

SHARP

Be Original.



Think nature
It is more beautiful than you had imagined

**Sharp North Malaysia Sdn. Bhd.
Environmental Report 2023**

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Message from MD

SNM is an Audio Product manufacturer located in Sungai Petani, Kedah, which was established since December 1974 and has been awarded ISO 14001 certification since 1999.

SNM, beside product manufacturing operation, we are also very concerned about environmental preservation in our operation. Therefore we are committed to comply with all applicable laws or regulation related to environment.

Several eco-positive activities had been carried out throughout the company to meet the environmental objective In FY2022 in-order to minimize the environmental impact such as energy saving through energy saving program by reduction approximately 462K metric tons of Co2 per year and increase awareness level of staff in energy saving.

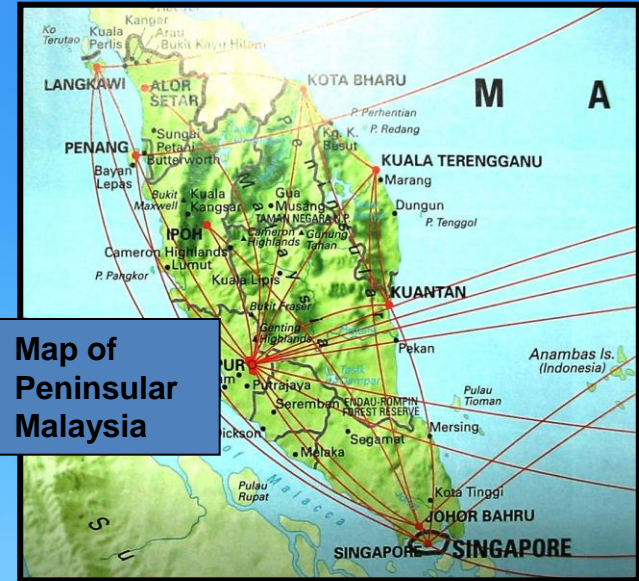
Besides the environmental awareness, training had been carried out as one of the important eco-positive activities. We had conducted the Chemical Spillage Drill, Chemical Safety Training, Scheduled Waste Handling Training, create awareness on Hazards Risk Assessment and Risk Control and so on for all the related key persons to improve their knowledge.

We will continue to enhance our activities in environmental conservation by conducting *Gotong-royong* in collaboration with governmental agencies in preserving the country's environment.

Mr. Sam Chen Sheng Yuan
Managing Director
Sharp North Malaysia

Company Profile

Company Name	SHARP NORTH MALAYSIA SDN. BHD.
Managing Director	Mr. Sam Chen Sheng Yuan
Address	Lot 202, Bakar Arang Industrial Estate, 08000 Sungai Petani, Kedah, West Malaysia.
Date of Incorporation	31 st December 1974
Date of Production Commencement	1 st January 1976
Number of Employees	1,954
Land Area	63,521 m ²
Build-up Area	48,690 m ²
Paid Up Capital	RM 24,000,000 (About U\$5,700,000)



Map of Peninsular Malaysia



Georgetown





PENANG

North-South Highway

Penang airport

Penang Bridge

Our Main Products

 	<p>Finished Goods</p> <ul style="list-style-type: none"> · CD/ Micro-Compo/ Hi-Fi Compo/ Slim Micro Compo · AV Receiver / Slim AVR · Sound Bar · Sound Partner · CD/ SD Card Compo System · Bluetooth Related Products · Clock Audio · Game Console
 	<p>Key Components & EMS</p> <ul style="list-style-type: none"> · Key Component : CD Changer/ CD Mechanism Unit · EMS – PCBA : Car Audio, Automotive Lighting, Motor Driver, PCB, SMPS, PLC · EMS – Box Build : Synthesizer, Bluetooth i-Remote, Game Player, Game Sound, Game Console, USB Microphone



Environmental Policy & Certification

SHARP NORTH MALAYSIA SDN. BHD.

ENVIRONMENTAL POLICY
POLISI ALAM SEKITAR

Sharp North Malaysia Sdn. Bhd. (SNM) recognizes that the Company has substantial responsibility and commitment to continually improve in the Environmental Management System and programs.

Sharp North Malaysia Sdn. Bhd. (SNM) mengenalpastikan bahawa Syarikat mempunyai tanggungjawab dan komitmen dalam peningkatan berterusan Sistem Pengurusan Alam Sekitar dan program yang berkaitan dengan alam sekitar.

The Company shall fulfil its compliance obligations including all applicable environmental laws and regulations. The Company shall take every measure to prevent pollution, promote waste minimization and conservation of natural resources through self-regulation approach.

Syarikat akan mematuhi semua undang-undang alam sekitar dan tanggungjawabnya atas alam sekitar. Syarikat bersedia untuk mengambil langkah sewajarnya untuk mencegah pencemaran alam sekitar, menggalakkan pengurangan sisa buangan dan pemuliharaan sumber semula jadi secara pematuhan sendiri.

In order to sustain and ensure the effectiveness of the Environmental Management System and achieve its intended outcomes, the Company will also undertake the following:-

Untuk memastikan dan mengekalkan tahap kecekapan dan keberkesanan Sistem Pengurusan Alam Sekitar dan mencapai keputusan seperti yang diinginkan, Syarikat juga akan mengambil kira langkah-langkah berikut:-

- 1) Ensure a safe and healthy working environment for all its employees and business partners.
Memastikan persekitaran tempat kerja yang selamat dan sihat untuk semua pekerja dan rakan niaganya.
- 2) Periodically review and enhance its environmental performance to ensure the achievement of its environmental objectives and targets.
Menghaji dari masa ke semasa dan meningkatkan prestasi alam sekitar bagi memastikan pencapaian objektif alam sekitar Syarikat.
- 3) Communicating this Environmental Policy to all employees and business partners.
Berkomunikasi polisi alam sekitar ini kepada semua pekerja dan rakan niaga Syarikat.
- 4) Make this policy available to all interested parties.
Menyediakan polisi alam sekitar ini untuk semua pihak yang berminat.

In conducting the business activities, the employees and business partners of SNM must comply with this policy in the daily activities and shall strive to protect the environment diligently.

Dalam menjalankan aktiviti-aktiviti perniagaan, semua pekerja dan rakan niaga SNM perlu mematuhi polisi ini dalam aktiviti harian dan dikehendaki berusaha bersungguh-sungguh untuk melindungi alam sekitar kita.


Mr. Sam Chen Sheng Yuan
Managing Director

Date: 22 March 2023
Revision: 6



CERTIFICATE

kiwa Cermet Italia S.p.A.
Società con azionisti unici,
soggetta all'attività di
direzione e coordinamento di
Kiwa Italia Holding Srl
Via Castano, 20
40037 Cornaro dell'Enza
(BO)
Tel +39 051 459.3.111
Fax +39 051 703.362
E-mail: info@kiwacermet.it
www.kiwa.it

CERMET



Reg. Number	13862 A-E	Valid From	2022-12-06
First issue date	2013-12-30	Last change date	2022-12-06
Valid until	2025-12-29	IAF Sector	19

Environmental Management System Certificate
ISO 14001:2015

We certify that the Environmental System of the Organization:

SHARP NORTH MALAYSIA SDN. BHD.

is in compliance with the Standard UNI EN ISO 14001:2015 for the following products/services:

Design, manufacturing and supply of multimedia audio system include avr, imini/micro compo system, sound bar, bluetooth speaker, party speaker & other similar products.
Provision of EMS solution including manufacturing of PCB assembly and related products through the reflow, wave, manual soldering, assembly and testing processes.
Manufacturing of video game console including accessory parts as well as service parts.

IPresident
Giampiero Belcredi

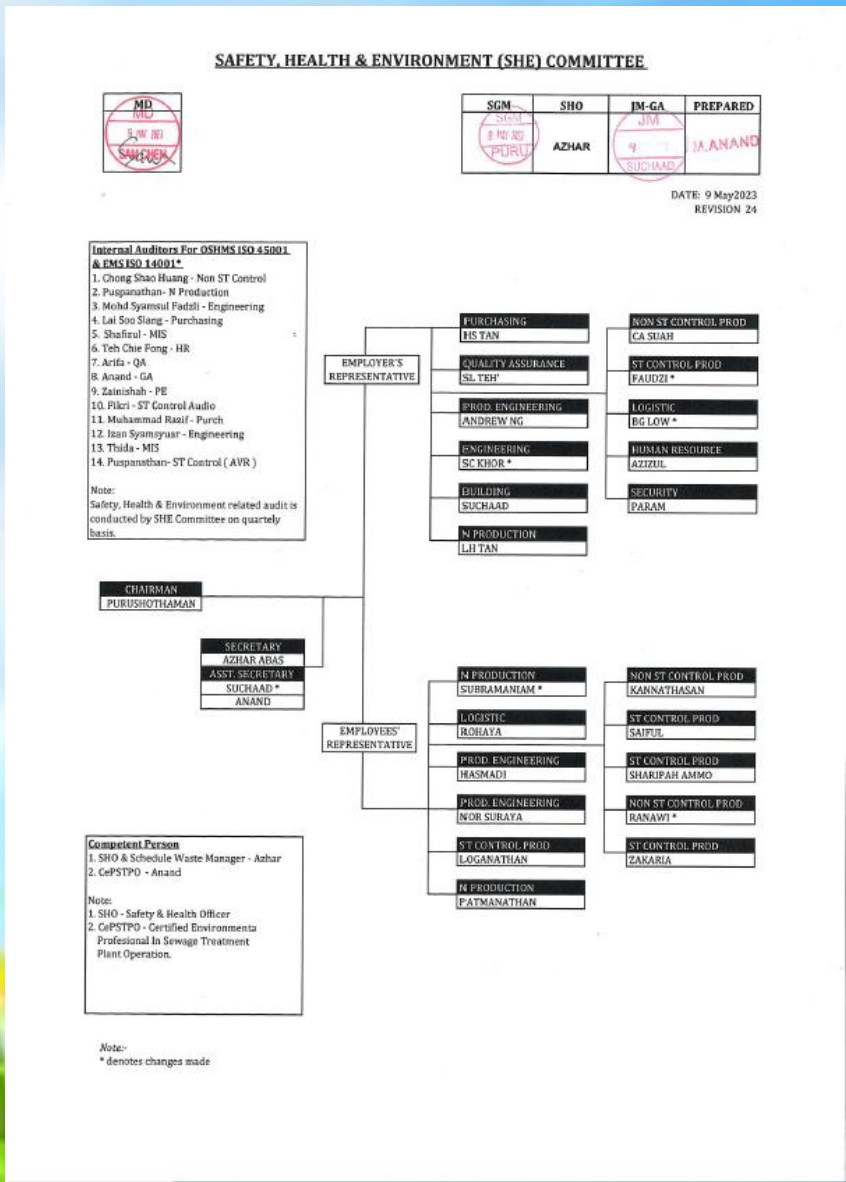
The maintaining of the certification is subject to annual surveillance and dependent on the observance of Kiwa Cermet Italia contractual requirements.
The date of issuance of this certificate is the date of first issue by another accredited body.
This certificate is composed of 1 page.

SHARP NORTH MALAYSIA SDN. BHD.

Registered Headquarters
Lot 202, Bakar Arang Industrial Estate, Kuala Muda, 08000 Sungai Petani, Kedah, Malaysia
Certified sites
Lot 202, Bakar Arang Industrial Estate, Kuala Muda, 08000 Sungai Petani, Kedah, Malaysia



Environmental Management Systems



- EMR is to ensure the compliance of the company to ISO 14001:2015 standards.
- Each EMS Working Committee's Responsibilities :
 - Achievement of objective/ target
 - Setting program and activities
 - Ensure the compliance of legal requirements.
- Departmental Representative is responsible to ensure the company operation is comply to EMS 14001:2015 standards and take correction action if necessary

Environmental Management Systems

Environmental Education

In order to enhance the knowledge and competency of all employees in the environmental aspects, SNM had conducted several sessions of training program on ISO 14001:2015 Environmental Management System in the fiscal 2022.

Date	Program	Targeted group	Goal	No. of participants
25 Aug' 22	Contractors & Vendors briefing on Safety, Health, environment & Security.	All contractors & vendors entering the factory compound.	To create awareness of contractors & vendors towards safety & health, security and environmental requirements .	22
29 Aug' 22				19
23 Feb' 22	Scheduled Waste Handling	Scheduled Waste Handler	Understand the handling of storage and disposal of schedule waste according to schedule waste regulation 2005 by Department of Environment	10
18 Aug' 22				25

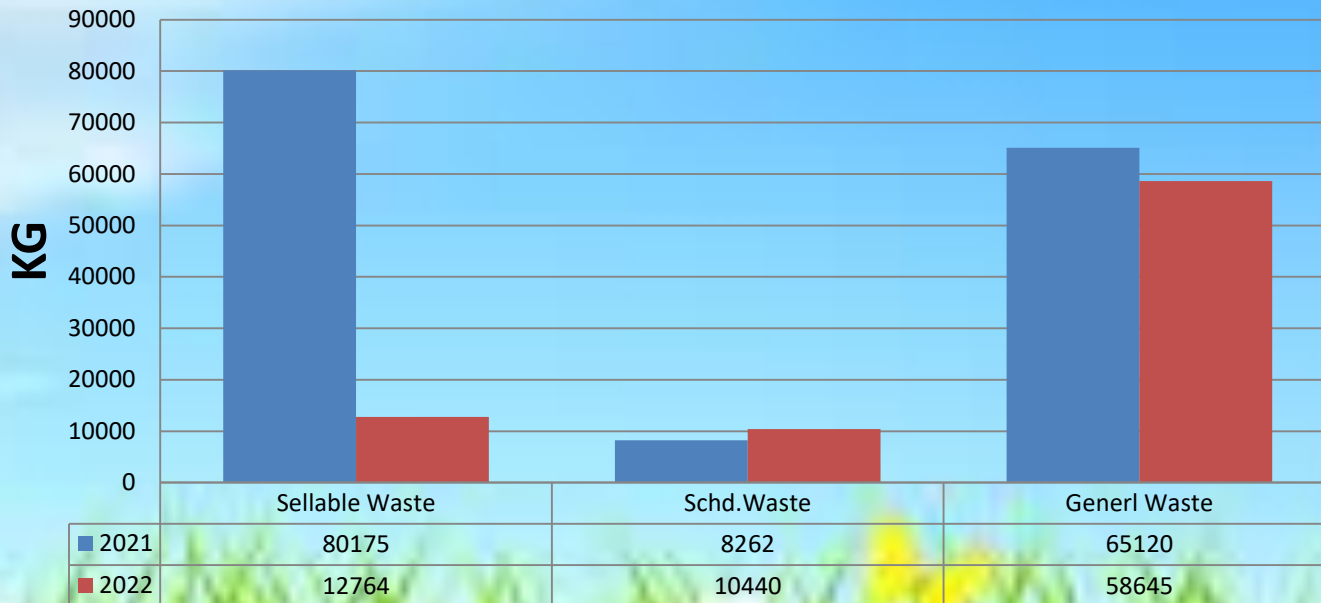
Environmental Impacts & Reduction Measures

1. Minimization and Recycle of Waste

Generally, SNM categorizes waste into 3 types :

- a) Sellable Waste
- b) Scheduled Waste
- c) General Waste

CATEGORY OF WASTE



The increasing of Sellable Waste and Schedule Waste due to high production order.

a) Sellable Waste



The Sellable waste being collected and sold to collector for recycling . In 2021 80,175 kg to 127,164 kg in 2022 - An increment of 46,989 kg (66.11 %) due to high production.

b) Scheduled Waste



Scheduled waste generated in SNM increases from 8,262 kg/lit (2021) to 10,440 kg/lit (2022). An increment of 2178 kg/lit (26.36 %) due to high production demand.

Electronic Waste (E-Waste) Disposal



Clear instruction and proper labeling are available to ensure proper usage of E-Waste Bin by employees

E-Waste includes all the electronic wastes which are destined for reuse, resale, recycling or disposal. Two E-Waste yellow bins are available in SNM . The purpose of E-Waste bins are to ensure that the handling and disposal of E-Waste (SW-110) are compliance with Environmental Quality Act 1974 and requirement of Department of Environmental. Beside that, separate the E-Waste from mixed up with general waste in company.

2. Reduction of Water Usage

Item	Unit	22F	22L
Amount	m ³	35,818	37,325
Payment	RM	61,282	76,423

The increasing of water usage was due to high production order and additional of manpower.

Reduction Measures :

SNM Rain Water Reading Record

Fiscal	Usage of Rain Water (m ³)
22F	360
22L	199

SNM Well Water Reading Record

Fiscal	Usage of Well Water (m ³)
22F	202
22L	178



Rain Water Tank

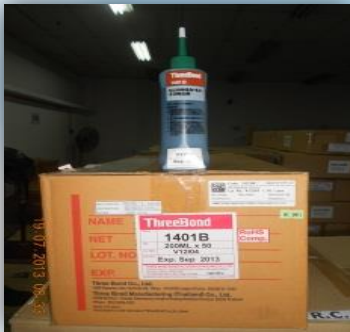
There are 2 water tanks in SNM for the purpose of rainwater collection. We have been using the rain water for toilet cistern since year 2005.



We have been using the well water for gardening since year 2015.

3. Management of Chemical

Chemical Substances



ThreeBond 1401B



Sankol Lubricants 1001Z



Propanol



Tamura Flux EC-19S-10



Tape Head Cleaner TLT808



Floil

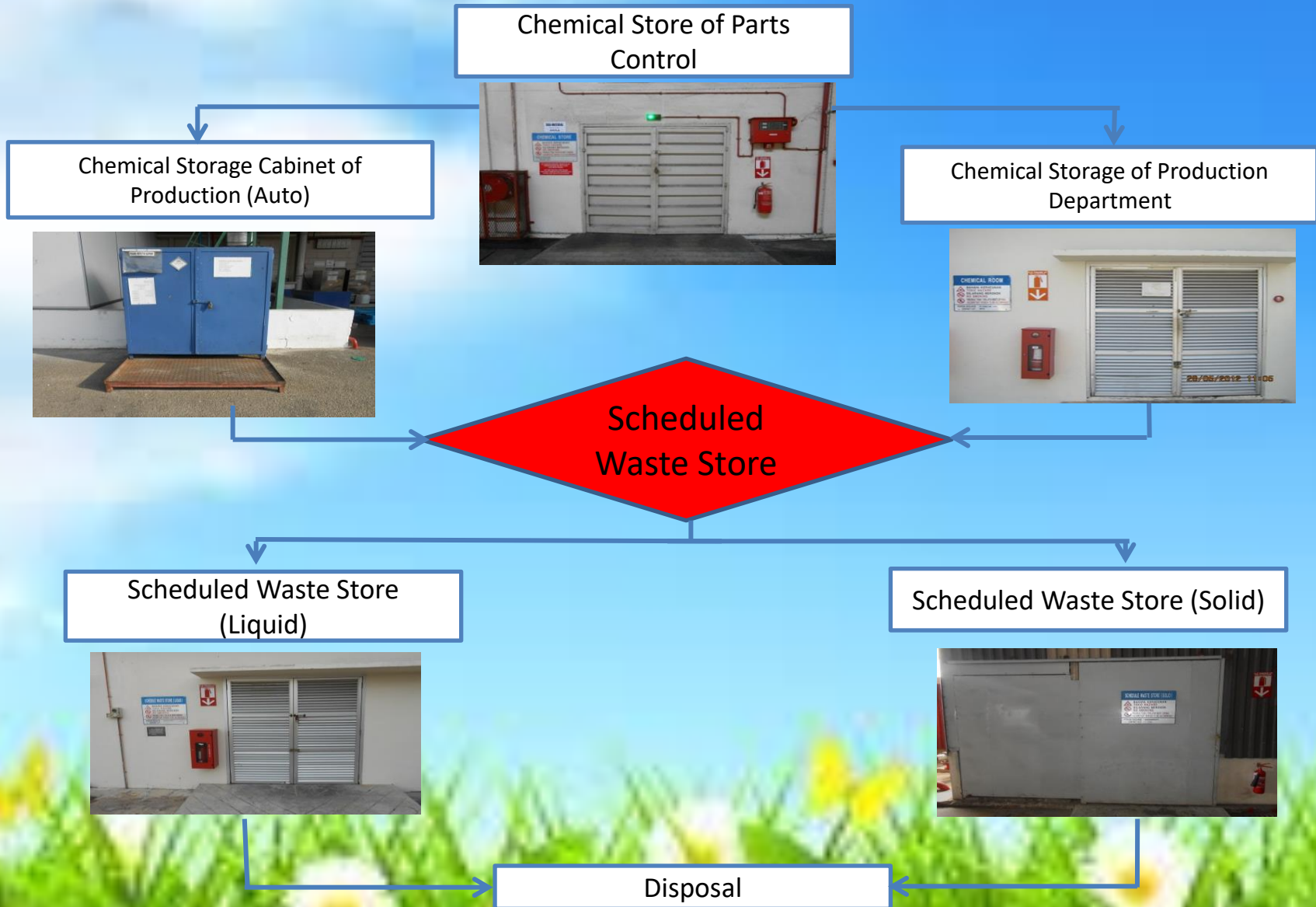


Diabond Zbond-N-1603H

Upon receiving of new chemical substances, will be stored at Chemical Store Room at Parts Control.

All chemical substances are stored in chemical storage room. Only competent person who had undergone training in handling chemical substances are allowed to enter and handle the chemical substances. The used chemical or scheduled waste are being stored at scheduled waste store room before disposal.

Work Flow of Chemical Substances Management



4. Compliance with Environmental Regulations

To ensure the compliance with MS 1596 Standard under the Malaysian Environmental Quality (Clean Air) Regulations 2014,

4 (A) Atmosphere Emissions – Air Emission Monitoring For Chimney

Schedule of Monitoring

Chimney	Frequency of Monitoring
2,3,4,5,6,8,9	Conducted once a year

Results (Based on date of Monitoring conducted on April' 23

Parameter	Limit Value	Sampling Date : 19 April 2023						
		Chimney No. 2	Chimney No. 3	Chimney No. 4	Chimney No. 5	Chimney No. 6	Chimney No. 8	Chimney No. 9
Particulate Matter	50mg/m ³	2.311	2.781	5.354	4.093	21.412	8.891	13.591
Ammonia	30 mg/m ³	ND<0.154	ND<0.139	ND<0.134	ND<0.136	ND<0.134	ND<0.127	ND<0.129
Chlorine	5mg/m ³	ND<0.154	ND<0.139	ND<0.134	ND<0.136	ND<0.134	ND<0.127	ND<0.129
Hydrochloric Acid	30mg/m ³	ND<0.154	ND<0.139	ND<0.134	ND<0.136	ND<0.13	ND<0.127	ND<0.129
Hydrogen Sulphide	5mg/m ³	ND<0.167	ND<0.167	ND<0.167	ND<0.167	ND<0.167	ND<0.167	ND<0.167
Nitrogen Dioxide	400mg/m ³	ND<0.008	ND<0.007	ND<0.007	ND<0.007	ND<0.007	ND<0.006	ND<0.006
Non-Methane Volatile Organic Compound	150	ND<0.039	ND<0.035	ND<0.033	ND<0.034	ND<0.035	ND<0.318	ND<0.032
Sulphur Dioxide	400mg/m ³	ND<0.008	ND<0.007	ND<0.007	ND<0.007	ND<0.007	ND<0.006	ND<0.006
Tin	5mg/m ³	ND<0.039	ND<0.035	ND<0.033	ND<0.034	5	ND<0.318	ND<0.132
Lead	1mg/m ³	ND<0.039	ND<0.035	ND<0.033	ND<0.034	1	ND<0.318	ND<0.132
Mercury	0.2mg/m ³	ND<0.039	ND<0.035	ND<0.033	ND<0.034	0.2	ND<0.318	ND<0.132

Layout for the Location of Chimney

SHARP NORTH MALAYSIA SDN.BHD. ~ CENTRALISED LEV EXHAUST SYSTEM

LEV EXHAUST FAN #8" SR007154



- 1) F1 WIRING PCB TOUCH-UP EXHAUST
- 2) ROSENBERG, 40" DIA. 40,000 CFM
- 3) MOTOR SPEC: 18.5 KW, 1440 RPM.
- 4) BLADES: ROSENBERG 1250-18-500-15"
- 5) INSTALLED: DEC 2002
- 6) CHANGE NEW MOTOR: 21 APR 2012

LEV EXHAUST FAN #6" SR007154

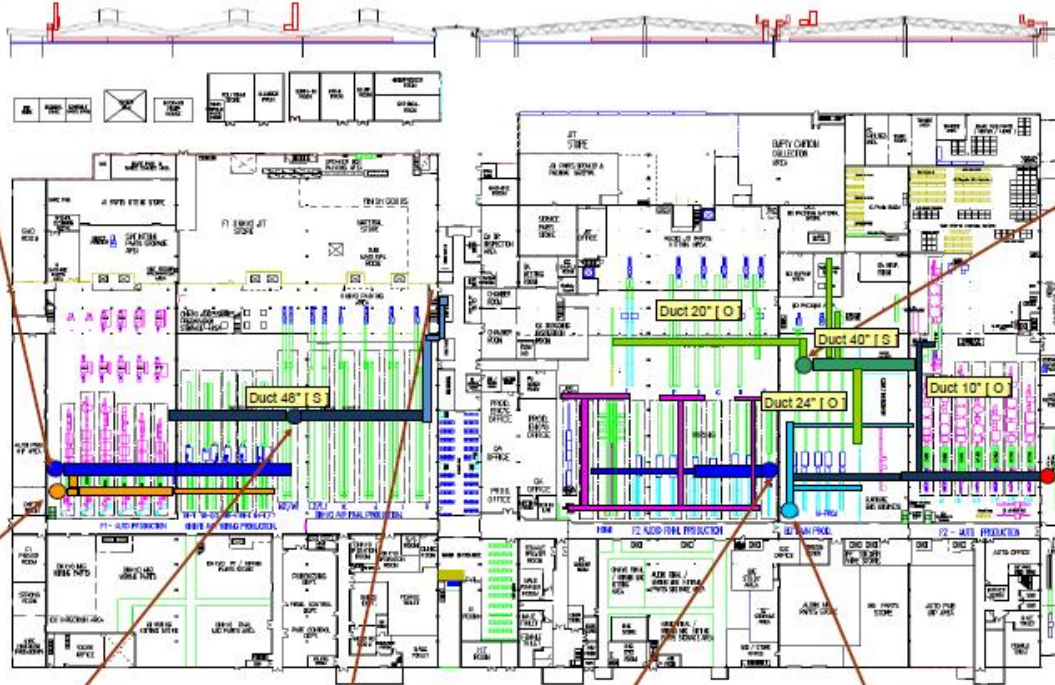


- 1) F1 SOLDERING MACHINE EXHAUST
- 2) COWDRAY FAN, 40" DIA. 30,000 CFM
- 3) MOTOR SPEC: 15 KW, 1450 RPM.
- 4) MOTOR: TEGO 3P INDUCTION
- 5) LEV INSTALLED: DEC 2002
- 6) CHIMNEY INSTALLED: JAN 2011

LEV EXHAUST FAN #9" MO 023181



- 1) F1 ONKYO WIRING / PT SOLDERING EXHAUST
- 2) AXIAL FAN, 48" DIA. 40,000 CFM
- 3) MOTOR SPEC: 18.5 KW, 1440 RPM.
- 4) BLADES: ROSENBERG 1250-18-500-15"
- 5) INSTALLED: 15-APRIL 2011



Fume Filtering System For Solder Dross Separator Machine



" Exhaust Fan " Yearly Servicing Record :
General Servicing for Exhaust Fan & Change Bearing Motor , Cleaning Internal Fan Body

Year 2018 : #5 / #6	Date : 19/05/2018
PO : 7000065476	
Year 2018 : #3 / #6	Date : 29/06/2018
PO : 7000065958	
Year 2017: #4 / #9	Date : 09/12/2017
PO : 7000064651	

PR : 5000091004 Plan Sched : Mid Dec 2018
12.11.2018 PO : 7000066335

LEV EXHAUST FAN #3 SR013722



- 1) F2 WIRING TOUCH-UP & SOLDERING MACHINE EXHAUST SYSTEM
- 2) AXIAL FAN, 48" DIA. 40,000 CFM
- 3) MOTOR SPEC: 18.57 KW, 1440 RPM.
- 4) BLADES: ROSENBERG 1250-18-500-15"
- 5) INSTALLED: APR 2005
- 6) CHANGE NEW MOTOR: 28 AUG 2011
- 7) CHANGE NEW FAN BLADE

BRANCO
MODEL : BRC 180M B3
18.5KW 1470 RPM

LEV EXHAUST FAN #2 SR007173



- 1) F2 WIRING SOLDERING MACHINE EXHAUST
- 2) UN-KNOW MOTOR SPEC.
- 3) INSTALLED: UN-KNOW
- 4) CONTROL PANEL UPGRADE 23/07/2012

LEV EXHAUST FAN #4 MO 022534



- 1) F2 BD SOLDER MACHINE EXHAUST
- 2) AXIAL FAN, 48" DIA. 40,000 CFM
- 3) MOTOR SPEC: 18.5 KW, 1440 RPM.
- 4) BLADES:ROSENBERG 1250-18-500-15"
- 5) INSTALLED : 08-NOV 2010

SR018426
SR005240



- 1) F2 AUTO SMT MACHINE EXHAUST
 - 2) AXIAL FAN, 48" DIA. 40,000 CFM
 - 3) MOTOR SPEC: 18.5 KW, 1466 RPM.
 - 4) MOTOR: BRC-180M-4B3
 - 5) BLADES:ROSENBERG 1250-18-500-24"
 - 6) INSTALLED : JUN 2006
- Blades Repaired : 30/04/2010
Replace New Motor : 12/10/2013

Jabatan Alam Sekitar [DOE]

CHIMNEY ==> #C9
Ruj AS(B/K) 38/310/900/052 (14)
Date :02/AUG/2011

CHIMNEY ==> #C4
Ruj AS(B/K) 38/310/900/052 (10)
Date :26/Apr/2011

CHIMNEY ==> #C5
Ruj AS(B/K) 38/310/900/052 (5)
Date :07/Apr/2011

CHIMNEY ==> #C2 / #C5
Ruj AS(KP)(B/K) 38320/008 (04)
Date :09/Nov/2006

CHIMNEY ==> #C3 / #C8
Ruj AS(KP)(B/K) 38320/008 (07)
Date :18/Dec/2005

4 (B) Pollutant Loads of Public Water Areas

1) Drain Water Monitoring Result for the Fiscal Year 2022

Note : Reference specification is based on Environmental Quality (Industrial Effluent) Regulation 2009.
This monitoring is only additional test for reference only as there is no effluent treatment plant in SNM.

JIT Store

No	Parameters	Std B	Result	OK
1	Aluminium : mg/l	15	0.09	✓
2	Ammoniacal Nitrogen : mg/l	20	ND	✓
3	Arsenic : mg/l	0.10	ND	✓
4	Barium : mg/l	2.0	0.03	✓
5	BOD- 5 days test @ 20 degree Celcius : mg/l	50	ND	✓
6	Boron : mg/l	4.0	0.01	✓
7	Cadmium : mg/l	0.02	ND	✓
8	Chemical Oxygen Demand /COD : mg/l	200	ND	✓
9	Chromium Hexavalent : mg/l	0.05	ND	✓
10	Chromium Trivalent : mg/l	1.0	ND	✓
11	Color : ADMI units	200	ND	✓
12	Copper : mg/l	1.0	0.03	✓
13	Cyanide : mg/l	0.10	ND	✓
14	Fluoride : mg/l	5.0	ND	✓
15	Formaldehyde : mg/l	2.0	ND	✓

16	Free Residue Chlorine : mg/l	2.0	ND	✓
17	Iron : mg/l	5.0	0.23	✓
18	Lead : mg/l	0.5	ND	✓
19	Manganese : mg/l	1.0	0.02	✓
20	Mercury : mg/l	0.05	ND	✓
21	Nickel : mg/l	1.0	ND	✓
22	Oil and Grease : mg/l	10.0	5	✓
23	pH value @ 25 degree Celcius	5.5-9.0	6	✓
24	Phenol : mg/l	1.0	ND	✓
25	Selenium : mg/l	0.5	ND	✓
26	Silver : mg/l	1.0	ND	✓
27	Sulphide : mg/l	0.50	ND	✓
28	Suspended Solids : mg/l	100	13	✓
29	Temperature : Degree Celcius	40	29.4	✓
30	Tin : mg/l	1.0	ND	✓
31	Zinc : mg/l	2.0	0.56	✓

Result : All complied with Environmental Quality (Industrial Effluent) Regulation 2009

1) Drain Water Monitoring Result for the Fiscal Year 2022

Note : Reference specification is based on Environmental Quality (Industrial Effluent) Regulation 2009.
This monitoring is only additional test for reference only as there is no effluent treatment plant in SNM.

Local Store

No	Parameters	Std B	Result	OK
1	Aluminium : mg/l	15	0.13	✓
2	Ammoniacal Nitrogen : mg/l	20	ND	✓
3	Arsenic : mg/l	0.10	ND	✓
4	Barium : mg/l	2.0	0.04	✓
5	BOD- 5 days test @ 20 degree Celcius : mg/l	50	11	✓
6	Boron : mg/l	4.0	0.03	✓
7	Cadmium : mg/l	0.02	ND	✓
8	Chemical Oxygen Demand /COD : mg/l	200	42	✓
9	Chromium Hexavalent : mg/l	0.05	ND	✓
10	Chromium Trivalent : mg/l	1.0	ND	✓
11	Color : ADMI units	200	ND	✓
12	Copper : mg/l	1.0	0.02	✓
13	Cyanide : mg/l	0.10	ND	✓
14	Fluoride : mg/l	5.0	ND	✓
15	Formaldehyde : mg/l	2.0	ND	✓

16	Free Residue Chlorine : mg/l	2.0	ND	✓
17	Iron : mg/l	5.0	0.25	✓
18	Lead : mg/l	0.5	ND	✓
19	Manganese : mg/l	1.0	0.03	✓
20	Mercury : mg/l	0.05	ND	✓
21	Nickel : mg/l	1.0	ND	✓
22	Oil and Grease : mg/l	10.0	ND	✓
23	pH value @ 25 degree Celcius	5.5-9.0	6.3	✓
24	Phenol : mg/l	1.0	ND	✓
25	Selenium : mg/l	0.5	ND	✓
26	Silver : mg/l	1.0	ND	✓
27	Sulphide : mg/l	0.50	ND	✓
28	Suspended Solids : mg/l	100	35	✓
29	Temperature : Degree Celcius	40	28.5	✓
30	Tin : mg/l	1.0	ND	✓
31	Zinc : mg/l	2.0	0.81	✓

Result : All complied with Environmental Quality (Industrial Effluent) Regulation 2009

2) Sewage Water Monitoring Result for the Fiscal Year 2022

Note: Non compliance to Environmental Quality (Sewage) Regulations 2009 – Regulation 7, Schedule (i) Standard B. Monitoring has been done on a monthly basis.

Date Of Report	Parameters (BOD = Biochemical Oxygen Demand; COD = Chemical Oxygen Demand)	Existing Sewage Treatment (Approved After Jan 1999)	Analysis		
			Result	OK	NG
April-22	BOD, at 20 Deg Celcius : mg/l	60 mg/l	18	✓	
	COD : mg/l`	240 mg/l	28	✓	
	Suspended Solids : mg/l	120 mg/l	<Loq	✓	
	Oil and Grease : mg/l	20 mg/l	<Loq	✓	
	Ammoniacal Nitrogen : mg/l	60 mg/l	26	✓	
May -22	BOD, at 20 Deg Celcius : mg/l	60 mg/l	22	✓	
	COD : mg/l`	240 mg/l	49	✓	
	Suspended Solids : mg/l	120 mg/l	26	✓	
	Oil and Grease : mg/l	20 mg/l	2	✓	
	Ammoniacal Nitrogen : mg/l	60 mg/l	38	✓	
June-22	BOD, at 20 Deg Celcius : mg/l	60 mg/l	21	✓	
	COD : mg/l`	240 mg/l	53	✓	
	Suspended Solids : mg/l	120 mg/l	<Loq	✓	
	Oil and Grease : mg/l	20 mg/l	<Loq	✓	
	Ammoniacal Nitrogen : mg/l	60 mg/l	31	✓	
July-22	Temperature ((as °C)	≤40°C	24.3	✓	
	pH Value @ 25°C	5-5-9.0	7.4		
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	13		
	COD : mg/l`	200 mg/l	43	✓	
	Suspended Solids : mg/l	100 mg/l	11	✓	
	Oil and Grease : mg/l	10 mg/l	<Loq	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	37		x
Aug -22	Temperature ((as °C)	≤40°C	23.4	✓	
	pH Value @ 25°C	5-5-9.0	7.2	✓	
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	48	✓	
	COD : mg/l`	200 mg/l	65	✓	
	Suspended Solids : mg/l	100 mg/l	40	✓	
	Oil and Grease : mg/l	10 mg/l	1	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	35		x

2) Sewage Water Monitoring Result for the Fiscal Year 2022

Date Of Report	Parameters (BOD = Biochemical Oxygen Demand; COD = Chemical Oxygen Demand)	Existing Sewage Treatment (Approved After Jan 1999)	Analysis		
			Result	OK	NG
Sep-22	Temperature ((as °C)	≤40°C	24.1	✓	
	pH Value @ 25°C	5-5-9.0	7.1	✓	
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	43	✓	
	COD : mg/l `	200 mg/l	50	✓	
	Suspended Solids : mg/l	100 mg/l	18	✓	
	Oil and Grease : mg/l	10 mg/l	1	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	25		x
Oct-22	Temperature ((as °C)	≤40°C	22.3		
	pH Value @ 25°C	5-5-9.0	6.9		
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	30		
	COD : mg/l `	200 mg/l	55		
	Suspended Solids : mg/l	100 mg/l	21		
	Oil and Grease : mg/l	10 mg/l	<Loq		
	Ammoniacal Nitrogen : mg/l	20 mg/l	21		x
Nov-22	Temperature ((as °C)	≤40°C	24.3	✓	
	pH Value @ 25°C	5-5-9.0	7.2	✓	
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	<Loq	✓	
	COD : mg/l `	200 mg/l		✓	
	Suspended Solids : mg/l	100 mg/l	<Loq	✓	
	Oil and Grease : mg/l	10 mg/l	<Loq	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	37		x
Dec-22	Temperature ((as °C)	≤40°C	25	✓	
	pH Value @ 25°C	5-5-9.0	7.3	✓	
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	22	✓	
	COD : mg/l `	200 mg/l	55	✓	
	Suspended Solids : mg/l	100 mg/l	<Loq	✓	
	Oil and Grease : mg/l	10 mg/l	1	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	39		x

2) Sewage Water Monitoring Result for the Fiscal Year 2022

Date Of Report	Parameters (BOD = Biochemical Oxygen Demand; COD = Chemical Oxygen Demand)	Existing Sewage Treatment (Approved before Jan 1999)	Analysis		
			Result	OK	NG
Jan-23	Temperature ((as °C)	≤40°C	22.1	✓	
	pH Value @ 25°C	5-5-9.0	7.3	✓	
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	<Loq	✓	
	COD : mg/l`	200 mg/l	57	✓	
	Suspended Solids : mg/l	100 mg/l	13	✓	
	Oil and Grease : mg/l	10 mg/l	5	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	33		X
Feb-23	Temperature ((as °C)	≤40°C	23		
	pH Value @ 25°C	5-5-9.0	7.4		
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	19		
	COD : mg/l`	200 mg/l	44		
	Suspended Solids : mg/l	100 mg/l	12		
	Oil and Grease : mg/l	10 mg/l	1		
	Ammoniacal Nitrogen : mg/l	20 mg/l	32		X
Mar-23	Temperature ((as °C)	≤40°C	23.4	✓	
	pH Value @ 25°C	5-5-9.0	7.5	✓	
	BOD, at 20 Deg Celcius : mg/l	50 mg/l	13	✓	
	COD : mg/l`	200 mg/l	36	✓	
	Suspended Solids : mg/l	100 mg/l	<Loq	✓	
	Oil and Grease : mg/l	10 mg/l	6	✓	
	Ammoniacal Nitrogen : mg/l	20 mg/l	20	✓	

Remaks: The Parameter for Sewage Discharge Water had been changed from July'22 onwards from 5 to 7.(Add temperature / pH value and Ammoniacal Nitrogen)

* Improvement plan for Sewage Treatment Plant in 2024 is to accommodate the above problem.



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