suffer losses such as oil pollution, damage to property, or death and injury, caused by negligence on the part of an insured shipowner.
The Japan P&I Club does not provide cargo insurance.
In addition, the insurance contract may be prejudiced where a shipowner member trades its vessel in a manner that may expose the Japan P&I Club to a risk of breaching sanctions.
Even where there is no risk to the business, cover is not provided for losses that arise whilst the vessel is employed on an unlawful trade.

Kind regards,

Soichiro Inokubo for Shigeru Yamada,
Chief Executive
The Japan Ship Owners' Mutual
Protection & Indemnity Association
(Japan P&I Club)
Singapore Branch
80 Robinson Road #14-01 Singapore 068898

1

We would be grateful for a reply, by email, by close of business on 20 October 2022.

Warm regards,

[redacted]

[redacted]

Business and Human Rights

AMNESTY INTERNATIONAL

International Secretariat, Amnesty International

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NAYARA ENERGY

September 6, 2022

VIA EMAIL

[redacted]

Amnesty International
1 Easton Street
London WC1X 0DW
United Kingdom
Tel: +44 20 74135500

[redacted]

Thank you for your August 24, 2022 correspondence. I am the General Counsel of Nayara Energy Limited ("Nayara Energy" or the "Company"), a globally recognized energy company with best-in-class infrastructure to power India's growing energy demands. We play a critical role in India's energy security given the projected growth in the country's economy and corresponding growth in energy consumption by households and industry. At Nayara Energy, we are committed to sustainable development by delivering economic, social, and environmental benefits to the communities in which we operate. Our vision is to be among the most respected organizations by doing what is right and rightful for the communities and nation at large.

We appreciate your interest in our operations. Due to client confidentiality obligations, we are unable to comment on any specific transactions or shipments. However, in the interest of transparency and cooperation with Amnesty International's important goals, we can confirm the following:

- Nayara Energy has not and does not currently have a relationship with Puma Energy Asia Sun Co. Ltd., contractual or otherwise, or with other parties in Myanmar.
- Nayara Energy's supply contracts contain sanctions-related provisions that provide, among other things, that fuel supplied by the Company shall not be exported or resold to any country or person that is the target of sanctions imposed by the United Nations, European Union, United Kingdom, United States, or other applicable government authority.

...2

Nayara Energy Limited (Formerly Essar Oil Limited)
5th Floor, Jet Airways Godrej BKC, Plot No. C-68, G Block,
Bandra Kurla Complex, Bandra East, Mumbai 400051, India

T +91 22 6612 1800 | **F** +91 22 6708 2177
E corp@nayaraenergy.com

Registered Office:
Khambhalia, Post Box No.24, Dist. Devbhumi Dwarka, Gujarat 361 305, India
T +91 2833 661444 | **F** +91 2833 662929

CIN: U11100GJ1989PLC032116
www.nayaraenergy.com

NAYARA ENERGY

- While neither the United States nor another relevant government authority has imposed comprehensive sanctions on Myanmar, out of an abundance of caution and in line with its commitments outlined in this letter, Nayara Energy is committed to not supplying fuel to any parties in Myanmar.

We also emphasize that Nayara Energy complies strictly with all applicable economic and trade sanctions, and maintains a robust program dedicated to compliance with applicable trade controls, including those with respect to Myanmar.

We trust that this information is helpful to you.

Sincerely,

Pooja Yadava
General Counsel

[redacted]

From: [redacted]
Sent: 18 October 2022 17:55
To: [redacted]
Subject: RE: Vessel transporting aviation fuel to Myanmar [NOE-LIVE.FID2603909]

⚠ **CAUTION External Sender** Exercise caution opening links or attachments. Do not provide login details.

[redacted]

Thank you for your letter dated 14 October addressed to the North of England P&I.

As a member of the International Group of P&I Clubs, the North of England provides third party liability insurance on a not for profit basis to its shipowner Members. That cover provides protection to those who suffer loss as a result of negligence on the part of an insured shipowner such as oil pollution, damage to property, death and injury.

North of England does not provide cargo insurance.

The insurance contract will automatically terminate where a shipowner member trades its vessel in a manner that may expose the North of England to a risk of breaching sanctions.

Even where there is no sanctions risk to the business, cover is not provided for losses that arise arising whilst a whilst the vessel is engaged on an unlawful trade.

Regards,

Mike Salthouse
Global Director (Claims)

North Group
The North of England P&I Association Limited
North of England P&I DAC
[redacted] Fax: +44 (0) 191 261 0540
Email: [redacted]

For details on the proposed merger between North and the Standard Club, please visit our website .
We are hybrid working and are contactable in the usual way via our switchboard, mobile number or email.

North

The Quayside, Newcastle upon Tyne, NE1 3DU

www.nepia.com/

Thank you for your letter of 26 September 2022 that sets out a summary of Amnesty International's findings into the supply of jet fuel into Myanmar. The summary of findings you have provided details a number of issues that contributed to our ongoing review of Puma Energy's investment in Myanmar. Our review has ultimately led to the decision to exit Myanmar and we have provided more details on this below.

Your summary contains a number of inaccuracies and incorrect conclusions, which we appreciate the opportunity to address. In addition, your summary also refers to a number of leaked or other documents that you have access to. We note that these have not been shared with us and therefore we are not in a position to comment on such documents.

The most significant inaccuracy in your report relates to Puma Energy's activities post the February 2021 military coup in Myanmar. Following the military coup in February of 2021, we have always sought to prioritize the safety and security of PEAS and NEPAS employees, to enable—where possible—the safe and continued operation of civilian aviation, and to prevent Puma Energy from having any involvement in the supply or distribution of fuel to the Myanmar Air Force (MAF).

In summary:

- Puma Energy has not supplied, sold or distributed any fuel or products to the Myanmar Air Force (MAF) since the coup on 1st February 2021.
- Shortly following the coup, at Puma Energy's insistence, the NEPAS joint venture limited its supply to civilian aviation customers only and not to the MAF.
- NEPAS put in place controls designed to ensure the segregation of military and civilian supply of aviation fuel.
- Puma Energy subsequently became aware of reports of incidents where the MAF had been able to breach controls that were put in place to maintain the segregation of civilian supply.
- In light of the deteriorating human rights situation in Myanmar and continued concern on the safety of our people, Puma Energy reviewed its ongoing presence in Myanmar and commissioned an independent Human Rights Impact Assessment
- Following the thorough review of our investment in Myanmar, and the recommendations of the independent Human Rights Impact Assessment, Puma Energy's board decided to fully exit Myanmar.
- After a period of negotiation and managing the associated employee safety risks, we signed agreements on October 5 2022 to exit our investments in Myanmar.

Update in Relation to Our Myanmar Operations

Your approach to Puma Energy, from the 18th of August 2022, came at a particularly sensitive period during which we have been working on implementing our decision to effect a responsible and full exit from Myanmar, while carefully mitigating the potential risks to employee safety and security.

We can now report that Puma Energy has entered into agreements on 5 October 2022 to fully exit Myanmar.

Context to Our Decision to Leave Myanmar

Pending completion of our exit, Puma Energy is: (i) a minority shareholder in National Energy Puma Aviation Services (NEPAS), which procures, sells and distributes jet fuel; and (ii) the sole shareholder of Puma Energy Asia Sun (PEAS), which handles and stores refined products delivered to the terminal in Thilawa.

Since the military coup on 1st February 2021, Puma Energy has not supplied fuel products into Myanmar and has always sought to put the safety and security of PEAS and NEPAS employees first, to enable—where possible—the continued, safe operation of domestic civilian aviation, and to prevent Puma Energy from having any involvement in the supply or distribution of fuel to the MAF.

This was a particularly challenging and uncertain period as a result of having to address, not only the immediate aftermath of the coup, but also the unfolding COVID-19 pandemic. Amnesty International has acknowledged the risks to employees and while Puma Energy has taken steps to prioritise the safety of PEAS and NEPAS employees, we have also sought to mitigate human rights risks, including through the engagement with local and international stakeholders familiar with the situation.

In February 2021, immediately after the military coup, Puma Energy suspended operations of NEPAS and PEAS in an effort to protect the safety and security of employees. During this period, and as referenced in your findings, employees experienced incidents of harassment and threats of violence. Since February 2021, Puma Energy exercised its limited influence to put in place various measures to help protect the safety and security of PEAS and NEPAS employees and their families.

With respect to the NEPAS operations specifically, these resumed under the direction of majority shareholder Myanma Petrochemical Enterprise (MPE). As part of the process and renegotiation to maintain civilian operations, Puma Energy also exercised its influence so that NEPAS terminated supply to the MAF and restricted its activities to civilian only airlines. Our understanding is that MPE then ran a separate tender for the supply and distribution of jet fuel to the MAF. You will appreciate that we have limited information about this, given that NEPAS nor PEAS participated in the tender.

In early 2022, in light of the deteriorating human rights situation in Myanmar, Puma Energy took a decision to review our ongoing presence in Myanmar and commissioned a confidential, independent Human Rights Impact Assessment to help inform our decision and how best to mitigate any potential human rights risks. This Assessment concluded that Puma Energy had taken positive steps to protect the safety and wellbeing of PEAS and NEPAS employees and leveraged its influence to seek to limit supply to civilian only airlines. However, this Assessment also concluded that it would prove increasingly difficult to continue to exert even limited influence on MPE and maintain controls to restrict supply to civilian only airlines, particularly in light of the deteriorating human rights position in the country.

More recently, we had also become aware of reports of the military forcibly demanding fuel at selected NEPAS airport facilities. These reported incidents undermined our confidence in NEPAS's ability to maintain the controls that were put in place and supported the opinion of the Human Rights Impact Assessment that it would be difficult to exert meaningful influence over MPE going forward. This led to the Board's conclusion that the only option was for Puma Energy to fully exit its Myanmar investment and to do so in a manner that prioritised safety and security of PEAS and NEPAS employees.

After considering the available options and consulting with relevant stakeholders, it was identified that the transfer of the businesses was the safest route to ensure employee security and to effect a

responsible exit. This decision was also supported by the findings of the Human Rights Impact Assessment. We would note that options, such as abandoning or mothballing the relevant assets, were considered to present greater risks, in particular, to employees.

Following several months of careful negotiations with relevant stakeholders and existing partners – which included the period in which Amnesty International has sought to engage with Puma Energy on this matter – and prioritising measures to protect the safety and security of PEAS and NEPAS employees, on 5 October 2022 we entered into agreements for the transfer of the businesses. You will appreciate that in the context of limited available counterparties and the situation in Myanmar, this has required sensitive handling.

Puma Energy has taken a substantial write down on the value of the asset both in 2021 and in 2022 in relation to our full exit from Myanmar. This will be reflected in our third quarter results.

In Conclusion

Prior to the coup, Puma Energy invested over USD 100 million to help build a modern fuel supply and distribution capability for Myanmar, underpinned by international safety standards and best practices. Our investment helped introduce international flights and tourism, and contributed to Myanmar's economic and social progress.

Since February 2021, and against a difficult and constantly evolving situation, we were guided by the priority of protecting the safety and security of PEAS and NEPAS employees, while seeking to ensure the continued, safe operation of domestic civilian aviation and preventing Puma Energy from having any involvement in the supply or distribution of fuel to the MAF.

Throughout this time, we consulted with relevant stakeholders and conducted a Human Rights Impact Assessment to help inform and guide our decisions. This has meant that our approach has evolved from the early period of the coup when stakeholders counselled against a rapid exit and encouraged us to take careful, considered actions while seeking to leverage what influence we had with stakeholders in Myanmar. As the situation continued to deteriorate and the controls put in place to prevent the supply of fuels for military purposes became increasingly difficult to enforce, we took the decision to effect a responsible exit that prioritised the safety and security of PEAS and NEPAS employees.

We appreciate that Amnesty International delayed its report, at our request, while we sought to ensure the safety and security of employees that we felt were in endangered by our exit.

We trust that Amnesty International will include our response in full in its report and correct inaccurate statements and misinterpretations in regards to Puma Energy's involvement in the supply of jet fuel to the Myanmar Air Force.

Thank you for your letter dated 7 October 2022.

As indicated in our previous correspondence, our decision to exit was informed by a confidential and independent Human Rights Impact Assessment, which also guided the steps Puma Energy took to exit responsibly from Myanmar.

In line with Puma Energy's policy, these steps included securing undertakings from the investor that it would comply with Human Rights laws, implement relevant policies and procedures, as well as not use the assets or services to commit human rights violations.

Thank you for letting us know of your plans to publish a report after 12 October 2022. We are not in a position to provide further clarification at this stage.

QBE Insurance Group Limited 28 008 485 014
Level 18, 388 George St, Sydney NSW 2000 Australia
GPO Box 82, Sydney NSW 2001 Australia
Tel: +61 2 9375 4444
www.qbe.com

Via email

20 October 2022

[redacted]
Head of Business, Security and Human Rights
Amnesty International
1 Easton Street
London, WC1X 0DW
United Kingdom

Dear [redacted]

Thank you for your letter dated 14th October 2022.

QBE is committed to respecting internationally recognised human rights principles, complying with national law and regulation. Wherever we operate, we respect human rights and are committed to avoiding human rights harm. This is outlined in our Group Human Rights Policy which we released in 2021.

As an insurer, we seek to prevent and mitigate adverse human rights impacts from our business as practically possible. In line with our adherence to the Principles for Sustainable Insurance and QBE's policies, standards and frameworks, we operationalise ESG criteria through our Environmental & Social (E&S) Risk Framework and our Group Underwriting Standards which define prohibited and restricted business. The E&S Risk Framework provides sensitive-sector positions including addressing areas of concern for elevated human rights risk. This is an integral part of our enterprise risk management approach. QBE is also committed to compliance with economic and trade sanctions as outlined in our Group Sanctions Policy. We also adhere to the requirements of the International Maritime Organisation.

We are unable to provide further information on the specific questions you have raised in your letter.

Yours sincerely

Vivienne Bower
Group Executive Corporate Affairs and Sustainability

From: pr@rosneft.ru
Sent: 13 October 2022 21:04
To: [redacted]
Cc:
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

⚠ **CAUTION External Sender** Exercise caution opening links or attachments. Do not provide login details.

Good evening!

As per to your request, we would like to inform you of the following.

The implication that Rosneft is supplying jet fuel to Myanmar is misleading. We sell to credible market buyers who have an impeccable reputation, operate in line with global standards and adhere to all international legal requirements.

Best regards,

Department of information and Advertising
Rosneft

[redacted]
Sent: Friday, October 7, 2022 6:46 PM
To: pr@rosneft.ru
[redacted]
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

Dear Sir or Madam;

Please find attached a letter setting out our key findings in order to give you an opportunity to review and respond to them before we publish our findings.

We would be grateful for a reply, by email, on or before 14 October 2022.

Thank you.

Warm regards,

[redacted]

AMNESTY INTERNATIONAL

1

International Secretariat, Amnesty International

[redacted]
Sent: 14 September 2022 16:20
To: pr@rosneft.ru
[redacted]
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

Thank you very much for your email and for responding to our queries.

We wanted to follow up on two points you mentioned in your email of 1 September 2022.

First, you state, in relation to Rosneft's shipment of aviation fuel to NEPAS in November 2021, that "the prohibition on the use of fuel for military purposes was stated in the supply contract". Would you be able to share the supply contract with us? Also, how did Rosneft ensure that NEPAS did, in fact, use the aviation fuel supplied for civilian purposes? As you must know, the majority shareholder of NEPAS (51%) is the Myanmar Petroleum Product Enterprise, which is a state-owned enterprise currently controlled by the military authorities in Myanmar.

Second, would you be able to share more information on your point that "Myanmar's aviation fuel consumption averages some 100,000 tonnes per year", and specifically, the source for that data? Do you know how much aviation fuel Myanmar produced domestically in 2021 and 2022?

Thank you very much in advance for your time.

Warm regards,
[redacted]
Amnesty International

From: pr@rosneft.ru <pr@rosneft.ru>
Sent: 01 September 2022 16:41
[redacted]
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

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[redacted]

We appreciate your kind concern towards security issues and supervision of fuel supply to global conflict zones.

We would like to state that in its operations Rosneft abides strictly by international law and regulation. Although the Company has neither operational nor legal capacity to exert any kind of influence on commercial activities of market participants subject to foreign jurisdictions, we have been able to obtain from public sources some information on the question of interest to you, suggesting that your conclusions regarding the fuel supply to military aviation are misguided and untrue. We have also gained from public sources that the shipment you mentioned earlier had been offloaded at the Puma Energy Asia Sun Co. Ltd. terminal in Thilawa area port to the benefit of National Energy Puma Aviation Services — the end user of the fuel. Yet the prohibition on the use of fuel for military purposes was stated in the supply contract.

We are confident of impeccable end-user reputation and we have no doubts about an accurate operation by Puma Aviation.

The shipment you mentioned was used, exclusively and entirely, for civil aviation last year and bears no relation to your assumptions. Myanmar's aviation fuel consumption averages some 100,000 tonnes per year. For your

2

information, we would also like to advise you of Myanmar's own capacity (1.1 million tonnes) producing all types of fuel, including jet fuel. This, among other things, confirms the fallacy of your conclusion about the use of products for military purposes.

We urge you to conduct a detailed review of the information you received, considering its importance to business and peacekeeping. We believe that you should again check shipments and flights schedules and other available data and information.

Rosneft wishes you the best with your noble goals.

Best regards,

Department of Information and Advertising
Rosneft

[redacted]
Sent: Thursday, August 25, 2022 12:45 AM
To: pr@rosneft.ru
[redacted]
Subject: Amnesty Letter regarding aviation fuel to Myanmar

Dear Sir or Madam;

I am writing from Amnesty International, a human rights organisation, in relation to the transport of aviation fuel from Vadinar Oil terminal (Nayara Energy refinery) in Jamnagar, Gujarat, to Myanmar. Please see the attached letter.

We would be grateful for a reply, by email, before 5 September 2022. We are also available for an online meeting to discuss our questions.

Warm regards,

[redacted]

AMNESTY INTERNATIONAL

International Secretariat, Amnesty International

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Настоящее сообщение (включая любые приложения к нему) предназначено только для указанного в нем

From: pr@rosneft.ru
Sent: 01 September 2022 16:41
To: [redacted]
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

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[redacted]

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We would like to state that in its operations Rosneft abides strictly by international law and regulation. Although th Company has neither operational nor legal capacity to exert any kind of influence on commercial activities of marke participants subject to foreign jurisdictions, we have been able to obtain from public sources some information on the question of interest to you, suggesting that your conclusions regarding the fuel supply to military aviation are misguided and untrue. We have also gained from public sources that the shipment you mentioned earlier had been offloaded at the Puma Energy Asia Sun Co. Ltd. terminal in Thilawa area port to the benefit of National Energy Puma Aviation Services — the end user of the fuel. Yet the prohibition on the use of fuel for military purposes was stated in the supply contract.

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Rosneft wishes you the best with your noble goals.

Best regards,

Department of Information and Advertising
Rosneft

1

From: CGCoordinate@thaioilgroup.com
Sent: 14 October 2022 04:26
To: [redacted]
Cc:
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

⚠ **CAUTION External Sender** Exercise caution opening links or attachments. Do not provide login details.

Dear [redacted]

Thank you very much for your email dated 6 October 2022.

We would like to emphasize that our Jet A-1 cargo was sold under Free on Board term. To the extent of our knowledge and experience, our business process and internal control system are well in line with best industry practices.

However, to avoid any doubt about the compliance of good corporate governance policy, our business unit has decided to hold a selling of Jet A-1 to Myanmar until no such concerned issue.

We appreciate and thank you again for your information.

Best regards,
CG Coordinate Team

Thaioil
CG Coordinate
Corporate Governance and compliance
Thai Oil Public Company Limited
555/1 Energy Complex Building A, 11th Floor,
Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand
Telephone : +66(0) 2299 0000, +66(0) 2797 2999 ext. -
www.thaioilgroup.com
Thaioil / REFINING VALUES

1

From: [redacted]
Sent: Thursday, October 6, 2022 3:01 PM
To: TOP GSCS-CG Coordinate[redacted]
Cc: TOP GLVP [redacted] TOP GLGC-Vorapattra[redacted]
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

Dear Mr. Viroj Meenaphant,

Thank you very much for your letter of 22 September 2022.

In addition to responding to each of your answers separately (please see below), we would like to inform you that we have received a leaked document which indicates that the Jet A-1 Thai Oil sold to Asia Sun Trading in May 2022 was delivered to the Myanmar military on arrival. In order to protect our source, we cannot share the letter with you. However, we are able to share its contents. The letter, dated May 2022, was purportedly written by Asia Sun Trading and addressed to the Director General of the Customs Department of Myanmar. It cites the "issuance of Jet A-1 (Kerosene) Aviation Fuel under Special Order" given that "we, Asia Sun Trading Co. Ltd. procured and imported Jet A-1 (Kerosene) Aviation fuel from Thailand-based Thai Oil Public Company Limited for use by the Tatmadaw (Air Force)." This would indicate that, despite the processes your company had in place with respect to the shipment of Jet A-1 in May 2022, the aviation fuel was provided to the Myanmar military.

In addition, please find below our response to each of your answers:

1. Due diligence: While we understand that Thai Oil conducted checks on its customer via World-Check One, this service unfortunately is not comprehensive enough to identify all links between companies and adverse human rights impact. In this case, for example, did it identify the direct links between Asia Sun Trading and the Myanmar military. According to information obtained by Amnesty International, Asia Sun Trading has acted as the Myanmar military's proxy in order to import avgas and Jet A-1 in multiple occasions throughout 2022.
2. Contractual provision: In addition to a contractual provision, did you take any additional steps to ensure that your customer was, in fact, not selling the Jet A-1 to the military?
3. Jet A-1: Although it is true that there is a Jet A-1 equivalent used by the military in various countries (JP-8), in Myanmar, that does not appear to be the case. Based on Amnesty International's findings, including through conversations with former members of Myanmar's air force and industry experts, the Myanmar military uses Jet A-1. This is confirmed by letters showing that Jet A-1 is delivered directly to the Myanmar military's air force for their use.
4. Yangon: The PEAS terminal, where the fuel was ultimately delivered, is in the Thilawa area port, which is considered part of the Yangon port. According to information obtained by Amnesty International, the majority of Jet A-1 arrives to Myanmar through this port, and is subsequently delivered to storage facilities and military bases across the country.

Given everything stated above, we believe that selling Jet A-1 to any counterparty in Myanmar is simply too risky.

Please respond to our follow up questions included above by 12 October 2022.

Thank you in advance for your time.

Warm regards,
[redacted]

From: [redacted]
Sent: 23 September 2022 14:58
To: [redacted]
Cc: [redacted]
Subject: RE: Amnesty Letter regarding aviation fuel to Myanmar

2

TBK 25/0477

September 22, 2022

Subject: SHIPMENT OF JET A1 FROM THAI OIL TO MYANMAR

Dear [redacted]
Amnesty International
1 Easton Street
London, WC1X 0DW, United Kingdom

Thank you for your letter dated 24 August 2022 (TC ASA 16/2022.009) in which you set out your preliminary findings, and asked certain questions in relation to information that you had obtained regarding a shipment of aviation (Jet A-1) fuel from the jetty no. 4 of the Thai Oil Marine Terminal in Sriracha, Thailand to Myanmar on or around 27 May 2022.

We refer in particular to your statement that "it is highly likely that a significant portion of this fuel was delivered to the Myanmar military for use by the Air Force."

Thai Oil Public Co. Ltd. ("**Thai Oil**") and its affiliates take our compliance and corporate social responsibility obligations very seriously. Not only do we endeavor to ensure that we comply strictly with applicable trade sanctions, but we also have a policy to ensure that we operate in a manner that takes into account our corporate social responsibility, along our responsibility to respect for human rights.

For that reason, we have considered the issues that you raised in your letter very seriously, and have undertaken enquiries with our responsible units in order to assess whether your statement that it is "highly likely" that a significant portion of the Jet A-1 fuel that was shipped from the Thai Oil Marine Terminal in Sriracha in May 2022 was delivered for use by the Myanmar Air Force is correct.

In summary, based on the information from our investigation, we consider that it is highly unlikely that the fuel that was shipped from the Thai Oil Marine Terminal in Sriracha in May 2022 was delivered to the Myanmar military for use by the Myanmar Air Force for the following reasons:

First, before agreeing to the sale of the fuel that was shipped from the Sriracha Thai Oil Marine Terminal to Myanmar in May 2022, our responsible unit conducted diligence on the proposed purchaser to ensure that neither it nor any of its affiliates were the subject of U.S., EU, U.K. or other trade or financial sanctions or associated with human rights violations. This is diligence that our responsible unit conducts as a part of regular ordinary course of business when dealing with any purchaser. Our responsible unit did so using a commercially available diligence tool provided by Thomson Reuters (World-Check One), and have checked with international legal counsel who confirmed that this is a reliable diligence tool used by businesses around the world. Our responsible unit are unable to divulge to you the name of the purchaser for commercial confidentiality reasons, but can assure you that it is not subject to sanctions and that the diligence check did not identify any issues related to potential human rights violations

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Second, in order to ensure that that there was no risk that the fuel might be used for military purposes in Myanmar, our responsible unit obtained a specific legally binding representation (and contractual indemnity) that the fuel was purchased solely and ultimately for commercial / civilian use in Myanmar, and that in no event will it be used for any military purpose, whether in Myanmar or otherwise. As you are aware, there is not an embargo on the sale of petroleum products to Myanmar, and Jet A-1 fuel may be required and used in Myanmar for purposes entirely unrelated to the military. Our responsible unit consequently obtained legally binding comfort that the Jet A-1 fuel would not be used by the Myanmar military.

Third, and perhaps most significantly, the specifications of the Jet A-1 fuel that was shipped from the Sriracha Thai Oil Marine Terminal to Myanmar in May 2022 (DEF STAN 91-091 and ASTM D1655-21C) is only suitable for use in civilian aircraft. Military aircraft, on the other hand, use fuel such as JP-5 (US MIL-DTL-83133H) and JP-8 (US MIL-DTL-83133K), i.e., with different specifications to that which was the subject of the May 2022 shipment and which is not interchangeable with Jet A-1 fuel. Indeed, it is common knowledge within the aviation industry that the use of Jet A-1 fuel by military aircraft is likely to cause serious engine damage. Following receipt of your letter, our responsible unit checked this understanding with three independent aviation experts, all of whom confirmed that the Jet A-1 fuel that was shipped from the Sriracha Thai Oil Marine Terminal to Myanmar in May 2022 is incompatible with military aircraft, which further confirms our understanding that this fuel was not intended for, and would not have been used by, the Myanmar Air Force.

Fourth, the bill of lading specified that the Jet A-1 that was shipped from the Thai Oil Marine Terminal in Sriracha in May 2022 would be delivered to Yangon, Myanmar. As you will be aware, Yangon is the location of the primary international civilian airport in Myanmar, which confirms our understanding that this Jet A-1 fuel was intended for civilian, not military, use.

We trust that this explanation is sufficient to correct your statement that "it is highly likely that a significant portion of this fuel was delivered to the Myanmar military for use by the Air Force." On the contrary, it is clear that this would not have been the case, and we are confident that the diligence procedures were correctly followed by our responsible unit, with the result that Thai Oil has had no involvement with the human rights violations or other violations of international law referred to in your letter.

However, for completeness, Our responsible unit has set out below responses to your questions.

1. Can you confirm that the Bhureemas transported aviation fuel to Myanmar and if so, can you provide details about this shipment (including quantity of aviation fuel transported, who the consignee was, who was the designated shipper, what terminal the fuel was offloaded at and any other relevant details)?

Based on our records, on 27 May 2022, Jet A-1 fuel which had been sold by Thai Oil to a customer in Myanmar was loaded onto a vessel named the Bhureemas from jetty 4 at the port of Sriracha in Thailand. Thai Oil had no further involvement with this shipment after this point; the shipping terms were free on board. The destination of the shipment stated on the bill of lading was Yangon, Myanmar.

2. Has Thai Oil, directly or indirectly, supplied any Jet A-1 fuel to companies based in or operating from Myanmar since February 2021?

Yes, since February 2021 Thai Oil has supplied Jet A-1 fuel to one company registered in Myanmar on one occasion. This sole shipment is that referred to in Question 1, above.

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a. If so, what companies has it entered into such contracts with? For the provision of what type of fuel and for how much fuel?

Due to reasons of commercial confidentiality, our responsible unit cannot disclose the identity of customer in Myanmar to which Thaioil has supplied Jet A-1 fuel. Our responsible unit can however confirm that the customer is a private commercial entity that, based on our diligence, is not subject to international sanctions. The arrangement with this customer was for the provision of Jet A-1 fuel (DEF STAN 91-091 and ASTM D1655-21C). Our responsible unit cannot provide details of the precise quantity of fuel provided for reasons of commercial confidentiality.

b. If so, did Thai Oil undertake any due diligence prior to entering into any such contractual arrangements to evaluate any potential human rights risks?

Yes, our responsible unit undertook due diligence on its customer based in Myanmar and its related entities prior to entering into the relevant contractual arrangements.

Our responsible unit ran background searches on its customer in Myanmar and its related entities through the World-Check One database, which flags issues relating to sanctions, corruption, import and export restrictions, law enforcement, and human rights concerns. No such issues were identified with respect to the customer or its related entities.

Further, prior to the supply of the fuel, our responsible unit obtained binding written contractual warranties and undertakings from its customer in Myanmar that the fuel being purchased and delivered is and will be solely and ultimately for the purpose of commercial and civilian use in Myanmar, and that in no event will the fuel be used for any military purpose whether in Myanmar or otherwise.

Thai Oil also has procedures in place generally designed to ensure that its operations do not contribute to the perpetration of human rights abuses. Thai Oil maintains a Business Partners Code of Conduct (the "**Code**") that sets forth expectations for its business partners with respect to human rights. The Code states that Thai Oil "fully supports the United Nations Framework and Guiding Principles on Business and Human Rights and expects business partners to respect human rights as well as labor rights throughout business activities."

c. In all cases, did Thai Oil understand who the end user of the aviation fuel was?

As noted above, prior to supplying this fuel, our responsible unit obtained binding written contractual guarantees from its Myanmar-based customer that the fuel will be solely intended for the purpose of commercial and civilian use and not for any military purpose.

Further, as we have noted above, the fuel Thai Oil supplied to its customer in Myanmar is widely acknowledged in the fuel industry to be incompatible with use in military aircraft. Thai Oil supplied Jet A-1 fuel (DEF STAN 91-091 and ASTM D1655-21C), which is distinct from and not interchangeable with the fuel commonly used in the engines of military jets, JP-5 (US MIL-DTL-83133H) and JP-8 (US MIL-DTL-83133K). Our responsible unit has consulted three independent aviation industry experts in respect of this matter, all of whom have confirmed Our responsible unit's view that the Jet A-1 fuel supplied to Thai Oil's customer in Myanmar is not suitable for use in military aircraft.

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Fax: +66(0) 3835 1554, +66(0) 3835 1444, +66(0) 3835 9019

3. Is Thai Oil planning to supply any Jet A-1 fuel to companies based in or operating from Myanmar? If so, can you provide all details relating to these future deliveries?

Our responsible unit has informed that no such plans at present.

4. Has Thai Oil provided Jet A-1 or other petroleum products directly or indirectly to the Myanmar military? If so, can you provide all details relating to this supply?

No, our responsible unit informed that Thai Oil has not provided Jet A-1 fuel or other petroleum products directly to the Myanmar military and is not aware of any indirect provision.

***

We trust that the explanations we have provided in this letter, including the above responses to your questions, have addressed your concerns in relation to the transaction referred to in your letter. Please let us know if you have any other questions in relation to this matter. We would be willing to assist you with your enquiries as best we can.

Yours Sincerely,

(Mr. Viroj Meenaphant)

Executive Vice President Corporate Governance and Affairs

Thai Oil Public Company Limited

Corporate Governance; Compliance and Legal Department

Telephone: 66 (0) 2797 2999 extension 43500

E-mail: CGcoordinate@thaioilgroup.com

บริษัท ไทยออยล์ จำกัด (มหาชน) ทะเบียนเลขที่ 0107547000711
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Thai Oil Public Company Limited Registration No. 0107547000711
555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand
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TRAFIGURA

[redacted]
AMNESTY INTERNATONAL
International Secretariat
1 Easton Street
London
WC1X 0DW
United Kingdom

5 September, 2022

Dear [redacted]

Thank you for your letter dated 24 August 2022, regarding shipments of jet fuel to Myanmar. We would like to confirm the following in response to your questions and comments set out in your letter:

While Trafigura now owns a majority share of Puma Energy (as of 30 September 2021), Puma Energy is independently managed. We understand that you are in contact with Puma Energy separately. Our responses below are therefore in respect of Trafigura's business activities only.

1. **What is the current shareholder structure of Nayara Energy?**
   Trafigura became an indirect minority (24.5%) shareholder in Nayara Energy in August 2017. As detailed in Trafigura's 2021 annual report, the company has decided to sell its equity investment in Tendril Ventures which indirectly holds the shares in Nayara Energy. While we have not yet been able to complete the sale, we continue to account for the asset as "held for sale" on our balance sheet.

2. **Is Trafigura aware that on or around 24 November 2021 the Swarna Mala (IMO 9421403) berthed at the Essar jetty B at the Vadinar Oil Terminal and subsequently offloaded Jet A-1 fuel at the PEAS terminal in Thilawa area port, Myanmar? Can you confirm that this shipment did, in fact, occur and that Jet A-1 was loaded at the Vadinar Oil Terminal?**
   Trafigura has no involvement in the day-to-day operations or commercial decision-making of Nayara Energy and we do not supply jet (aviation) fuel to companies based in or operating from Myanmar. The vessel referenced above was not on charter to Trafigura or a Trafigura Group company and we had no involvement in any such shipment.

3. **Has Trafigura, directly or indirectly through affiliated entities, supplied any aviation fuel to companies based in or operating from Myanmar since February 2021?**
   No. Neither Trafigura nor any Trafigura Group company has supplied aviation fuel to companies based in or operating from Myanmar since February 2021.

   a. **If so, what companies has it entered into such contracts with? For the provision of what type of fuel and for how much fuel?**
      n/a

TRAFIGURA

b. **If so, did Trafigura or any of its affiliated entities undertake any due diligence prior to entering into any such contractual arrangements to evaluate any potential human rights risks? If so, please provide details of your findings. If not, please explain why.**
n/a

4. **Is Trafigura or any of its affiliated entities planning to supply any aviation fuel to Myanmar in the future? If so, can you provide all details relating to these future deliveries?**
Neither Trafigura nor any Trafigura Group company is planning to supply aviation fuel to Myanmar.

5. **Has Trafigura provided fuel directly or indirectly to the Myanmar military, before or after February 2021? This question is particularly relevant given Trafigura's ownership (through Puma Energy) of PEAS and partial ownership of Myanmar company National En ergy Puma Aviation Services (NEPAS). Can you provide all details relating to this supply?**
Trafigura has not and does not have any contract to deliver fuel to the Myanmar military.

Yours sincerely,

Claire Divver
Global Head of Corporate Affairs, Trafigura

Koninklijke Vopak N.V.
Westerlaan 10
3016 CK Rotterdam
P.O. Box 863
3000 AW Rotterdam
The Netherlands

Telephone +31(10)4002911
www.vopak.com
Company Register Rotterdam 24295332

11 October 2022

Amnesty International
International Secretariat
1 Easton Street,
London, WC1X 0DW,
United Kingdom

Reference: response to your letter dated 16 September 2022

[redacted]

Thank you for your letter.

Vopak respects human rights as described in the United Nations (UN) Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, and accepts the responsibility for ensuring that human rights are respected when conducting business. In our Code of Conduct and annual report which are both available online, more detailed information is given how this is integrated when conducting business.

Our company is an independent storage service provider. We do not produce, transport, own, buy or sell products. Our service is the safe storage of our customers' products while it is in our terminals in the ports. Before accepting customers, vessels and products that arrive at our terminals, are screened in line with our Code of Conduct and applicable regulations. We can confirm that this has also been done for the cargo that is mentioned in your letter. The Myanmar military was not during that period, and is also not now a customer at the PITSB terminal.

We hope that this information is of use to you and that it gives more insight in the activities of our company.

Kind regards,
Peter Paul Smid



Koninklijke Vopak N.V.
Westerlaan 10
3016 CK Rotterdam
P.O. Box 863
3000 AW Rotterdam
The Netherlands

Telephone +31(10)4002911
www.vopak.com
Company Register Rotterdam 24295332

19 October 2022

Amnesty International
International Secretariat
1 Easton Street,
London, WC1X 0DW,
United Kingdom

Reference: response to your e-mail dated 12 October 2022

[redacted]

Thank you for your e-mail.

We share your view on the importance of human rights.

With respect to your questions we can only repeat what we have said in our earlier response, dated 11 October 2022, namely that PITSB's function in the supply chain is that of a storage service provider and that as such this terminal never buys, produces, owns, transports, delivers, or sells any products. We trust that this explains the potential different views we have on what is included in the value chain of independent storage service providers.

Kind regards,
Peter Paul Smid

From: Moore, Melanie [redacted]
Sent: 18 October 2022 17:12
To: [redacted]
Cc:
Subject: FW: Amnesty letter regarding aviation fuel to Myanmar

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[redacted]

We appreciate Amnesty International's investigation regarding Jet A-1 aviation fuel imported to Myanmar via the Thilawa Terminal.

Having thoroughly reviewed the latest information provided by Amnesty International with our case handling team, our ships agency colleagues in Myanmar, and senior management, we have determined that Wilhelmsen Ships Service Myanmar will not risk contributing in any way towards the human rights violations outlined by your report.

Therefore, Wilhelmsen Ships Service Myanmar will immediately cease to provide agency services of any kind for vessel or cargo owners discharging Jet A-1 aviation fuel at ports in Myanmar, irrespective of designations regarding end use. This will remain the case until further notice.

Kind regards,
MELANIE MOORE
Vice president ESG
[redacted]

Wilh. Wilhelmsen Holding ASA
Lysaker, Norway
wilhelmsen.com

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From: [redacted]
Sent: Wednesday, October 12, 2022 2:22 PM
To: Moore, Melanie [redacted] WSS MYANMAR <WSS.MYANMAR@wilhelmsen.com>; HUMANRIGHTS <HUMANRIGHTS@wilhelmsen.com>; [redacted]
Subject: RE: Amnesty letter regarding aviation fuel to Myanmar

Dear Ms. Moore,

Thank you for your email of 21 September 2022. Please find attached a letter setting out the substance of our key findings in order to give you an opportunity to review and respond to them before we publish our findings.

We would be grateful for a reply, by email, on or before 18 October 2022.

Thank you.

Warm regards,
[redacted]

1

Amnesty International

From: Moore, Melanie [redacted]
Sent: 21 September 2022 17:02
To:
Cc: [redacted] WSS MYANMAR <WSS.MYANMAR@wilhelmsen.com>; HUMANRIGHTS <HUMANRIGHTS@wilhelmsen.com>
Subject: RE: Amnesty letter regarding aviation fuel to Myanmar

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[redacted]

In response to your enquiry related to human rights, please see below the responses to your four questions:

Question 1: Since February 2021, have you provided shipping agency services to PEAS, NEPAS and/or other companies involved in the import of aviation fuel into Myanmar? Can you describe what services you have provided, for what purpose and to which companies?
Answer: Yes, Wilhelmsen Ships Service (WSS) Myanmar have acted as Owner's Protective Agent for tankers discharging aviation fuel at the PEAS terminal in Thilawa port with HS Code: 10198210 Aviation Turbine Fuel (JET A-1) with description: Domestic airline sales only. In this capacity, WSS Myanmar act as Owner's Representative on behalf of the vessel owner/operator for the transmission of proforma disbursement accounts and port captaincy on the berth.

Question 2: Did Wilhelmsen undertake any due diligence prior to entering into any contractual arrangements with PEAS, NEPAS or any other companies based in Myanmar involved in the import of aviation fuel to evaluate any human rights risks? If so, can you provide details on your findings. If not, why not?
Answer: Yes, WSS Myanmar perform as standard an OFAC screening on every vessel handled through our in-house operation platform. In addition, due to the ongoing situation in Myanmar, we also performed additional OFAC checks on entities that our principals (vessel owner/operator) are dealing with, in this case, PEAS and NEPAS, with the result being all clear.

Question 3: Are you aware that a significant portion of Jet A-1 that enters the country is provided to the Myanmar Air Force? If so, why have you continued to provide shipping agency services to companies involved in the import of aviation fuel?
Answer: The aviation fuel imported to PEAS Terminal for NEPAS is clearly described for domestic airline sales only.

Question 4: Is Wilhelmsen planning to continue to provide shipping agency services to companies involved in the import of aviation fuel into Myanmar?
Answer: WSS Myanmar provide Owner's Protective Agent services for tankers calling in Myanmar discharging aviation fuel clearly marked on all documents for domestic airline sales only. However, if international law prohibits the import of all aviation fuel (irrespective of its designation) WSS Myanmar will immediately cease working with tanker owners/operators calling in Myanmar to discharge aviation fuel.

Kind regards,
MELANIE MOORE
Vice president ESG
[redacted]

Wilh. Wilhelmsen Holding ASA
Lysaker, Norway
wilhelmsen.com

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2

From: [redacted]
Sent: Sunday, September 4, 2022 9:00 PM
To: Moore, Melanie [redacted]
Cc: [redacted] WSS MYANMAR <WSS.MYANMAR@wilhelmsen.com>; HUMANRIGHTS <HUMANRIGHTS@wilhelmsen.com>
Subject: RE: Amnesty letter regarding aviation fuel to Myanmar

> **Caution:** This email originated from outside of the **Wilhelmsen Organization.** Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Moore,

Thanks for your response. We understand and look forward to receiving your response.

Warm regards,
[redacted]

From: Moore, Melanie [redacted]
Sent: 01 September 2022 14:09
To: [redacted]
Cc: [redacted] WSS MYANMAR <WSS.MYANMAR@wilhelmsen.com>; HUMANRIGHTS <HUMANRIGHTS@wilhelmsen.com>
Subject: RE: Amnesty letter regarding aviation fuel to Myanmar

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[redacted]

Thank you for your email. We confirm receipt of your enquiry related to human rights.
Based on the scope of your enquiry, the processing and written response time can take up to 3 weeks.

Kind regards,
MELANIE MOORE
Vice president ESG
[redacted]

Wilh. Wilhelmsen Holding ASA
Lysaker, Norway
wilhelmsen.com

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From: [redacted]
Sent: Wednesday, August 31, 2022 4:55 PM
To: Moore, Melanie [redacted]
Cc: Mark Dummett [redacted] WSS MYANMAR <wss.myanmar@wilhelmsen.com>; WSS INFO <wss.info@wilhelmsen.com>
Subject: Amnesty letter regarding aviation fuel to Myanmar

> **Caution:** This email originated from outside of the **Wilhelmsen Organization.** Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Moore,

I am writing from Amnesty International, a human rights organisation, in relation to shipping agency services provided by Wilhelmsen Ships Service Myanmar Ltd. to vessels transporting aviation fuel into Myanmar. Please see the attached letter.

We would be grateful for a reply, by email, before or on 9 September 2022. We are also available for an online meeting to discuss our questions.

Warm regards,

[redacted]

AMNESTY INTERNATIONAL

International Secretariat, Amnesty International

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From: Moore, Melanie [redacted]
Sent: 21 September 2022 17:02
To: [redacted]
Cc: [redacted]
Subject: RE: Amnesty letter regarding aviation fuel to Myanmar

⚠ CAUTION External Sender Exercise caution opening links or attachments. Do not provide login details.

[redacted]

In response to your enquiry related to human rights, please see below the responses to your four questions:

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Answer: Yes, WSS Myanmar perform as standard an OFAC screening on every vessel handled through our in-house operation platform. In addition, duet the ongoing situation in Myanmar, we also performed additional OFAC check on entities that our principals (vessel owner/operator) are dealing with, in this case, PEAS and NEPAS, with the resu being all clear.

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Answer: WSS Myanmar provide Owner's Protective Agent services for tankers calling in Myanmar discharging aviation fuel clearly marked on all documents for domestic airline sales only. However, if international law prohibits the import of all aviation fuel (irrespective of its designation) WSS Myanmar will immediately cease working with tanker owners/operators calling in Myanmar to discharge aviation fuel.

Kind regards,
MELANIE MOORE
Vice president ESG
Email: [redacted]

Wilh. Wilhelmsen Holding ASA
Lysaker, Norway
wilhelmsen.com

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1

AMNESTY INTERNATIONAL IS A GLOBAL MOVEMENT FOR HUMAN RIGHTS. WHEN INJUSTICE HAPPENS TO ONE PERSON, IT MATTERS TO US ALL.

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DEADLY CARGO

EXPOSING THE SUPPLY CHAIN THAT FUELS WAR CRIMES IN MYANMAR

For the first time since the military coup of February 2021, Amnesty International, in collaboration with Justice For Myanmar, presents a detailed account of one of the most secretive and strategic business operations in Myanmar – the supply of aviation fuel to the military. This report shows how Puma Energy, majority-owned by global commodity giant Trafigura, has played a key role in supplying the Myanmar military since 2015 through its Myanmar entities. It also shows how global and regional oil companies, as well as maritime insurers, vessel owners, shipping agents and truck distributors, also play a part in this supply chain. Without the provision of aviation fuel, the Myanmar military would have no means to power the aircraft responsible for air strikes amounting to crimes. Amnesty International is therefore calling on states and companies to suspend the supply of aviation fuel to Myanmar.

Index:ASA 16/6147/2022
November 2022
amnesty.org

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