Updates of the Chemical Substance Management Rank Guidelines (for Products) Ver.14 and Requests

March 1, 2023

Quality & Environment Division
Operational Excellence Company Co., Ltd.
1. Points of revisions to the Rank Guidelines

2. Requests should be asked to suppliers
Rank Guidelines

1. Objective of this Guidelines
2. Scope
3. Operations and Exemptions
4. Establishment, Revision, and Abolition
5. Definition of Terms
6. Specified Managed Substances
   • Level 1 Prohibited Substances (PS)
   • Level 2 PS
   • Level 3 PS

Appendix 1. Exempted Items List on the EU RoHS Directive
Appendix 2. Exempted Items on the ELV Directive
Appendix 3. Controlled Values for Prohibited Substances

- Amended in response to the structural change, etc., to the Operating Company System (The front page, the back page, Definition of Terms). (Refer to Page 9.)
- Amended in response to the structural change to the Operating Company System. (Refer to Page 8.)
- PFHxS: Changed the category to the Level 1 from the Level 2. (Refer to Page 4.)
- PIP(3:1): Changed the category to the Level 1 from the Level 2. (Refer to Page 4.)
- Dechlorane Plus™: Changed the category to the Level 1 from the Level 3. (Refer to Page 5.)
- UV-328: Changed the category to the Level 1 from the Level 3. (Refer to Page 5.)
- Updated the descriptions for Hydrofluorocarbon (HFC). (Refer to Page 6.)
- MCCP(C14-17): Changed the category to the Level 2 from the Level 3. (Refer to Page 7.)
- PFCA(C15-21): Changed the category to the Level 2 from the Level 3. (Refer to Page 7.)
- Added BPA to the Level 2 from the Level 3. (Refer to Page 7.)
- Updated the latest information.
Way of thinking to add substances to the Level 1 in the Rank Guidelines [Change]

Add a substance to the Level 1 Prohibited Substances judging from contents of the Elimination Recommendation under the convention on Persistent Organic Pollutants (POPs) (Addition of Annex A) deeming them equivalent to the one in the official journal (OJ).

[Reasons for change]
◆ External environment
  ➢ Frequent publication of candidate substances
  ➢ The regulation may be implemented within 1 year from the publication date of OJ, as the timing of the publication of OJ is unpredictable,

◆ Internal environment
  ➢ More frequent update of the Rank Guidelines is difficult as workload such as renewal of Non-use warranty is high.

Proposal by COP countries
(Provide info. specified in Annex D.)

Screening
(Judge using the screening criteria specified in Annex D.)

Preparation of risk profile
(Examine details with the info. specified in Annex E)

Preparation of risk management evaluation
(Examine considering the info. specified in Annex F.)

Final determination
(Add to Annex A, B, and C.)

Notification from U.N. general to member countries

Publication of the EU official journal
e.g. EU POPs regulations

Implementation of the regulation

Timing for adding 2 substances to Ver.14.

Timing for adding substances to the Level 1.

Timing up to now for adding substances to the Level 1.

Add a substance to the Level 1 by the Elimination Recommendation (Addition of Annex A.).

Note that in Ver.14, the substances whose inclusion were decided to recommend to COP for elimination (Appendix A) are added in this timing as there are no cases that such substances were rejected in COP (the next COP is planned in May, 2023).
PFHxS, its salts, and PFHxS-related substances and PFHxS-related substances, and PIP(3:1) : Changed the category to the Level 1 Prohibited Substances from the Level 2 Prohibited Substances.

Table 1

<table>
<thead>
<tr>
<th>Substance/Group of Substances</th>
<th>Regulated by the Panasonic Group</th>
<th>Main Laws/ Regulations referred to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfluorohexane-1-sulphonic acid (PFHxS), its salts, and PFHxS-related Substances (Also known as Perfluorohexanesulfonic acid, its salts, and PFHxS-related Substances)</td>
<td>Intentional use of these substances is prohibited, and the concentration must be less than 25ppb (0.025ppm)*3. In the case of combination of 1 or multiple PFHxS-related substances, the total concentration must be 1000ppb (1ppm) *3.</td>
<td>POPs Convention</td>
</tr>
<tr>
<td>Phenol isopropylated phosphate (PIP(3:1)) (Also known as Tris(isopropylphenyl) phosphate, TIPP, IPPP)</td>
<td>Intentional use of these substances is prohibited*3. (There are exemptions.)</td>
<td>TSCA</td>
</tr>
</tbody>
</table>

*3: If compliance with the Regulations by the Panasonic Group is verified by tracing back the supply chain, the analysis for checking non-use of the subject substance is not required.
Dechlorane Plus™ and UV-328: Changed the category to the Level 1 Prohibited Substances from the Level 2 Prohibited Substances.

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<tr>
<td>Dechlorane Plus™ (1,6,7,8,9,14,15,16,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene)</td>
<td>Intentional use of these substances is prohibited*3 (There are exemptions.)</td>
<td>POPs Convention</td>
</tr>
<tr>
<td>UV-328 (2-(2H-benzotriazole-2-yl)-4,6-Di-tert-pentyphenol)</td>
<td>Intentional use of these substances is prohibited*3. (There are exemptions.)</td>
<td>POPs Convention</td>
</tr>
</tbody>
</table>

*3: If compliance with the Regulations by the Panasonic Group is verified by tracing back the supply chain, the analysis for checking non-use of the subject substance is not required.
Updated the descriptions for Hydrofluorocarbon (HFC).

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</thead>
<tbody>
<tr>
<td>Hydrofluorocarbon (HFC)</td>
<td>Intentional use of these substances is prohibited*3. (There are exemptions.)</td>
<td>-Canada Environmental Protection Act (CEPA), 1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-The EU Regulation on F gasses Added</td>
</tr>
</tbody>
</table>

### Table 2-26

<table>
<thead>
<tr>
<th>Substance/Substance Group Name: Hydrofluorocarbon (HFC)</th>
<th>Regulated items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products include HFC indicated in Attached table 1, 6.1.3</td>
<td>Each product is restricted by HFC global warming potential (GWP) per use.</td>
</tr>
</tbody>
</table>

[Applications and use examples]
- Stand-alone refrigerator and Centralized refrigeration equipment.
- ...

*Note: To each Operating Company, Business Division, and Supplier, please check details on the above for HFC, as the period for the restriction is set per individual usage of HFC by the HFC’s Global Warming Potential (GWP) value under “the CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999” and/or “The EU Regulation on F gasses”.

- “The EU Regulation on F gasses” (Refer to ANNEX XIII)
  PDF file for Japanese translation for reference ==>

- “The CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999” (Refer to Schedule 1.1)
  PDF file for Japanese translation for reference ==>
### Revised Contents of the Level 2 Prohibited Substances (PS)

- Added the descriptions for MCCP, C14-17, C15-C21 PFCA, its salts, and C15-C21 PFCA-related substances, and Bisphenol A to the Level 2 Prohibited Substances.

<table>
<thead>
<tr>
<th>Substance/Group of Substances</th>
<th>Date for starting prohibition of delivery of components, materials, etc. to the Panasonic Group*1</th>
<th>Main Laws/ Regulations referred to</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medium chain chlorinated paraffins (MCCP, C14–17)</strong></td>
<td>The date will be set in response to regulatory trend hereafter.</td>
<td>– EU RoHS Directive, – EU REACH Regulation – POPs Convention</td>
</tr>
<tr>
<td><strong>Perfluorocarboxylic acids containing 15 to 21 carbon atoms in the chain (C15-C21 PFCAs), their salts and C15-C21 PFCA related substances.</strong></td>
<td>The date will be set in response to regulatory trend hereafter.</td>
<td>– POPs Convention – CEPA</td>
</tr>
<tr>
<td><strong>Bisphenol A (2,2-Bis(4-hydroxyphenyl)propane) and bisphenols of similar concern</strong></td>
<td>The date will be set in response to regulatory trend hereafter.</td>
<td>– EU REACH Regulation</td>
</tr>
</tbody>
</table>

*1: If an operating company or a business division sets own date for starting prohibition of delivery of certain components, materials, etc., depending on the situation (e.g., requests from suppliers) earlier than the date set on this policy, the operating company or the business division must inform it to relevant members such as suppliers.
Amendments to the Rules for Establishment, Revision, and Abolition

The rules for Establishment, Revision, and Abolition are amended in response to the structural change to the Operating Company System.

<table>
<thead>
<tr>
<th>Current category</th>
<th>Substance Group</th>
<th>Background of the update</th>
<th>Policies to reflect to the Rank Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Establishment, Revision, and Abolition</td>
<td>Amend the rules for the Establishment, Revision, and Abolition.</td>
<td>-In response to the new structure to an operating company system, the structure of the Panasonic Group Product Chemical Substance Management Committee and the flow for deliberation of the Rank Guidelines were changed.</td>
<td>-Change the authorizer from Quality &amp; Environment Director to Operation Administrators meeting of Panasonic Group Product Chemical Substance Management Committee. -Directors of Procurement Division and of Quality &amp; Environment Division are in charge of consultation of the authorizer. -In response to the change of the committee structure, abolish the Product Chemical Substance Management Subcommittee.</td>
</tr>
</tbody>
</table>
In response to the structural change to Operating Company System, items below are amended.

<table>
<thead>
<tr>
<th>Subject items</th>
<th>Before the amendments</th>
<th>After the amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>Published by Panasonic Corporation Quality &amp; Environment Division Operational Excellence Company</td>
<td>Published by Panasonic Group</td>
</tr>
<tr>
<td>Back cover</td>
<td>Issued by: Quality &amp; Environment Division Operational Excellence Company Panasonic Corporation</td>
<td>Issued by: Quality &amp; Environment Division Panasonic Operational Excellence Company</td>
</tr>
<tr>
<td>Amendments of the terms in the whole document</td>
<td>Divisional Companies/Business Division</td>
<td>Operating Company/Organizational Unit</td>
</tr>
<tr>
<td>Amendments of the terms in the whole document</td>
<td>Panasonic Corporation</td>
<td>Panasonic Holdings Corporation</td>
</tr>
<tr>
<td>Table 2-27 Exemptions of PFOA</td>
<td>Abolished the exemptions as informed in the QED letter on July 1, 2022.</td>
<td>Deleted the exemptions.</td>
</tr>
</tbody>
</table>
1. Points of revisions to the Rank Guidelines

2. Requests should be asked to suppliers
   (including important notes for internal responses
   required for the revision of the Rank Guidelines)
• Because of revised contents of the Level 1 Prohibited Substances (PSs), relevant suppliers are requested to resubmit a Non-use Warranty.
• For resubmission of a Non-use Warranty, relevant suppliers including those in your supply chain are requested to check whether any of the Level 1 PSs is contained and a possibility of inclusion of the PSs in your products or components.

■ How to resubmit
– Fill in requirements in the latest ‘Non-use Warranty (Level 1 PSs)’.
– Submit the Non-use Warranty by the deadline respectively set by Panasonic group’s Operating Company/Organizational Unit.

[Change points]
◇ Level 1 PSs
– Addition of substance groups:
  1) Perfluorohexane-1-sulphonic acid (PFHxS), its salts, and PFHxS-related substances
  2) Phenol isopropylated phosphate (3:1)
  3) Dechlorane Plus TM
  4) UV-328

■ Important notes
The components/materials containing the foregoing newly included substances in the Level 1 PSs that exceed the restricted limit are deemed non-compliant to the Rank Guidelines Ver.14. In such case, please immediately contact the Panasonic Operating Company or Organizational Unit who requested this, in order to replace the components/materials with substitutes.
Once the Rank Guidelines Ver.14 is enforced, Panasonic’s responsible division will request relevant suppliers to investigate subject substances via GP-Web.

Upon the request, the subject suppliers are requested to reconfirm the registered information of the subject chemical substances in the components/materials (correct the information, if necessary.), and update the data with the latest version of the tool.

Important notes

1) Please reconfirm the status of the following substances in the components/materials, that have been newly added to the Level 1 Prohibited Substances.
   -1) Perfluorohexane-1-sulphonic acid (PFHxS), its salts, and PFHxS-related substances
   -2) Phenol isopropylated phosphate (3:1)
   -3) Dechlorane Plus TM
   -4) UV-328

2) The components/materials containing the foregoing newly included substances in the Level 1 PSs that exceed the restricted limit are deemed non-compliant to the Rank Guidelines Ver.14. In such case, please immediately contact the Panasonic Operating Company or Organizational Unit who requested this, in order to replace the components/materials with substitutes.
Level 2 Prohibited Substances
• Please prepare for their substitution, as those substances are highly likely to classified into the Level 1 in the near feature.

Exemption of the prohibited substances under the RoHS regulation
• As for other exempted items for which extending the exemption period was requested, the EU Commission is still under discussion. However, please pay due attention to the trend hereafter, because there is a possibility that its exemption period may be newly set, or the scope of the exemption may be limited.
Download documents available at the following URLs.

- **Green Procurement Standards Ver.6.5**
  - Chinese: [https://panasonic.cn/about/csr/supply/procurement/](https://panasonic.cn/about/csr/supply/procurement/)

- **Rank Guidelines Ver.14**
  - Regulated value
  - List of Exempted Items
  - List of the Controlled Values

- **Product chemical substances management system (GP-Web) Manuals (Members only)**
  - Japanese, English, and Chinese: [https://eww.gpscmn.panasonic.co.jp/prtl](https://eww.gpscmn.panasonic.co.jp/prtl)

- **Website introducing e-learning programs for Product Chemical Substance Management, and the like (Document and videos on chemSHERPA)**

- **chemSHERPA website**
  - Japanese: [https://chemsherpa.net/](https://chemsherpa.net/)
  - English: [https://chemsherpa.net/english](https://chemsherpa.net/english)