

Classification Number	50-05 Rev.1
--------------------------	-------------

Guideline for Complying with Regulations of Substances Control (CRSC)

March, 2020

Editor	Quality Assurance Department Engineering Administration Group
--------	------------------------------------------------------------------

Preface

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 (*)".

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, GCC - RoHS Directive 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.

Product Division Quality Assurance Department
Mitsubishi Heavy Industries Engine & Turbocharger, Ltd.

Iwao Arai, Director

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

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

Table of Contents

1. Policy of MHIET	1
2. Regulations to comply with.....	1
3. Prohibited substances	1
4. Controlled substances	1
5. Requirements to be satisfied by the business partner	1
5.1 Contact for CRSC	1
5.2 Building of management system of regulations regarding substances control and non-containing management of prohibited substances	2
5.3 Investigation of substances contained in products	2
5.4 Packing material management	3
6. Transfer of contained material data.....	4
7. Inquiry and sending destination	5
Table 1: List of regulations to comply with	6
Table 2: List of prohibited substances.....	8
Table 3: List of controlled substances	9
Table 4: List of prohibited substances which MHIET defined itself.....	10
Appendix 1: Business partner's contact information for CRSC	11
Appendix 2: MHIET's information exchange sheet (Parts).....	12
Appendix 3: MHIET's information exchange sheet (Materials)	13
Appendix 4: ProChemist/AS uses form ENTRY	14

Revision history : It's established newly as MHIET edition from 2016.

	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.

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.

<http://www.mhiet.co.jp/en/company/procurement/material/index.html>

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.

- 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) Reply to the investigation results of substances contained in products
- 4) 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.

When change etc. occur at the charge window connected from the business partner, please give us connection to our window (it indicates below) promptly.

Connection utilizes the [Appendix 1](#) of this guideline "Business partner's contact information for CRSC", and please presents it to below to the window of a statement.

Administration Group
Procurement Department :
j_reach_purchasing@mhiet.mhi.co.jp

5.2 Building of management system of regulations regarding substances control and non-containing management of prohibited substances

The business partner is requesting of the construction of the non-containing management system of prohibited substances in which the business partner is performed in the company, implementation of non-containing management of prohibited substances, and building of a material investigation system contained in products through a supply chain, as CRSC which specifies by this guideline.

When building the organization in the company, it is kindly asked to submit the result of actions mentioned in "Guidelines for the Management of Chemicals in Products (Edition 4.0)" by JAMP; Joint Article Management Promotion-Consortium. In addition, please submit a check sheet (The following (1)) specified in these guidelines at the time of starting a new transaction and at a frequency of once every two years (***)(****). If all of the questions whose question flag is "Basic" are met in the self-evaluation of the check sheet, submit a declaration ((2) below) attached to the check sheet.

- (1) Annex E: "Check sheet version 4.01"
(2) Annex F: "declaration of self-conformity"

(**) The frequency is once a year in the following cases.

- For business partners outside Japan
- In the case of a business partner who has delivered goods products to a Turbocharger

(****) If you are a business partner that supplies only subsidiary materials and metallic materials, you do not need to submit them.

The related documents of JAMP are downloadable from following HP.

<https://chemsherpa.net/>

Inquiries regarding the management system for chemical substances contained in products and **submission** of check sheets and declarations are as follows..

Quality Management Section
Quality Assurance Department :
j_reach_qa@mhiet.mhi.co.jp

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.

5.3 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".

<http://www.mhiet.co.jp/en/company/procurement/material/index.html>

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 0.1% and more in homogeneous material. (Though, in the case when the threshold volume of particular substance is provided less than 0.1%, 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:

Environmental Substances Control Support Center :
j_reach_helpdesk@mhiet.mhi.co.jp

5.4 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) In the case of 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)

6. Transfer of contained material data

The use of "ProChemist/AS" which is the web system of product containing material management that NEC offers it was begun in MHIET (After Nov/2015). There are following functions for "ProChemist/AS", and use as-containing substance managements system of the business partner.

- Bulk storage of investigation and research already parts data.
- Opening to the public of storage part data or closed choice is possible.
(It's possible to treat as company confidentiality in the business partner.)
- "Reply E-mail" past responses history is managed by function.
(The answer contents and attachment data are included.)
- Containing parts search of current prohibit substance and controlled substances that study storage part database.
- Parts search that falls under various law and regulation that study storage part database.
- The automatic updates of prohibited substances and controlled substances.
- Updating of registered data manageable with the business partner.

In e-mailing an information exchange sheet to the business partner like before in MHIET, it's sent. An answer way can choose an information exchange sheet by an e-mail from the way to answer like before or the way to answer by the "Reply E-mail" function of "ProChemist/AS". (The above history management is possible.)

The form of Appendix 7 (form of Excel) is sent to the business partner who hoped for use of "ProChemist/AS". After entering requirements, please present following destination in an e-mail.

Presenting destination

Environmental Substances Control Support Center :
j_reach_helpdesk@mhiet.mhi.co.jp

If being used to only investigation of substances contained in products from MHIET, it can be used for free of charge. It's also possible that the business partner uses the investigation of substances contained in products for your supply chain using "ProChemist/AS". But, it'll be pay service. It's necessary to covenant with NEC which manages "ProChemist/AS" in that case. Would you inquire about details to ProChemist/AS secretariat of NEC in the following?

ProChemist/AS secretariat (NEC)

Contact : ecosol@office.jp.nec.com

Inquiries on system's operations of ProChemist/AS hopes query: NEC ProChemist/AS Contact Information.

ProChemist Contact Information (NEC)

Contact : procas-helpgl@nes.jp.nec.com (English / Chinese)

7. Inquiry and sending destination

	Inquiry destination
Business partner's contact information for CRSC	Administration Group Procurement Department j_reach_purchasing@mhi et. mhi. co. jp
List of Action Items & Check Sheet of JAMP Guidelines	Quality Management Section Quality Assurance Department j_reach_qa@mhi et. mhi. co. jp
Self-Declaration of Conformance based on JAMP Guidelines	
Investigation of substances contained in products	Environmental Substances Control Support Center (MHI Sagami High-tech, Ltd.) j_reach_helpdesk@mhi et. mhi. co. jp
ProChemist/AS application form	
ProChemist/AS	ProChemist Contact Information (NEC) procas-helpgl@nes. jp. nec. com (English / Chinese)
Contact information for general substance regulations	Administration Group Procurement Department j_reach_purchasing@mhi et. mhi. co. jp

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)	Applied to products manufactured in June 2008 or later.
2	Industrial Safety and Health Act (Japan); (for prohibiting asbestos)	All products of MHIET	MSJ1-0001 GENERAL SPEC (MSJ2-0102 Prohibited Substance Management Standard)	Applied to products shipped in September 2006 or later.
3	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	
4	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. New EU Battery directive Directive 2013/56/EU	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 (MSETJ2-001 Prohibited Substances and Controlled Substances on Engine & Energy Division)	Application starting of ES046-02001 is 2016/10/1. Application starting of ES046-02010 and MSETJ2-001 are 2018/4/1.
5	Packaging of Engine & Energy-related parts 1. Packaging and packaging waste Directive Directive 94/62/EC 2. 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.

Table 1: List of regulations to comply with (continued)

	Regulations and laws to comply with	Applicable products	Corresponding standards in MHIET	Notes
6	Minamata Convention on Mercury Mercury Contamination Prevention Act (Japan)	All products of MHIET	MSJ1-0001 Indication of Reference Standards on drawings (MSJ2-0102 PROHIBITED SUBSTANCE MANAGEMENT STANDARD)	Application starting of ES046-02002 is 2020/3/1.
7	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.(Japan) Class I Specified Chemical Substances	All products of MHIET	MSJ1-0001 Indication of Reference Standards on drawings (MSJ2-0102 PROHIBITED SUBSTANCE MANAGEMENT STANDARD)	Application starting of ES046-02002 is 2020/3/1.

(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
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.
2	EU REACH Regulation	Authorisation List (Annex XIV)	Applied to substances and mixtures
3	Industrial Safety and Health Act (Japan) (for prohibiting asbestos)	(1) CAS No. 1332-21-4 (all asbestos) (2) CAS No. 77536-66-4 (actinolite) (3) CAS No. 12172-73-5 (amosite) (4) CAS No. 77536-67-5 (anthophyllite) (5) CAS No. 12001-28-4 (crocidolite) (6) CAS No. 77536-68-6 (tremolite) (7) CAS Nos. 12001-29-5, 132207-32-0 (chrysotile)	Contents of asbestos shall not exceed 0.1 wt%
4	Turbo business	It indicates to ES492-00002	
5	Engine & Energy business	It indicates to ES046-02001 and ES046-02010	
6	Packaging of Engine & Energy-related parts	It indicates to ES046-02002	
7	The material list by which use is prohibited at MHIET	It indicates to Table 4.	It's applied to subsidiary material (substance and mixture).
8	Mercury Contamination Prevention Act (Japan) (Mercury and mercury compounds)	(1) 7439-97-6 (Mercury) (2) 33631-63-9 (Mercuric chloride) (3) 7546-30-7 (Mercury(I) chloride) (4) 7487-94-7 (Mercury(II) chloride) (5) 7783-35-9 (Mercury(II) Sulfate) (6) 10045-94-0 (Mercury(II) nitrate) (7) 7783-34-8 (Mercury(II) nitrate monohydrate) (8) 21908-53-2 (Mercury(II) Oxide) (9) 1344-48-5 (Mercury(II) sulfide) etc.	It indicates to MSJ2-0102
9	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.(Japan) Class I Specified Chemical Substances	It indicates to MSJ2-0102	

Table 2: List of prohibited substances (continued)

	Regulations and laws to comply with	Prohibited substances	Notes
10	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.(Japan) (PFOA, its salts and PFOA- related compounds)	(1) 335-67-1 (Perfluorooctanoic acid) (2) 3825-26-1 (Ammonium perfluorooctanoate) (3) 335-95-5 (Sodium perfluorooctanoate) (4) 2395-00-8 (Potassium perfluorooctanoate) (5) 335-93-3 (Silver perfluorooctanoate (I)) etc.	It indicates to MSJ2-0102

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 (Note)

(Note) 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	

ProChemist/AS uses form ENTRY

Application for Use of ProChemist/AS

(Only for free use by business partner of MHIET)

Be sure to fill in the blanks in No.1 through No.3.

For new applicants for ProChemist/AS, please read and agree to the ProChemist/AS Service Conditions (ITPFS-11-683) first, and then, fill in the blanks in No.3.

				Date		
* is required						
1. Company Information						
Required to enter	Company Name	Japanese	Hiragana			
		English*	Mitsubishi Heavy Industries Engine & Turbocharger, Ltd.			
	Address* (head office)	〒 / Zip		252 - 5293		
Hiragana		3000 Tana, Chuo-ku, Sagamihara, Kanagawa				
2. ProChemist/AS						
Required to enter	* Inform us if you are already registered for ProChemist/AS. If you are already registered for ProChemist/AS, enter the "Supplier Web Company ID" specified in the Use Notice.					
	ProChemist/AS registration and ID*					
	(If already registered) Addition of ID					
3. ProChemist/AS User Information (In the case that you are already using ProChemist/AS, specify the current user information)						
Required to enter	<ul style="list-style-type: none"> ◇ For new applicants for ProChemist/AS, please read and agree to the ProChemist/AS Service Conditions (ITPFS-11-683) first, and then, fill in the blanks. ◇ In the case that you are already using it, please specify the current user information. 					
	<ul style="list-style-type: none"> * In the case of any change of the user information please inform Mr. or Ms. of NEC ProChemist/AS Help Desk. * The user information may be used as the contact information for the following purposes. <ul style="list-style-type: none"> - For confirmation or notification about this application for ProChemist/AS - For confirmation or notification from Mr./Ms. ... about chemical content survey * This application is intended only for free use service. For paid services, another form of application is required. 					
	<User Information (contact person)>					
	Address* (head office)	〒 / Zip		252 - 5293		
		Hiragana	3000 Tana, Chuo-ku, Sagamihara, Kanagawa			
	Dept	Marketing department		TEL*	042-000-0000	
	Position	Manager		FAX	042-000-0000	
	Name	Japanese*				
		English*	TAROU MITSUBISHI			
	e-mail*	t_mitsubishi@samplemail.com				
Permission to go public the Company Name and the Company Code.*						
Screen Mode*						
Note						

Ver2.1 rev.2

Privacy Policy

- ◆ We will use your Personal Information only within the scope of the purpose of ProChemist/AS service.
- ◆ Our Privacy Policy is linked to NEC's Website (<http://www.nec.co.jp/site/en/privacy.html>).