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Guideline for Complying with Regulations of Substances Control (CRSC)

April 2025

Editor	Quality Assurance Department Engineering Administration Group
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Koki Kambe, Director

First, I sincerely would like to express my gratitude for your daily cooperation to the business activities of this company.

This company, "MITSUBISHI HEAVY INDUSTRIES ENGINE & TURBOCHARGER, LTD." (hereinafter referred to as "MHIET") has started its operation on July 1st, 2016, and shall continue to work on the substance control, regarding it as one of the important issues of management.

In September 2008, we have started to follow European REACH regulation with publishing the "Guideline for Complying with Regulations of Substances Control (CRSC (*))".

Each business partner has been cooperating with us by submitting "Non-containing declaration of prohibited substances", and also by submitting the results of the investigation of substances in products using MHIET's information exchange sheet.

In turbocharger business, more strict control of substances list, which is mentioned in the list used among automobile industries (GADSL (**)) and also in specifications of customers, i.e. automobile builders, is required.

In Engine & Energy business, it is required to conform to EU RoHS2 directive, similar regulations in each country, and ship recycling convention.

This guideline specifies substance control laws and regulations to which each delivered product from business partners shall conform and also asks business partners to build the organization so that products can conform to requirements of each substance control laws and regulations all through the supply chain.

In the future, to keep on supplying products that conform to laws and regulations of each country or area is essential to our business to grow in the global market and to enjoy mutual benefit together with business partners.

When single failure is made to comply with various laws and regulations, this will cause market lost, consequently block the growth of the business, and moreover, will spoil the business itself.

We kindly ask business partners to understand the importance of substance control, to build up the control organization including supply chain, and to take proper actions against related laws and regulations.

(*) CRSC: **C**omplying with **R**egulations regarding **S**ubstances **C**ontrol

(**) GADSL: **G**lobal **A**utomotive **D**eclarable **S**ubstance **L**ist

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Revision history

	Date	Executed by	Details
(Created)	November 30, 2012	Shimizu	
(Rev. 1)	November 18, 2013	Shimizu	Unification of a MHI Sagamihara window. Packing material management of direct delivered purchases. The addition of prohibited substances. Rules for filling in the JAMA sheet change.
(Rev. 2)	July 1, 2014	Shimizu	"General Machinery & Special Vehicles" is changed into the "Sagamihara". The address of MHI Sagami's website about material procurement was changed. Department Standard JA019-10 is changed into Domain Standard T00-19-210.
(Rev. 3)	October 1, 2015	Shimizu	Change in investigation rules. EU Ship Recycling Regulation is added. EU CLP Regulation is added.
Created	October 1, 2016	Shimizu	The company's name is changed. URL of procurement HP is changed. Implementation of JAMP check sheet is added. Change of management prohibited substance non containing system. Rules for filling in the information exchange sheet are added. Engine & energy business CRSC is added. Prohibited substances which MHIET defined itself are added.
Rev. 1	March 23, 2020	Ishihara	The JAMP Check sheet was changed to the 4.01 version and frequency of submission was added. Changed the contact information and submission information for the management system for chemical substances contained in products. Changed packaging management to direct shipments and purchases. Table 1 Changes to the list of applicable laws and regulations. Table 2 Changed the list of banned substances. Table 3 Changed the list of controlled substances. Table 4 Changed the MHIET Prohibited Substances List.
Rev. 2	November 15, 2021	Miyazawa	European POPs regulation is added. Check sheet of management system refined by section 5.2(Note 3) is added. Section 5.3 is added. Rules regarding submitting documents other than our specified format is added in section 5.4. Mail addresses are updated. Some intext wording were modified.
Rev. 3	January 25, 2022	Miyazawa	US TSCA (The Toxic Substances Control Act) is added. Correction of error appendix number in section 6. Some intext wording were modified.
Rev. 4	January 24, 2023	Miyazawa	"Corresponding standards in MHIET" of "Engine & Energy business" in Table 1 is changed due to the termination of MSETJ2-001. Mail addresses are updated.
Rev.5	April 1,2024	Arakane	Section 5.5, Tables 1, 2 Add the French Circular Economy Act. Section 6 and 7. Remove ProChemist/AS. Table 1. The name of the law was changed from the new battery directive to the European battery regulation. Some intext wording were modified.
Rev.6	April 1, 2025	Miyazawa	Section 5.2, CiP Management Checklist is added. Table 1, Packaging and Packaging Waste Regulation is added.

* It's established newly as MHIET edition from 2016.

1. Policy of MHIET

For the purpose of controlling substances contained in products, we specify related laws and regulations, prohibited substances, and controlled substance in this guideline.

We ask business partners to control prohibited substances and to comply with requirements of MHIET, to prevent the mixture of prohibited substances in products delivered from business partners.

We may ask business partners to submit the result of study on prohibited substances and/or to audit the status of substance control.

Please cooperate with us and take actions.

The latest version of this guideline can be found on MHIET's website about 'Material Procurement' from the following address.

MHIET's website 'Material Procurement'	https://www.mhi.com/group/mhiet/company/procurement/material
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2. Regulations to comply with

Table 1 shows the regulations with which MHIET should apply. Table 1 may be revised if needed with regulation revision etc.

We ask business partners to confirm the latest information periodically.

3. Prohibited substances

Table 2 shows the prohibited substances specified by MHIET. Table 2 may be revised if needed with regulation revision etc.

We ask business partners to confirm the latest information periodically.

4. Controlled substances

Table 3 shows the controlled substances specified by MHIET. Table 3 may be revised if needed with regulation revision etc.

We ask business partners to confirm the latest information periodically.

5. Requirements to be satisfied by the business partner

MHIET asks you for the following four points as CRSC to the business partners who supply products related to MHIET products.

Requirements to be satisfied by the business partner
1) Submit the contact person's information for CRSC in the business partner
2) Build a management system of regulations regarding substances control in the business partner and non-containing management of prohibited substances
3) Submit the investigation results of specified substances
4) Reply to the investigation results of substances contained in products
5) CRSC of packing materials

5.1 Contact for CRSC

Please submit notice on the business partner's contact window from MHIET for the connection about CRSC and an investigation of substances contained in products. The business partner may apply with the appendix 1 of this guideline "Business partner's contact information for CRSC ", and please submit it to our window below.

When change etc. occur at the submitted window, please submit it again to our window below promptly.

Submission address	Environmental Substances Control Support Center (MHI Sagami High-tech, Ltd.) j_reach_helpdesk@mhi.com
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5.2 Building of management system of regulations regarding substances control and non-containing management of prohibited substances

As the requirement of this Guideline, the business partner should

- build the management system of non-containing prohibited substances.
- implement the non-containing management of prohibited substances and build the management system of material investigation system contained in products through a supply chain.
- submit the "CiP Management Checklist" to confirm the management systems.

When building the management system in the company, MHIET recommend referring "Guidelines for the Management of Chemicals in Products (Edition 4.0)" provided by Joint Article Management Promotion-Consortium (JAMP).

Regarding the Checklist, the detail information is provided following table.

Name	CiP Management Checklist (CiP : Chemicals in Products)
Request of submission	The Checklist submission is required by official letter from MHIET.
Frequency	The submission request is sent at the start of the transaction and once every two years.
Inquiry and submission address	Quality Management Section Quality Assurance Department j_reach_qa@mhi.com

MHIET may inspect a management system of CRSC to the business partner if needed. Please give us the cooperation to audit, and correspondence.

The business partner should request to each your business partner through a supply chain similarly, building of the management system of prohibited substances, implementation of management of non-containing of prohibited substances, and building of management system of CRSC of a demand from MHIET.

Note 1: The frequency is once a year for business partner who has delivered products to the Turbocharger.

Note 2: If you are a business partner that supplies only subsidiary materials and metallic materials, you do not need to submit them. If you are unclear on whether you need to submit it or not, please contact the above inquiry.

5.3 Investigation of specified substances

MHIET may investigate in order to confirm the non-containment of specified substances such as prohibited substances, controlled substances and substances designated by MHIET. Please reply by the due date after receiving this investigation.

Examples of investigation for non-containment of specified substances
1) MHIET may confirm non-containment of new prohibited substances or controlled substances.
2) MHIET may confirm non-containment of specified substances even when "Non-inclusion check sheet for prohibited substances" submission was not required.
3) MHIET may confirm non-containment of specified substances when the specs are not specified in the drawings.
4) MHIET may reconfirm an item confirmed in the past in order to verify that a change in the non-inclusion status has not occurred.

5.4 Investigation of substances contained in products

For CRSC, MHIET conducts the investigation of substances contained in products. For the investigation, the information exchange sheet of MHIET designation (attachment 2, 3) is used.

Since we sent information exchange sheets which filled in the targeted parts and the subsidiary materials from MHIET to the business partner if needed, the business partner should answer.

For the way to fill in the information exchange sheet, refer to the MHIET's website about 'Material Procurement' from the following address, containing the document "How to fill out MHIET's information exchange sheet".

MHIET's website 'Material Procurement'	https://www.mhi.com/group/mhiet/company/procurement/material
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If you may have problems preparing the documents, MHIET will support the preparation of the document with the business partner's original data regarding substances contained in products. Please contact the Environmental Substances Control Support Center.

* Additional data may be required as needed.

Rules for filling in the information exchange sheet
1) Be sure to fill in the item prohibited substances and controlled substances that is specified in this guideline.
2) When completing item 1) above, it is required to notify every time when the substance is contained 0.1wt% and more in homogeneous material. (Though, in the case when the threshold volume of particular substance is provided less than 0.1wt%, it is required to notify when the result is beyond the volume.)
3) Fill in the items other than those described in 1) as far as possible. For the residual, write "Others".
4) Maximum value of 'Others' is permitted to 10% about an ingredient of the material affected by a company secret (The prohibited substance and the controlled substance are non-applicable.)
5) The prohibited substances and controlled substances may be changed. When newly specified substances are written as "Others", immediately present the revised information exchange sheet to MHIET. (Please revise the information exchange sheet by adding the new information to existing information exchange sheet.)
6) Even for standard materials, please write the material components used in the business partner as practicable as possible.
7) Provision of the information does not intend to ask you to measure actual products. Please investigate to each your business partner like the request from MHIET. Also, please be sure to build an information communication network through supply chains.

Please present the information exchange sheet to the following organization in charge:
For inquiries or information, please contact the following organization in charge:

Inquiry and submission address	Environmental Substances Control Support Center j_reach_helpdesk@mhi.com
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5.5 Packing material management

Under the EU REACH Regulation, packing materials since they are independently treated as articles. (Packing materials are not some products and are treated as other products.)

In addition, please keep packaging materials under control, as there are laws or regulations on packaging material in each country. (Example; Directive 94/62/EC on packaging and packaging waste, etc.)

Please take the following actions regarding these.

(1) Packing materials for direct delivery goods

When products, parts, materials, subsidiary materials, etc. (hereinafter collectively referred to as purchased goods) ordered by our company are directly delivered to customers or our group companies, etc., we ask our business partners to appropriately manage the packaging materials of purchased goods to comply with the material regulations.

(2) Packing materials used for purchased goods

Please ensure that the packing materials to be used for the purchased goods delivered to our company after 2019 do not contain the banned substances as stipulated in the Transaction Guideline 20 - 03 "A guide for picking of delivery goods", and please submit "application for packing of delivery goods". (To: Procurement Division)

(3) Packing materials imported into France

For packaging materials imported into France, the use of mineral oil in inks used for printing packaging materials is prohibited by "LOI n° 2020-105 du 10 février 2020 relative à la lutte contre le gaspillage et à l'économie circulaire". (Hereinafter referred to as the "French Circular Economy Law.")

Please respond to any requests from our company for regulatory compliance.

Specific prohibited substances and the threshold value of mineral oil are listed in Table 2.

6. Inquiry and sending destination

	Inquiry destination
Business partner's contact information for CRSC	Environmental Substances Control Support Center (MHI Sagami High-tech, Ltd.) j_reach_helpdesk@mhi.com
Management system of substances control	Quality Management Section Quality Assurance Department j_reach_qa@mhi.com
CiP Management Checklist	
Investigation of substances contained in products	Environmental Substances Control Support Center (MHI Sagami High-tech, Ltd.) j_reach_helpdesk@mhi.com
Contact information for general substance regulations	Substance Control Staff Office (Direct Contact Box for Q&A) j_suigin@mhi.com * If MHIET has prepared an individual window for specified investigation, please contact to the individual window.

Table 1: List of regulations to comply with

	Regulations and laws to comply with	Applicable products	Corresponding standards in MHIET	Notes
1	EU REACH Regulation Regulation (EC) No 1907/2006	All products of MHIET	MSJ1-0001 GENERAL SPEC (MSJ2-0101 Substance Management Standard on REACH Regulation etc)	Applied to products manufactured in June 2008 or later.
2	European POPs Regulation	Same as above.	Same as above.	Applied to products manufactured in October 2021 or later.
3	US TSCA (The Toxic Substances Control Act)	Same as above.	Same as above.	Applied to products manufactured in March 2022 or later.
4	Industrial Safety and Health Act (Japan); (for prohibiting asbestos)	Same as above.	Same as above.	Applied to products shipped in September 2006 or later.
5	Minamata Convention on Mercury Mercury Contamination Prevention Act (Japan)	Same as above.	MSJ1-0001 Indication of Reference Standards on drawings (MSJ2-0102 PROHIBITED SUBSTANCE MANAGEMENT STANDARD)	Applied to products shipped in March 2020 or later.
6	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.(Japan) Class I Specified Chemical Substances	Same as above.	Same as above.	Applied to products shipped in March 2020 or later.
7	Turbo business 1. EU ELV Directive Directive 2000/53/EC 2. EU RoHS II Directive Directive 2011/65/EU 3. Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 4. EU Ship Recycling Regulation Regulation (EU) No 1257/2013	Turbocharger-related parts	ES492-00002 Guideline for Hazardous Substances	-
8	Engine & Energy business 1. EU RoHS II Directive Directive 2011/65/EU 2. Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 3. EU Ship Recycling Regulation Regulation (EU) No 1257/2013 4. EU CLP Regulation Regulation (EC) No 1272/2008 5. EU Battery Regulation Regulation (EU) 2023/1542	Engine & Energy-related parts	ES046-02001 Restriction of Chemical Substances in Products ES046-02010 Control or Restrict Chemical Substances in Marine Products MSJ1-0001 GENERAL SPEC MSJ2-0103 (PROHIBITED SUBSTANCES IN THE PRODUCTS)	Application starting of ES046-02001 is 2016/10/1. Application starting of ES046-02010 is 2018/4/1. MSJ2-0103 is an alternative to MSETJ2-001. Application starting of MSJETJ2-001 is 2018/4/1.
9	Packaging of Engine & Energy-related parts 1. Packaging and packaging waste Directive (PPWD) Directive 94/62/EC 2. Packaging and Packaging Waste Regulation (PPWR) Regulation (EU) 2025/40 3. Model Toxics in Packaging Legislation (USA)	Packaging of Engine & Energy-related parts	ES046-02002 Criteria for Chemical Substances in Packaging	Application starting of ES046-02002 is 2016/10/1. PPWD will be replaced by PPWR on 2026/8/12.
10	French Circular Economy Law L2020-105	Packaging materials for products and parts imported into France	This guideline	Applied to products manufactured in 2024/10/1 or later.

(Note) The correspondence standard etc. which MHIET publishes prescribes the details corresponding to a regulation.

Table 2: List of prohibited substances

	Regulations and laws to comply with	Prohibited substances	Notes (Prohibited use, Threshold value,,)	Related specs																						
1	EU REACH Regulation	List of Restrictions (Annex XVII)	Applied to substances, mixtures and articles. When an object substances corresponds to restriction application and does not correspond to exclusion application, it is considered as a prohibited substances.	MSJ2-0101																						
2	EU REACH Regulation	Authorization List (Annex XIV)	Applied to substances and mixtures	Same as above.																						
3	EU POPs Regulation	Prohibited substances (Annex I)	-	Same as above.																						
4	US TSCA (The Toxic Substances Control Act)	Prohibited substances (40 CFR Part 751 Subpart E)	-	Same as above.																						
5	Mercury Contamination Prevention Act (Japan)	Mercury and mercury compounds <table border="1"> <thead> <tr> <th>CAS No.</th> <th>name</th> </tr> </thead> <tbody> <tr> <td>7439-97-6</td> <td>Mercury</td> </tr> <tr> <td>33631-63-9</td> <td>Mercuric chloride</td> </tr> <tr> <td>7546-30-7</td> <td>Mercury(I) chloride</td> </tr> <tr> <td>7487-94-7</td> <td>Mercury(II) chloride</td> </tr> <tr> <td>7783-35-9</td> <td>Mercury(II) Sulfate</td> </tr> <tr> <td>10045-94-0</td> <td>Mercury(II) nitrate</td> </tr> <tr> <td>7783-34-8</td> <td>Mercury(II) nitrate monohydrate</td> </tr> <tr> <td>21908-53-2</td> <td>Mercury(II) Oxide</td> </tr> <tr> <td>1344-48-5</td> <td>Mercury(II) sulfide</td> </tr> <tr> <td colspan="2">etc.</td> </tr> </tbody> </table>	CAS No.	name	7439-97-6	Mercury	33631-63-9	Mercuric chloride	7546-30-7	Mercury(I) chloride	7487-94-7	Mercury(II) chloride	7783-35-9	Mercury(II) Sulfate	10045-94-0	Mercury(II) nitrate	7783-34-8	Mercury(II) nitrate monohydrate	21908-53-2	Mercury(II) Oxide	1344-48-5	Mercury(II) sulfide	etc.		-	MSJ2-0102
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6	Act on the Regulation of Manufacture and Evaluation of Chemical Substances(Japan)	Class I Specified Chemical Substances	Use of "Products Prohibited from Import if a Class I Specified Chemical Substance Is Used"	Same as above.																						
7	Industrial Safety and Health Act (Japan) (for prohibiting asbestos)	<table border="1"> <thead> <tr> <th>CAS No.</th> <th>name</th> </tr> </thead> <tbody> <tr> <td>1332-21-4</td> <td>all asbestos</td> </tr> <tr> <td>77536-66-4</td> <td>actinolite</td> </tr> <tr> <td>12172-73-5</td> <td>amosite</td> </tr> <tr> <td>77536-67-5</td> <td>anthophyllite</td> </tr> <tr> <td>12001-28-4</td> <td>crocidolite</td> </tr> <tr> <td>77536-68-6</td> <td>tremolite</td> </tr> <tr> <td>12001-29-5, 132207-32-0</td> <td>chrysotile</td> </tr> </tbody> </table>	CAS No.	name	1332-21-4	all asbestos	77536-66-4	actinolite	12172-73-5	amosite	77536-67-5	anthophyllite	12001-28-4	crocidolite	77536-68-6	tremolite	12001-29-5, 132207-32-0	chrysotile	Contents of asbestos shall not exceed 0.1 wt%	Same as above.						
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9	Engine & Energy business	It's specified by the related specs written in the right column.	-	ES046-02001 ES046-02010																						
10	Packaging of Engine & Energy-related parts	It's specified by the related specs written in the right column.	-	ES046-02002																						
11	French Circular Economy Law	1) Mineral oil aromatic hydrocarbon (MOAH) containing 1~7 aromatic rings 2) Mineral oil-saturated hydrocarbon (MOSH) containing 16~35 carbon atoms	1) and 2), the ink concentration exceeds 0.1wt%. 2) >1ppm for MOAH containing 3~7 aromatic rings	This guideline																						
12	The material list by which use is prohibited at MHIET	It indicates to Table 4.	It's applied to subsidiary material (substance and mixture).	-																						

Table 3: List of controlled substances

	Regulations and laws to comply with	Controlled substances	Notes
1	EU REACH Regulation	SVHC (Candidate List of Substances of Very High Concern for Authorisation)	When 0.1 wt% or more is contained in each homogeneous material
2	IMDS (International Material Data System)	GADSL (Global Automotive Declarable Substance List)	List of controlled substances specified by automobile industries
3	JAMP (Joint Article Management Promotion-consortium)	chemSHERPA Declarable Substances Reference List	-
4	Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009	APPENDIX 2 Minimum List of Items for the Inventory of Hazardous Materials	-
5	EU Ship Recycling Regulation	ANNEX II List of Items for the Inventory of Hazardous Materials	-
6	EU CLP Regulation	ANNEX VI Harmonised classification and labelling for certain hazardous substances	Applied to substances and mixtures

Table 4: The material list by which use is prohibited at MHIET

Subsidiary material (substance and mixture)

	Prohibited substances
1	Mercury and alkyl mercury and other mercury compounds
2	Cadmium and its compounds
3	Lead and its compounds
4	Organophosphorus compound
5	Hexavalent chromium compound
6	Arsenic and its compounds
7	Cyanide
8	PCB
9	Trichloroethylene
10	Tetrachloroethylene
11	Dichloromethane
12	Carbon tetrachloride
13	1,2-Dichloroethane
14	1,1-Dichloroethene
15	1,2-Dichloroethene
16	1,1,1-trichloroethane
17	1,1,2-trichloroethane
18	1,3-Dichloropropene
19	Thiuram
20	Simazine
21	Thiobencarb
22	Benzene
23	Selenium and its compounds
24	1,4-dioxane
25	Boron and its compounds
26	Fluorine and its compounds
27	Ammonia, Ammonium compound, Nitrous acid compound and Nitric acid compound (Gas atmosphere is removed)

(Importance)

When chemical content that use is prohibited by MHIET of products (subsidiary material) that is delivered to MHIET was identified, report to purchase department as soon as possible, and must consider response.

Business partner's contact information for CRSC

Company name		
Supplier code		
Contact Information	Section	
	Person in charge	
	Phone number	
	Fax number	
	Email address	

