MEMORANDUM TO

DEPARTMENT OF ENVIRONMENT MALAYSIA ("DOE")
MINISTRY OF ENERGY, SCIENCE, TECHNOLOGY, ENVIRONMENT & CLIMATE CHANGE

ON

"GARIS PANDUAN PENGIMPORTAN SEKERAP LOGAM KE MALAYSIA"

18 DECEMBER 2019

EXECUTIVE SUMMARY

Background

Department of Environment Malaysia ("DOE") has conducted a briefing on "Garis Panduan Pengimportan Sekerap Logam ke Malaysia" at Dewan Perhimpunan MESTECC on 3rd December 2019. Accordingly, Director General of DOE YBrs. Puan Norlin had requested industrial players / stakeholders to forward suggestions and comments before 20th December 2019 in the pursuit to ensure that such Garis Panduan is sensible and practical prior to its formalization.

Purpose of this Memorandum

The purpose of this memorandum is to forthwith our feedback to DOE in regard to Garis Panduan presented during the briefing on 3rd December 2019 that was subsequently published at DOE official website at

http://www.doe.gov.my/eparticipation/wp-content/uploads/2019/12/Garispanduan-Pengimportan-Sekerap-Logam-Ke-Dalam-Malaysia.pdf

Clarification

Before we proceed to our feedbacks on Garis Panduan, we would like to seek clarification on importation of copper cables. The first screenshot states that only copper cables without insulation are allowed to come in whilst the second screenshot shows that copper cables (with insulation) that are mixed with more than 0.3% of e-waste would be prohibited. In other words, importation of copper cables (with insulation) is allowable so long as e-waste is being kept at threshold of 0.3%.

As above findings are contradicting, we therefore would like to clarify if copper cables with insulation that conform with Basel Convention B1115 classifying as non-hazardous are allowed to be imported to Malaysia under HS Code 740400 or otherwise?

Assessment and Presentation Method

The assessment on Garis Panduan was based upon slide presentation obtained from the link mentioned above and accordingly it was evaluated from the following perspectives and was presented in sequential order following such slide presentation:

Evaluation Perspective	Presentation Method
a) Perception	a) An extract from the slide
b) Legal Framework	b) Findings, Issues and Challenges
c) Clarification	c) Proposal
d) Sensibility & Practicality	

Feedback

First of all, we would like to take this opportunity to express our appreciation and gratitude to DOE for organizing this briefing and allowance for us to contribute our inputs. We would also like to apologise for the choice of words (if any) and our direct comments that might have offended our respected officers, but we trust this is the concerted efforts from all parties to preserve our environment while ensuring healthy growth of the industry. Append below are our deliberations:

a) Importation of scraps for the purpose of segregation is non-value adding to the industry sector

We opined that such negative perception is a spill-over effect from plastic waste and it is not entirely true from industry and economy point of view. Even a mere segregation would bring value to us such as job opportunities and cheaper raw materials to cross-industrial players like steel mills as pointed out by representative from MISIF. At the broader prospect, we should look beyond the conducts and business models of current Chinese operators. Indeed, recycling is pivotal in building a sustainable circular economy that even open door to new economy that is possibly derived from development of green technologies such as renewable energy system and continuous advancement in digitalization.

Thus, it is about building a strong footage to warrant such development and hence we just got to allow some grace period for upstream to blossom first in order to demonstrate promisable supply of raw materials and competitive cost advantage to induce subsequent players along the supply chain to come in. The move to drive non-ferrous upstream activities structurally is synergistic and cohesive with development of circular economy, a departure from current linear economy of take-make-waste whereby we are able to tap the potential benefits from the supply chain in the long run (when it is built).

b) Justification from China controlling the importation of scrap metals

We have highlighted that there are other reasons for China to restrict scrap metals importation apart from addressing environmental concerns. In year 2005, China has started to consume big quantities of coppers and thus base on cycle time of 15 – 20 years, domestic scrap coppers in China is expected to reach 3.8 million mt by year 2025. China's government has indicated that it

is taking measures to replace the imports with domestic resources before the end of 2019. The move is also in tandem with current softening investment activity as credit and fiscal spending growth slows in China.

In addition, we have pointed out that such restriction on scrap metals importation by China is not entirely came from environmental consideration:

- In contrary to other countries, scrap metals in China are being classified as solid waste that ranks pari passu with plastic and paper waste. The notion of "scrap" and "waste" is completely different though these terms are commonly exchangeable used.

- Restriction on scrap metals importation is through notification to WTO instead of serving a notice to Secretariat of Basel Convention.

- Allowance for importation of copper ore that is less environmentally friendly than copper recycling.

A study on China's administration of solid waste policy clearly revealed that solid waste policy was initially used as a catalyst to boost economy while later becoming a mechanism to conserve its economy and environment at this point of time. It is about the art of balancing to cater the needs of country.

c) Homogenous and not contaminated with scheduled waste and e-waste

The term "homogenous" by its definition of identical mechanical properties and sizes if were to impose on importation of scrap metals is impractical and it does not have any correlation with administration of scheduled wastes and relevancy with impacts on environment.

Thanks to clarification from respected Ketua Pengarah Puan Norlin that homogenous in this context only refers to scrap metals that are not contaminated with scheduled waste and e-waste (with interim threshold of 0.3%). In fact, she welcomes suggestions to replace the word "homogenous" as it is misleading.

We are fully agreed with deletion of the term "homogenous" and re-worded as follows:

"*Bahan sekerap yang tidak tercemar dengan mana-mana buangan terjadual. Pengecualian kepada e-waste dengan had batasan yang dibenarkan iaitu tidak melebihi 0.3% daripada berat keseluruhan.*"

d) Preconditions on importation of scrap metals

We have highlighted a few inputs regarding the preconditions on importation of scrap metals as follows:

- Manufacturing License

    - Approximately 98.5% of business establishments in Malaysia are SMEs. Imposition of precondition for manufacturing license would deter healthy growth of industries implying that importation of scrap metals would only be confined to companies with stronger capital.

- License from PDRM

  - License from PDRM is meant for scrap yards. Many times, scrap metals were imported by factories as feed materials to its production. These factories usually do not involve in trading of scrap metals

- Importation of Scrap shall not Exceed Existing Production Capacity

  - We would like to seek clarification on "*importation of scrap shall not exceed…*" refers to per shipment basis, per month basis or total raw materials in hand? Stock turnover may differ from one company to another and across the industry.

- The Premise needs to be Equipped with Facilities for Recycling and Imported Scrap Metals has to be Processed to Ingots with Purity of 90% and Above

  - We wish to highlight that many industrial operators are not equipped with smelting facilities. Indeed, segregated scrap metals are sent to smelters for further processing. Besides, traders appointed by steel mills to procure scrap metals do not have recycling and smelting facilities since scrap metals are being sent directly to steel mills. These operators and traders have been conducting business for years in the industry.

- Certification of e-Waste Percentage from Accredited Lab

  - It would be useful to publish a list of accredited labs at DOE official website to facilitate engagement of their services. Besides, we would like to propose that accreditation shall not be given exclusively to one party to ensure that there is no backlog in their service rendering and at competitive price.

- Environmental Audit

  - Whilst we appreciate the need of DOE to ensure proper disposal of e-waste to licensed processors in accordance with EQA. We are not sure about justification, frequency and ways to conduct environmental audit particularly at port level. Cost of environmental audit would be substantial and burdening if were to conduct on per container basis.

As importation of goods and materials are governed by Custom Act 1967. Imposition of preconditions for scrap metals importation shall be effected into Schedule 3 of Custom (Prohibition of Imports) Order 2017 that clearly defined import manner base upon respective HS Code.

e) Prohibition to import scrap transformers and scrap metals that are contaminated with oil and grease

- Scrap transformers

  - As highlighted during the briefing that was held on 3rd December 2019, we attached herewith *our proposal for importation of scrap transformer - oil had been drained off and de-pollution process had been dully performed*.

- Scrap metals or scraps from engines / vehicles that are contaminated with oil and grease

- According to Basel's requirement, there are 4 (four) criteria to be satisfied for the purpose of hazardous waste classification namely:
  a) Waste stream (source of waste)
  b) Hazardous characteristics
  c) Type of wastes
  d) Content of hazardous substances in waste (its related concentration)

- We are of the view that *on the basis of substance over form*, classification of wastes shall take a step further to identify and analyse possible hazardous characteristics of a particular waste and its related concentration so that comprehensive conclusion can be derived on its impact towards our environment.

- In addition to the need of assessing hazardous characteristics, the related magnitude of its impact shall be taken into consideration. *Basel Convention reiterate its practicality by stressing that "…..to an extent to render them hazardous."* Therefore, in the case of scrap metals or scraps from engines / vehicles that are contaminated with oil and grease, the whole lot of container should not be classified as SW422 in view of its insignificant impact to the environment.

- In fact, imported scrap auto parts or engines would have gone through depollution process. Common practice for End of Life Vehicle (ELV) processing centre is to drain off the oil through gravity of last drop.

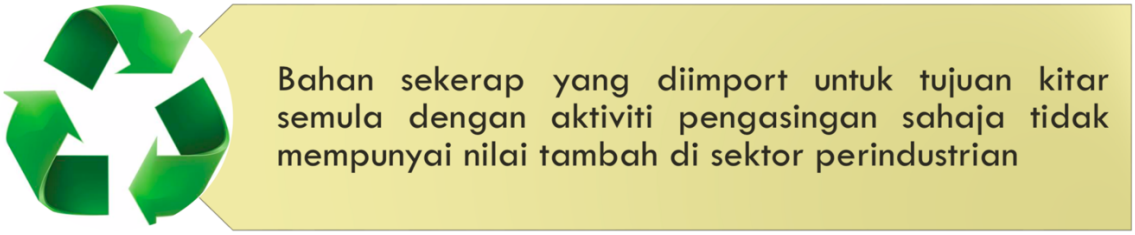
The formulation of policy apart from addressing environmental concerns, other pertinent factors such as well beings of operators, job opportunities and economic impacts shall be taken into consideration. The industry has been long in existence whereby some of them have been operating for 30 years. Thus, we would like to appeal for consideration of our proposal on scrap transformers importation and introduction of threshold for oil and grease.

Conclusion

We recognize and appreciate government's efforts in addressing current environmental concerns and it is at prerogative of officers to administer. Admittedly, plastic wastes recycling had adversely affected our environment but still there is a need for a paradigm shift in mindset that recycling is good and thus open eye to long-sighted opportunities and benefits. This would promote a feasible and sensible ways to regulate the industry and the ability to strike an equilibrium point between environmental and commercial considerations.

Clarity in rules and regulations is paramount in regulating the industry in order to avoid unwanted confusion in the market. We would like to request a chance to review the revised version of Garis Panduan subsequent to officers incorporating feedbacks from the market. At the same time, we would also like to appeal for considerable time allowance to get ourselves prepared prior to the adoption of such Garis Panduan.

1. IMPORTATION OF SCRAPS FOR THE PURPOSE OF SEGREGATION IS NON-VALUE ADDING TO THE INDUSTRY SECTOR.



1.1. Findings, Issues and Challenges

i. Negative Perception from Spill-Over Effect of Plastic Waste

Following the spill-over effect of plastic waste, there is a perception that recycling is in fact polluting. Numerous cases were spotted whereby unscrupulous recyclers (primarily operators from China) conduct recycling business in the following manner:

a) Scrap metals were imported and segregated. Valuable metals recovered from recycling process were then exported to overseas.
b) Plant was not maintained properly and debris from recycling was not treated as it should be.
c) Operate illegally with no show of intention for legal and environmental compliance.
d) The absent of local employment and jobs are being carried out by illegal foreign workers.
e) Even some recyclers are sending contaminated waste for landfill or river was contaminated through the discharge of fluid from production in the absent of proper facilities.

Based upon above findings, importing scrap metal for the purpose of segregation is perceived to be non-value adding not only to the industry but also to the nation as a whole especially from the aspect of environment and local job opportunities. While we agreed on the statement that were based on above mentioned observations, such perception is not entirely true from industry and economy point of view.

ii. Roles of Recycling in Circular Economy

Looking beyond the current linear economy of take-make-waste extractive industrial model, a circular economy paves the ways to re-think the utulisation of finite resources. In this manner, recycling undoubtly forms an integral part to building our circular economy.

In the context of ferrous metals, copper is a recyclable material without losing its mechanical properties. Recycling copper saves 85% of the energy needed to produce new copper and eliminates emissions of sulfur dioxide and carbon dioxide from extraction. Accordingly, in US and Europe, more than 50% of copper used came from recycling.

iii. Potential Development to New Economy

Renewable energy systems use up to 12 times more copper than conventional power systems and copper consumption is predicted to rise more than 40% by year 2035. By taking advantage of distinctive copper properties that is recyclable in nature and taking a ride on current trend that is marching towards green technologies and digitalisation (that translate to higher demand for copper consumption), the move to drive non-ferrous upstream activities is pivotal and is cohesive to foster development of new economy. Such move is feasible as strategic advantage can be derived from a comprehensive copper supply chain and across its related industries (when it is built). For example, potential savings to downstream companies on stock holding costs, logistic costs and provision of raw materials that is fit for use attributed to establishment of effective quality loop within the supply chain.

iv. Can't See the Forest for the Trees

Back to basic, recycling in fact starts from segregation. Existence of unscrupulous recyclers in the market shall not be a reason to discourage development of such potential industry and to neglect genuine operators leaving them in an unrest situation. ***Holistically and sensibly, we should not withdraw ourselves from the potential benefits that is able to be derived from solidifying copper related supply chain in the long run. Upstream prosperities would certainly induce further downstream investment as revealed from interest shown by Jiangxi Copper Co. to build a plant to produce refined copper in Malaysia and thus It is about regulating the industry instead of putting a full stop when it starts to blossom.***

We shall acknowledge that segregation brings value to us such as job opportunities and cheaper raw materials to cross-industrial players as pointed out by representative from MISIF in the case of scrap transformer during the briefing. Not to mention potential savings when segregated coppers were processed as cathode for raw materials used by operators in cross-industry. It is about fostering the move from upstream to downstream along the supply chain for greater benefits. ***You just got to allow some grace period for upstream to blossom first in order to demonstrate promisable supply of raw materials and competitive cost advantage to induce subsequent players along the supply chain to come in***. We agreed and opined that efforts should be taken in addressing unscrupulous operators, just like what is happening to other industries. However, the industry itself is not at fault especially when it is capable to develop further to downstream that further value adds to the industry and to the nation.

1.2. Proposal

We do not fully agree with the statement that importation of scrap for the purpose of segregation is non-value adding to the industry sector. As pointed out above, its value had spurred across other industries that potentially promotes greater value when a comprehensive supply chain has been solidified to induce new investments in downstream possibly from green technologies and digital sectors. ***Structurally, upstream development is synergistic with building a circular economy, a departure from current linear economy of take-make-waste***. This is a segment of new economy that worth a thought on means and

ways to manage and to regulate. While that requires further time and efforts, append below are our proposal for initial kick off:

a) Requirement for a paradigm shift in mindset that recycling is good and thus open eye to long-sighted opportunities and benefits. This would promote a feasible and sensible ways to regulate the industry and the ability to strike an equilibrium point between environmental and commercial considerations.

b) Allowance for importation of scrap for the purpose of segregation as time allowance is paramount in establishing upstream activities that is capable to induce further downstream investment.

c) Gradually foster the development of downstream activities through: (1) imposition of export duty for exportation of segregated products so that operators would further invest to downstream production; and (2) promotion of conducive environment for downstream investment including facilitation of "surat sokongan" from DOE on PBT license application and manufacturing license issuance from MIDA.

d) Clarity in rules and regulations that is based upon Basel Convention adoption in order to avoid confusion among international players.

2. CHINA CONTROL THE IMPORT OF SCRAP METALS

2.1. Findings, Issues and Challenges

i. There are Other Reasons on Restrictions of Scrap Metals Importation

China has started to administer importation of solid wastes since 1996 by adjusting allowable imported quantities against shortages in feed materials for its manufacturing needs. Recently, China has broadened the scope to impose conditional restriction on scrap metals importation (only allows high purity metals to be imported) that has been seen as an effort to address environmental concerns subsequent to plastic and paper waste.

China's demand for copper is five-fold of U.S. while scrap coppers produced by U.S. is far beyond its domestic industrial needs and thus U.S. had then become the largest scrap coppers exporting country to China. During that time, about 70% of scrap copper needed in China was sourced from overseas (a direct and effective source of copper supply).

However, according to recent statistics from U.S. Census Bureau, importation of scrap copper from U.S. to China has reduced from 688,000 mt in year 2017 to 275,000 mt in year 2018 partly due to restriction on imports and a surge on import duty resulting from trade war with U.S. If this phenomenon were to assess from basic economic supply and demand theory, the reasoning of why China can withstand such a deep cut in scrap coppers importation against its industrial needs is attributed to a surge in domestic scrap coppers thanks to years of infrastructural and industrial development. As opposed to previous 70% ratio mentioned above, domestic supply of scrap coppers continues to outpace its imported quantities. ***In year 2005, China has started to consume big quantities of coppers and thus base on cycle time of 15 – 20 years, domestic scrap coppers in China is expected to reach 3.8 million mt by year 2025***.

The Chinese government began taking action to phase out such imports in 2017, despite citing environmental concerns, there are other reasons for restricting importation of scrap metals. Many recyclers and policy analysts, however, sense protectionism in the moves, since China's government has indicated it is taking measures to replace the imports with domestic resources before the end of 2019. The move is also in tandem with current softening investment activity as credit and fiscal spending growth slows in China.

ii. The Dilemma of Classifying Scrap Metals as Solid Wastes

In contrary to other countries, scrap metals in China are being classified as solid waste that ranks pari passu with plastic and paper waste. With that, scrap metals have jumped on the bandwagon being one of the targets in the pursuit to combat against foreign wastes by China government. "***Substance over form***", it is a matter of classification and how to convince China's government that scrap metals is in fact not a solid waste. ***The notion of "scrap" and "waste" is entirely different though these terms are commonly exchangeable used by public***.

During Cesco Asia Copper Week ("ACW 2019") that was held on 19th November 2019 in Shanghai, Wang Ji-Wei, Secretary General of China Nonferrous Metals Industry Association's ("CMRA") said vast majority of current copper scrap imports could be renamed as merchandise "recyclable copper raw materials" rather than scrap.

If the renaming were to be successful, certain copper scraps would have been delisted from solid waste category. As China's domestic copper scraps is escalating, we have reasons to believe that such renaming policy would be geared towards higher purity scraps that were meant for industrial use.

iii. Restriction on Scrap Metals Importation is through Notification to WTO

If the restriction was made solely from environmental perspective, it would be more appropriate to execute via Article 3 of Basel Convention by serving a notice to Secretariat of the Convention of the wastes that are defined as hazardous. Indeed, such restriction was served by China through notification to WTO. In other words, such restriction on scrap metals importation shall neither be perceived solely as an environmental move nor a guide to draw a conclusive statement that scrap metals exhibit hazardous characteristics. Append below is Article 3 of Basel Convention.

ARTICLE 3

NATIONAL DEFINITIONS OF HAZARDOUS WASTES

1. Each Party shall, within six months of becoming a Party to this Convention, inform the Secretariat of the Convention of the wastes, other than those listed in Annexes I and II, considered or defined as hazardous under its national legislation and of any requirements concerning transboundary movement procedures applicable to such wastes.

2. Each Party shall subsequently inform the Secretariat of any significant changes to the information it has provided pursuant to paragraph 1.

3. The Secretariat shall forthwith inform all Parties of the information it has received pursuant to paragraphs 1 and 2.

4. Parties shall be responsible for making the information transmitted to them by the Secretariat under paragraph 3 available to their exporters.

iv. Allowance for Importation of Copper Ore

Copper ore does not contain pure copper, but either a copper-sulphur-iron compound (chalcopyrite) or a copper-sulphur compound (chalcocite). The metal must first be separated from such minerals by means of multi-step metallurgic processes. In many cases these processes are so complicated that they account for up to 30 per cent of the metal price. In most cases newly mined copper ores contain between 0.6 and 1 per cent of copper. Purity of these copper ores would then be upgraded to between 25% - 30% prior to its further metallurgical process.

On the other hand, the energy requirements of recycled copper are as much as 85% to 90% less than the processing of new copper from virgin ore. Besides, copper recycling helps to reduce emissions of sulfur dioxide and CO_2 if were to compare with copper mining. Certainly, importation of copper scraps would be preferable than copper ores from environmental perspective.

In the contrary, China allows copper ores to come in while restricting importation of copper scraps. In fact, less than 50% of coppers used in China came from recycling. While we praise China's green move to restrict scrap metals importation, the above contradicting facts leave us ponder…..

2.2. Proposal

A study on China's administration of solid waste policy clearly reflects the path of a country's development and transformation whereby in the management of solid waste importation, China government has from various perspective navigating the country with the aim to upscale its economy and ensure a success in transformation to a developed country.

From the initial relaxation allowing China to be the biggest importer of solid wastes for the purpose of extracting feed materials to complement its industrial and infrastructural development till current tightening of each single screw for those solid wastes that are no longer needed or can be replaced domestically. It is about the move to establish a sustainable recycling loop within its economy domestically.

Solid waste policy was initially used as a catalyst to boost economy while later becoming a mechanism to conserve its economy and environment at this point of time. It is about the art of balancing to cater the needs of country. Certainly, each country is different from every aspect and not necessary to follow. However, policy making got to be evaluated from different perspective and congruence to country's direction.

3. HOMOGENOUS AND NOT CONTAMINATED WITH E-WASTE AND SCHEDULED WASTE

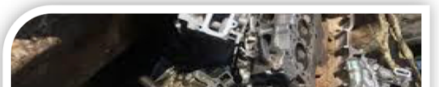
Homogenous dan tidak bercampur dengan logam-logam lain dan tidak tercemar dengan mana-mana buangan terjadual

3.1. Findings, Issues and Challenges

"Homogenous" is a word that is so heavy that its use has to be handled with due care. It might be just a choice of words for policy makers or regulators but in the eye of industrial operators its implication is catastrophic.

In the context of metals, homogenous is commonly refers to identical mechanical properties and sizes. This is the reason why during the briefing there was a question raised on sizes of scrap metals. It is impossible to achieve homogenous state without going through manufacturing processes needless to say for scrap metals to ensure uniformity in its properties and sizes. For example, append below is an extract from subsequent slide during the briefing that clearly stated that aluminium scraps from vehicles with depollution certificate are allowed to import. Set aside the practical aspect to obtain depollution certificate (which is meant for POPs), these aluminium scraps would not be able to satisfy definition of homogenous as revealed in the photo that come with variety in sizes and different composition of mechanical properties.

Sekerap aluminium daripada kenderaan kecuali dengan sijil nyahpencemaran (depollution) daripada agensi penguatkuasa negara pengeksport



Thanks to clarification from respected Ketua Pengarah Puan Norlin that homogenous in this context only refers to scrap metals that are not contaminated with scheduled waste and e-waste (with interim threshold of 0.3%). In fact, she welcomes suggestions to replace the word "homogenous" as it is misleading.

3.2. Proposal

The term "homogenous" by its definition of identical mechanical properties and sizes if were to impose on importation of scrap metals is impractical and it does not have any correlation with administration of scheduled wastes and relevancy with impacts on environment. We are fully agreed with deletion of the term "homogenous" and re-worded as follows:

"***Bahan sekerap yang tidak tercemar dengan mana-mana buangan terjadual. Pengecualian kepada e-waste dengan had batasan yang dibenarkan iaitu tidak melebihi 0.3% daripada berat keseluruhan."***

4. PRECONDITIONS ON IMPORTATION OF SCRAP METALS

4.1. Findings, Issues and Challenges

- Manufacturing License

  Approximately 98.5% of business establishments in Malaysia are SMEs. Imposition of precondition for manufacturing license would deter healthy growth of industries implying that importation of scrap metals would only be confined to companies with stronger capital. Furthermore, we were made to understand that manufacturing license has been freezed for companies having scrap metals as feed materials. There are many SMEs that have been operating for years that are now struggling for survival in the light of current economic conditions. It would be rather tough for them to increase the paid-up capital to RM2.5 million.

- License from PDRM

  License from PDRM is meant to prevent easy disposal of stolen materials through scrap yards. As such, each scrap yard is required to obtain license from PDRM as a means to alert and to prevent scrap yard operators from buying stolen goods. Many times, scrap metals were imported by factories as feed materials to its production. These factories usually do not involve in trading of scrap metals that by nature of its business do not require license from PDRM.

- Importation of Scrap shall not Exceed Existing Production Capacity

  We would like to seek clarification on "*importation of scrap shall not exceed…*" refers to per shipment basis, per month basis or total raw materials in hand? Stock turnover may differ from one company to another and across the industry. It is also subject to seasonal fluctuation and shipment lead time. Usually raw materials would be stocked up base on procurement and delivery lead time to ensure production consistency.

- The Premise needs to be Equipped with Facilities for Recycling and Imported Scrap Metals has to be Processed to Ingots with Purity of 90% and Above

  We wish to highlight that many industrial operators are not equipped with smelting facilities. Indeed, segregated scrap metals are sent to smelters for further processing. Besides, traders appointed by steel mills to procure scrap metals do not have recycling and smelting facilities since scrap metals are being sent directly to steel mills. These operators and traders have been conducting business for years in the industry.

- Certification of e-Waste Percentage from Accredited Lab

  It would be useful to publish a list of accredited labs at DOE official website to facilitate engagement of their services. Besides, we would like to propose that accreditation shall not be given exclusively to one party to ensure that there is no backlog in their service rendering and at competitive price.

- Environmental Audit

  Whilst we appreciate the need of DOE to ensure proper disposal of e-waste to licensed processors in accordance with EQA. We are not sure about justification, frequency and ways to conduct environmental audit particularly at port level. Cost of environmental audit would be substantial and burdening if were to conduct on per container basis.

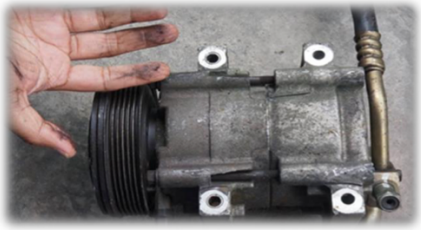
4.2. Proposal

As importation of goods and materials are governed by Custom Act 1967. Imposition of precondition for scrap metals importation shall be effected into Schedule 3 of Custom (Prohibition of Imports) Order 2017 that clearly defined import manner base upon respective HS Code.

5. PROHIBITION TO IMPORT SCRAP TRANSFORMERS AND SCRAP METALS THAT ARE CONTAMINATED WITH OIL AND GREASE

Sekerap transformer

Sekerap daripada bahagian enjin kenderaan, yang dicemari minyak terpakai – SW 422



Sekerap logam yang dicemari buangan terjadual - SW422

5.1. Findings, Issues and Challenges

- Scrap transformers

  As highlighted during the briefing that was held on 3rd December 2019, we attached herewith ***our proposal for importation of scrap transformer - oil had been drained off and de-pollution process had been dully performed***.

- Scrap metals or scraps from engines / vehicles that are contaminated with oil and grease

  According to Basel's requirement, there are 4 (four) criteria to be satisfied for the purpose of hazardous waste classification namely:

  a) Waste stream (source of waste)
  b) Hazardous characteristics
  c) Type of wastes
  d) Content of hazardous substances in waste (its related concentration)

  These are the four pillars required for classification of hazardous waste for the purpose of safeguarding our environment in a practical and sensible manner. Malaysia has adopted criteria (a) and (c) for the purpose of classification whereby Schedule 1 of

Environmental Quality (Scheduled Wastes) (Amendment) Regulations 2007 was drafted from the aspect of waste stream specified in Annex I and type of wastes contained in Annex VIII of Basel Convention.

By adopting criteria (a) and (c) in isolation would not be sufficient as there is a chance that we might overlook certain hazardous wastes that may not have surfaced previously. On the other hand, it is impractical to classify certain scraps that is contaminated with negligible amount of hazardous waste as SW422 in view of its insignificant impact to the environment.

We are of the view that ***on the basis of substance over form***, classification of wastes shall take a step further to identify and analyse possible hazardous characteristics of a particular waste and its related concentration so that comprehensive conclusion can be derived on its impact towards our environment.

In addition to the need of assessing hazardous characteristics, the related magnitude of its impact shall be taken into consideration. ***Basel Convention reiterate its practicality by stressing that "…..to an extent to render them hazardous."*** Therefore, in the case of scrap metals or scraps from engines / vehicles that are contaminated with oil and grease, the whole lot of container should not be classified as SW422 on the justification that its "concentration" is negligible to have caused an impact to environment that warrant us the need for special handling at the cost of forgoing potential economic values

In fact, imported scrap auto parts or engines would have gone through depollution process. Common practice for End of Life Vehicle (ELV) processing centre is to drain off the oil through gravity of last drop.

Therefore, decision on import sanctions for oil / grease contaminated auto parts should be assessed wisely from all aspect of abovementioned criteria so that it would not jeopardise potential economic values while it is in accordance with sound environmental management and best practices on sensible and justifiable grounds.

5.2. Proposal

We recognize and appreciate government's efforts in addressing current environmental concerns and it is at prerogative of officers to administer. We would like to take this opportunity to highlight our concern that imposition of zero allowance may not be practical with current business nature and practices. The formulation of policy apart from addressing environmental concerns, other pertinent factors such as well beings of operators, job opportunities and economic impacts shall be taken into consideration. The industry has been long in existence whereby some of them have been operating for 30 years. Thus, we would like to appeal for consideration of our proposal on scrap transformers importation and introduction of threshold for oil and grease.

PROPOSAL FOR SCRAP TRANSFORMER IMPORTATION

Background

Transformers generally can be classified to two types namely dry and oil cooled transformers. This paper would primarily focus on oil cooled transformers attributed to it's insulting fluids that it may be contaminated with hazardous pollutants in accordance with Basel definition.

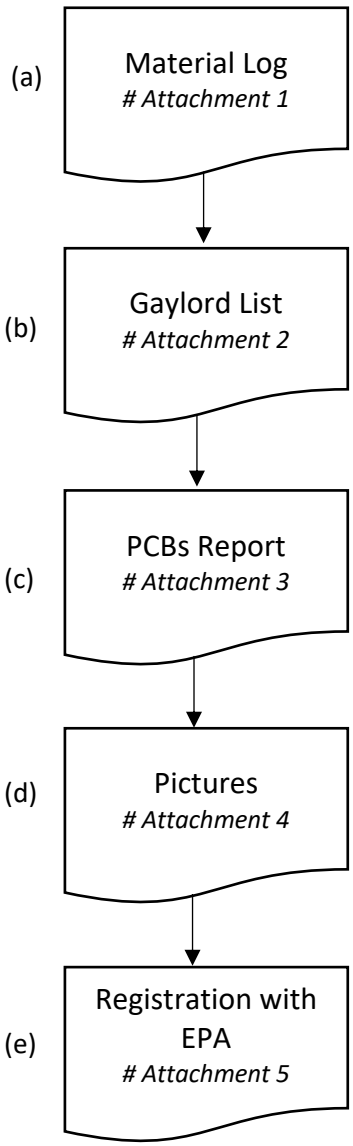
The purpose of this paper is to propose importation of oil cooled scrap transformers with justification that such importation do not cause any adverse impact to the environment and it is in compliance with Basel definition, Custom (Prohibition of Imports) Order 2017 and Schedule 1 of Environmental Quality (Scheduled Wastes) (Amendment) Regulations 2007 ***when the transformer oil had been drained off and de-pollution process had been dully performed***.

Title			Descriptions	
1	Designation		Oil cooled / liquid filled / wet transformers, hereinafter refers as "oil transformer".	
2	Descriptions		As the name suggested, oil cooled transformer utilises transformer oil or insulating oil to insulate, suppress corona discharge and arcing, and to serve as a coolant to transformer. Prior to being one of the initial twelve (12) persistent organic pollutants ("POP") restricted under the Stockholm Convention in 1980, Polychlorinated Biphenyls (PCBs), a form of synthetic chlorinated organic chemicals, was widely used as insulating fluid in oil transformer since they have high dielectric strength and are not flammable. Subsequent to the ban, mineral oil had replaced PCBs as major transformer oil. However, in view of longer life expectancy of PCBs transformer of approximately 40 years, due diligence has been enforced on transformer disposal. To date, it is essential to identify and ascertain if the transformer is PCBs-contaminated during the process of disposal.	
3	Hazardous Substances		a) b)	Polychlorinated Biphenyls (PCBs) Mineral Oil

4	Applicable Basel Codes		**Polychlorinated Biphenyls (PCBs)** In accordance with Basel Convention General Technical Guidelines for the Environmentally Sound Management of Wastes Consisting of, Containing or Contamined with Persistent Organic Pollutants (POPs), the following List A of Annex VIII are applicable to PCBs: a) A1180 *Waste electrical and electronic assemblies or scrap[1] containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III (note the related entry on list B B1110)[2]* [1] *This entry does not include scrap assemblies from electric power generation.* [2] *PCBs are at a concentration level of 50 mg/kg or more.* b) A3180 *Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more[3]* [3] *The 50 mg/kg level is considered to be an internationally practical level for all wastes. However, many individual countries have established lower regulatory levels (e.g., 20 mg/kg) for specific wastes.* Whereas, applicable List B of Annex IX that mentioned about PCBs is as follows: a) B1040 *Scrap assemblies from electrical power generation not contaminated with lubricating oil, PCB or PCT to an extent to render them hazardous* **Mineral Oil** Mineral oil is defined in Annex I under Y8 coding as "waste mineral oils unfit for their originally intended use". As such, it was further classified in List A of Annex VIII as follows:

			a) A3020 *Waste mineral oils unfit for their originally intended use* b) A4060 *Waste oils/water, hydrocarbons/water mixtures, emulsions* Mineral oil that contained in scrap transformer, when it is unfit for originally intended use as insulating fluid, it would be classified as hazardous waste. However, if mineral oil was previously used in retrofillig, hazardous assessment shall take into account its PCBs concentration level relatively. On the other hand, A4060 that emphasizes on mixture content and emulsion may not be applicable for scrap transformer importation. Similarly to treaty of PCBs, applicable List B of Annex IX that mentioned about mineral oil is as follows: a) B1040 *Scrap assemblies from electrical power generation not contaminated with lubricating oil, PCB or PCT to an extent to render them hazardous* In determining the extent of mineral oil would have rendered scrap assemblies hazardous, such magnitude was not defined in Basel Convention. Indeed, it is at the prerogative of each nation. General accepted threshold that is widely used by Basel signatories is 0.1% of total weight of scrap assemblies.
5.	Applicable SW Codes		**Polychlorinated Biphenyls (PCBs)** a) SW 318 *Waste, substances and articles containing or contaminated with polychlorinated biphenyls (PCB) or polychlorinated triphenyls (PCT)* **Mineral Oil** In Malaysia, waste oil is classified as scheduled wastes under the First Schedule of the Environmental Quality (Scheduled Wastes) (Amendment) Regulations 2007. Accordingly, there are a few codes that dealt with waste oil as append below: a) SW 305 *Spent lubricating oil* b) SW 306 *Spent hydraulic oil*

			c) SW 307 *Spent mineral oil-water emulsion* d) SW 308 *Oil tanker sludges* e) SW 309 *Oil-water mixture such as ballast water* f) SW 310 *Sludge from mineral oil storage tank* g) SW 311 *Waste oil or oily sludges* h) SW 312 *Oily residue from automotive workshop, service station oil or grease interceptor* i) SW 314 *Oil or sludge from oil refinery or petrochemical plant* j) SW 408 *Contaminated soil, debris or matter resulting from cleaning-up of a spill of chemical, mineral oil or scheduled wastes* k) SW409 *Disposed containers, bas or equipment contaminated with chemicals, pesticides, mineral oil or schedule waste*
6.	Threshold		**Polychlorinated Biphenyls (PCBs)** Reference is made to *Point (4) of Applicable Basel Codes* in this paper on treaty of PCBs and it is proposed that allowable tolerance to be set at concentration level of 50mg/Kg or less. **Mineral Oil** It is proposed to set at 0.1% of total weight of scrap assemblies that is widely applied by Basel signatories. Despite the fact that PCBs and Mineral Oil are identified hazardous pollutants in scrap transformers, importation of scrap transformers that was within the threshold mentioned above are in accordance with general practices and it would not have possessed adverse impact to our health and environment.
7.	HS Code		740400: Copper Scrap

8.	De-Pollution		It is industrial practices that for exportation of scrap transformers, such transformer needs to go through de-pollution / de-contamination process. Scrap transformers that have been certified under de-pollution process would be tested if the concentration level of Polychlorinated Biphenyls (PCBs) is kept below allowable threshold of 50ppm. Below is an illustration of process flow for tracing scrap transformers in the container to their respective PCBs Report.  a) Material Log – Please refer to Attachment (1) *Material log would spell out container no., shipping details and list of gaylord in the container. In this case, there are eight gaylords in container CMAU1924472. Each gaylord is identified with four digits for example 6462 as shown in Attachment 1.*

			b) Gaylord List – Please refer to Attachment (2) *Gaylord list would list down each core coil (with bar code) contained in each gaylord and summary of the test result. For example, gaylord with box number 6462 contained 14 items. Among others is core coil of 1 phase pole transformer that carries bar code number 00052886 that was tested on 9 June 2019 with PCBs ppm at 28ppm.* c) PCBs Report – Please refer to Attachment (3) *PCBs Report contains a list of core coils identified by bar code number and test results. The oil sample is tested according to 4 methods (standards): Arcoclor 1242, Arcolor 1254, Arcolor 1260, Arcolor other. As you can see the test results varies from one method to another. These results would be added together as can be seen in 00052886R with total ppm sum up at 28ppm. As highlighted from PCB Report, PCBs testing was made for licensed processor FT LLC dba Emerald Transformer.* d) Pictures – Please refer to Attachment (4) *The picture will show how they identified the bar code of core coil from each gaylord that goes into a container.* e) Registration with Environment Protection Agency (EPA) - Please refer to Attachment (5) *This is a registration certificate issued by Florida Department of Environmental Protection to Florida Transformer LLC dba Emerald Transformer as a licensed processor.*

Conclusion

The paper has detailed out hazardous aspect of oil transformers and proposed widely accepted threshold to comply with transboundary movement of hazardous waste and their disposal. Accordingly, there are two possible hazardous waste identified in accordance with applicable Basel classification and Environmental Quality (Scheduled Wastes) (Amendment) Regulations 2007 in Malaysia.

In addition, the paper has suggested an alternate method to ensure that Polychlorinated Biphenyls (PCBs) contained in oil transformers (if any) are being kept below the threshold subsequent to the de-pollution process and the concentration level has been certified by PCBs Report prior to exportation that it is capable to trace from scrap transformers in the container to its licensed processor and respective test results.

We are therefore would like to propose Authorities to adopt PCBs Report for the purpose of allowing scrap transformers to be imported to Malaysia under HS Code 740400 at threshold that have been stipulated in Basel Convention.

Attachment 1

MATERIAL LOG

Container #	Truck #	Date Shipped	Sold To		Seal #	Trucking Company	
CMAU1924472	190	9/23/2019	Core Metals		C3920943	Chickasaw / CCS	
Item #	Material Type	Description	Gross	Tare	Net		
6453	al/cu C&C	box	6142	158	5984		
6461	al/cu C&C	box	5650	155	5495		
6462	al/cu C&C	box	5872	156	5716		
6465	al/cu C&C	box	5750	162	5588		
6466	al/cu C&C	box	5427	159	5268		
6427	al/cu C&C	box	5670	150	5520		
6396	al/cu C&C	box	5854	160	5694		
6478	al/cu C&C	box	5735	155	5580		
Totals			46100	1255	44845		
Booking # :	AYU0299924	P.O.D.	Penang		Date:	09/23/19	
Loaded By :	Zach P.	P.O. #	F2369				

Attachment 2

Job Transaction ID	Dept Code	Job Type Description	Screen Test	Cert No	PCB PPM	Test Date
Box Number 6478						
00052393	Decom	1 Phase Pole Transformer	NPD			
00052397	Decom	1 Phase Pole Transformer	NPD			
00052413	Decom	1 Phase Pole Transformer	CC	66831	0.1	8/19/2019
00052667	Decom	1 Phase Pole Transformer	GC	00052667	0.1	9/5/2019
00052675	Decom	1 Phase Pole Transformer	GC	00052675	2	9/5/2019
00052693	Decom	Auto Booster	GC	00052693	6	9/5/2019
00052695	Decom	Auto Booster	NPD			
00052928	Decom	1 Phase Pole Transformer	NPD			
00052929	Decom	1 Phase Pole Transformer	GC	00052929	0.1	9/9/2019
00052939	Decom	1 Phase Pole Transformer	GC	00052939	0.1	9/9/2019
00052983	Decom	1 Phase Pole Transformer	NPD			
00052984	Decom	1 Phase Pole Transformer	NPD			
00052985	Decom	1 Phase Pole Transformer	NPD			
00052986	Decom	1 Phase Pole Transformer	GC	00052986	0.1	9/10/2019
00052987	Decom	1 Phase Pole Transformer	NPD			
00053069	Decom	1 Phase Pole Transformer	NPD			
00053101	Decom	1 Phase Pole Transformer	NPD			
00053112	Decom	1 Phase Pole Transformer	GC	00053112	0.1	9/9/2019
00053114	Decom	1 Phase Pole Transformer	NPD			
00053122	Decom	1 Phase Pole Transformer	CC	999999	0.1	3/15/2019
00053173	Decom	1 Phase Pole Transformer	GC	00053173	0.1	9/11/2019
00053212	Decom	1 Phase Pole Transformer	NPD			
00053215	Decom	1 Phase Pole Transformer	NPD			
00053216	Decom	1 Phase Pole Transformer	NPD			
00053232	Decom	1 Phase Pole Transformer	NPD			
00053235	Decom	1 Phase Pole Transformer	NPD			
00053237	Decom	1 Phase Pole Transformer	GC	00053237	0.1	9/9/2019
Box Number 6462						
00051326	Decom	1 Phase Pad Transformer	NPD			
00052047	Decom	1 Phase Pad Transformer	NPD			
00052051	Decom	1 Phase Pad Transformer	GC	00052051	0.1	9/3/2019
00052500	Decom	1 Phase Pole Transformer	NPD			
00052503	Decom	1 Phase Pole Transformer	NPD			
00052504	Decom	1 Phase Pole Transformer	NPD			
00052869	Decom	1 Phase Pole Transformer	NPD			
00052878	Decom	1 Phase Pole Transformer	NPD			
00052886	Decom	1 Phase Pole Transformer	GC	00052886	28	9/6/2019
00052911	Decom	Auto Booster	GC	00052911	0.1	9/6/2019
00052912	Decom	Auto Booster	GC	00052912	13	9/6/2019
00052913	Decom	Auto Booster	GC	00052913	4	9/6/2019
00052914	Decom	1 Phase Pole Transformer	GC	00052914	8	9/6/2019
00052915	Decom	Auto Booster	GC	00052915	0.1	9/6/2019
Box Number 6454						
00052045	Decom	1 Phase Pad Transformer	NPD			
00052050	Decom	1 Phase Pad Transformer	NPD			
00052498	Decom	1 Phase Pole Transformer	NPD			
00052519	Decom	1 Phase Pole Transformer	NPD			
00052795	Decom	1 Phase Pole Transformer	GC	00052795	0.1	9/6/2019
00052800	Decom	1 Phase Pole Transformer	GC	00052800	0.1	9/6/2019
00052808	Decom	1 Phase Pole Transformer	GC	00052808	0.1	9/6/2019

Attachment 3

PCB Report

FT LLC dba Emerald Transformer
4509 State Hwy 83 N
DeFuniak Springs, FL, 32433

Phone (850) 892-2711

Report # 090619 Date Analyzed: 9/6/2019 11:21:00 AM Method: EPA SW-846 Method 8082

Barcode	Serial Number	Aroclor 1242	Aroclor 1254	Aroclor 1260	Aroclor Other	Total Conc (PPM)	Customer ID	Comments
00052795R		0	0	0	0	< 1		
00052800R		0	0	0	0	< 1		
00052808R		0	0	0	0	< 1		
00052830R		0	0	0	0	< 1		
00052832R		0	0	0	0	< 1		
00052873R		0	0	0	0	< 1		
00052880R		0	0	0	0	< 1		
00052882R		0	0	0	0	< 1		
00052886R		6	0	22	0	28		
00052889R		0	11	0	0	11		
00052904R		0	0	0	0	< 1		
00052907R		0	0	0	0	< 1		
00052909R		0	0	0	0	< 1		
00052911R		0	0	0	0	< 1		
00052912R		0	0	13	0	13		
00052913R		0	0	4	0	4		
00052914R		0	8	0	0	8		
00052915R		0	0	0	0	< 1		
Sample Count: 18 of 18 Samples								

Provided for Customer
FTI DBA EMERALD
TRANSFORMER
Load: N/A

Re-Print

Emerald /GC Laboratory
Signature TMckinney
Completed by: TERESAMcKINNEY

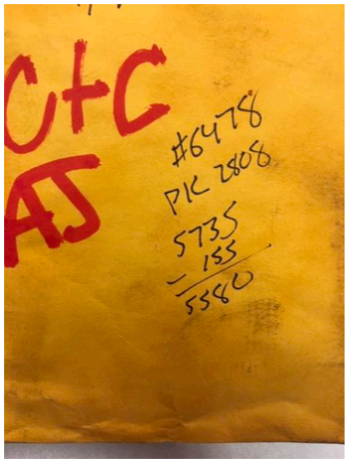
Date : 11/1/2019 11:41:14 AM

1 of 1

Attachment 4

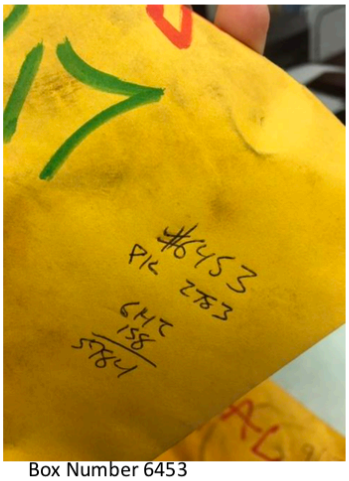
Box Number 6462

Barcodes for Box #6462



Box Number 6478

Barcodes for Box # 6478



Box Number 6453

Barcodes for Box # 6453

Attachment 5

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

August 14, 2019

Jessica Pennington
Florida Transformer LLC DBA Emerald Transformer
PO Box 507
Defuniak Springs, FL 32433

BE IT KNOWN THAT

Florida Transformer LLC DBA Emerald Transformer
4509 State Highway 83 N
Defuniak Springs, FL 32433- 3960

IS HEREBY REGISTERED AS A USED OIL

Transporter, Transfer Facility, Processor, Marketer, Filter Transporter

pursuant to Chapter 62-710, Florida Administrative Code (F.A.C)
For regulatory guidance, go to:
http://www.dep.state.fl.us/waste/categories/used_oil/default.htm
The Department of Environmental Protection hereby issues
Registration Number **FLR000168203** on August 14, 2019
Transporter Type: **FH**

This registration will expire on 6/30/2020

This certificate documents receipt of your annual registration and annual report. It shall be displayed in a prominent place at your facility. This certificate and your cancelled check are your receipts.

Janet K. Ashwood

Janet Ashwood
Environmental Consultant
Waste Compliance Assistance Program

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