Attachment 7

Environmental Assessment

For

a) Alkenes, C26-30 alpha-,polymer , b) 1-Triacontene polymer with 1-hexacosene, 1-octacosene and 1-tetracosene, c) 1-Hexacosene, polymer with 1-docosene, 1-eicosene and 1-tetracosene, and d) 1-Tetracosene, polymer with 1-docosene, and 1-eicosene, and 1-hexacosene, and 1-octadecene

1. Date: December 20, 2011

2. Name of notifier: Idemitsu Kosan Co.,Ltd

3. Address: 1-1,Marunouchi 3-chome, Chiyoda-ku, Tokyo, Japan

4. Description of the proposed action

a. Proposed action:

The name of food-contact substance (FCS) is a) Alkenes, C26-30 alpha-,polymer , b) 1-Triacontene polymer with 1-hexacosene, 1-octacosene and 1-tetracosene, c) 1-Hexacosene, polymer with 1-docosene, 1-eicosene and 1-tetracosene, and d) 1-Tetracosene, polymer with 1-docosene, and 1-eicosene, and 1-hexacosene, and 1-octadecene.

FCS is used as an additive for polypropylene sheet.
Maximum use level in food contact material is 10% .

b. Need for action:

FCS is used to improve to great extent elongation properties of polypropylene sheet.

c. Location of use

The polypropylene sheet contained FCS is used as the food packaging, and expected to be utilized in patterns corresponding to the national population density and to be widely distributed across the country.

d. Location of disposal

The locations where the FCS disposed from use are 1) landfills, where finished food-contact articles containing the FCS and degradation products, if any, are ultimately disposed and 2) wastewater treatment plants, where the FCS, if any, may potentially enter the environment after ingesting food by consumers, following migration of the FCS from finished food-contact articles into food.

The types of environments present at and adjacent to these disposal locations are the same as for the disposal of any other food-contact material in current use. Consequently, there are no special circumstances regarding the environment surrounding either the use or disposal of food-contact materials prepared from the FCS.

According to United States Environmental Protection Agency's "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2008", 12.7% of municipal solid waste was combusted, 54.1% was discarded landfill, and 33.2% was recovered for recycling and composting.
Total municipal solid waste in United States is 249.61 million of tons and plastic container and packaging was 13.01 million of tons, and 13.2% of plastic container and packaging was recycled.

5. Identification of the substance that is the subject of the proposed action:

The FCS that is the subject of this notification is a) Alkenes, C26-30 alpha-,polymer , b) 1-Triacontene polymer with 1-hexacosene, 1-octacosene and 1-tetracosene, c) 1-Hexacosene, polymer with 1-docosene, 1-eicosene and 1-tetracosene, and d) 1-Tetracosene, polymer with 1-docosene, and 1-eicosene, and 1-hexacosene, and 1-octadecene.

6. Introduction of substances into the environment

a. As a result of manufacture:

FCS is manufactured in Japan. Thus the substances as a result of manufacture will not be introduced into the environment of the United states. The production facilities for FCS operate in compliance with the environmental regulations of Japan.

No extraordinary circumstances are reasonably known to exist for the manufacture of the FCS that would cause or threaten to cause non-compliance with such regulations.

b. As a result of use:

No environmental release is expected upon the use of the subject polymers to fabricate packaging materials. In these applications, the polymers will be entirely incorporated into the finished food-contact article. Any waste materials generated in this process are expected to be disposed as part of the manufacturer's overall non-hazardous solid waste in accordance with established procedures.

c. As a result of disposal from use:

Disposal by the ultimate consumer of food-contact materials produced by the subject

copolymers will be by conventional rubbish disposal and, hence, primarily by sanitary landfill or incineration. The subject copolymers consist of carbon and hydrogen. No toxic combustion products are expected as a result of the proper incineration of the polymers.

FCS as a component of the polypropylene sheet will be subjected to conventional municipal solid waste (MSW) management. Compared to 249.61 million tons of MSW, the amount of the FCS anticipated to enter the waste stream in the US is not significant because polypropylene sheet food-packaging material is a small contributor to MSW. Additionally, the FCS disposed from use in landfills is unlikely to enter the environment because landfill management is expected to comply with local, state, and federal landfill regulations.

7. Fate of substances released into the environment:

No significant effect on the concentrations of and exposures to any substances in the atmosphere are anticipated due to the proposed use of subjected copolymers. The polymers are of high moleculr weight and do not volatilize. Thus, no significant quantities of any substances will be released upon the use and disposal of food-contact articles manufactured with these polymers.

The products of complete combustion of the polymer would be carbon dioxide and water; the concentrations of these substances in the environment will not be significantly altered by the proper incineration of the polymers in the amounts utilized for food packaging applications.

No significant effects on the concentrations of and exposure to any substances in fresh water, estuarine, or marine ecosystems are anticipated due to the proposed use of the subject copolymers. No significant quantities of any substance will be added to these water systems upon the proper incineration of the polymers, nor upon their disposal in landfills due to the extremely low levels of aqueous migration of polymer components.

Considering the factors discussed above, no significant effects on the concentrations of and exposures to any substances in terrestrial ecosystems are anticipated as a result of the proposed use of the subject copolymers. In particular, the extremely low levels of migration of components of thepolymer, demonstrated by extraction studies, indicate that virtually no leaching of these substances may be expected to occur under normal environmental conditions when finished food-contact materials are disposed. Furthermore, the low production of copolymers for use in food-contact applications indicates low potential introduction of extractables from the subject polymer into terrestrial ecosystems. Thus, there is no expectation of any meaningful exposure of terrestrial organisms to these substances as a result of the proposed use of the

copolymers.

Considering the foregoing, we respectfully submit that there is no reasonable expectation of a significant impact on the concentration of any substance in the environment due to the proposed use of the subject polymer in the manufacture of articles intended for use in contact with food.

8. Environmental effects of released substances:

As discussed previously, the only substances that may be expected to be released to the environment upon the use and disposal of food packaging materials fabricated with the subject copolymer consist of extremely small quantities of combustion products and extractables, Thus, no adverse effect on organisms in the environment is expected as a result of the proposal of articles containing the food-contact substance. In conclusion, no information needs to be provided on the environment effects of the substances released into the environment as a result of use/or disposal of the FCS. Therefore, the use and disposal of the FCS are not expected to threaten a violation of applicable laws and regulations, e.g., EPA's regulation in 40 C.F.R. Parts 60 and 258.

9. Use of resources and energy:

FCS is used as an additive for polypropylene sheet. FCS is added to polypropylene sheet at level not exceeding 1 0 %, thus, it has a very minor use compared to the usage of polypropylene. The use of FCS is not expected to have any effect on the use of resources and energy.

10. Mitigation measures:

There will be no adverse environmental impacts from the use or disposal of FCS or its degradation products and, thus, no mitigation procedure are needed.

11. Alternatives to the proposed action

No potential adverse environmental impacts have been identified for the proposed action, so no alternatives to the proposed action are contemplated.

12. List of preparers:

Shigeru Murakami
Chief Associate, Safety, Environment & Quality Assurance Department

13. Certification

The undersigned official certifies that the information presented is true, accurate, and complete to the best of his knowledge.

Date: December 20, 2011

[redacted]

Dr. Shigeru Murakami

14. Reference

* EPA, Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2008

* EPA, Clean Watersheds Needs Survey 2008 Report to Congress, Appendix I, Summary of CWNS 2008 Technical Information