

### **CHEMICAL RECYCLING IS NOT RECYCLING (DRAFT 7-29-24)**

#### ***Rationale***

Processes are being researched, developed, and commercialized to convert used plastic back into molecular or petrochemical feedstocks. This policy clarifies the NRC's position on NRC policy regarding "chemical processing", "molecular processing", "chemical recycling" and "advanced recycling."

The terms "chemical processing", "molecular processing", "chemical recycling", "advanced recycling", and terms reflecting the same processes, are misleading and do not meet the NRC policy and definition of recycling. NRC refers to all these terms as chemical processing.

#### ***Policy***<sup>1</sup>

*Non-mechanical processes that convert plastics at the end of life into petrochemical products that are fuels or used to make fuels do not meet NRC's definition of recycling and thus cannot be properly considered recycling.*

*NRC does not support the label of "advanced recycling" or "chemical recycling" for non-mechanical recycling, as doing so creates a totally inappropriate and untruthful distinction between mechanical and non-mechanical recycling processes.*

*NRC supports policies that provide a distinction between recycling (inclusive of both mechanical and non-mechanical recycling) and solid waste management.*

*NRC does not support any policy in which non-mechanical recycling is considered manufacturing and mechanical recycling is not.*

*NRC does not support the use of "chemical processing", "molecular processing", "chemical recycling", or "advanced recycling" as a means to reduce plastic pollution.*

#### ***Background***

By its nature, manufacturing of products and packaging introduces harm. NRC asserts that this harm can be reduced by material recovery, reuse, and recycling. Maintaining the form of the product is a key element essential to defensible recycling and reuse into input materials. The plastics recycling and recovery landscape has been distinctly different from the measurable, marketed recycling process characteristics of other materials. The high use of this material makes this issue a priority concern. Misuse of the term "recycling" further obstructs achieving these objectives.

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<sup>1</sup> The NRC thanks ReMA (formally ISRI) for developing its framework policy on chemical processing, as the NRC adopts borrowed language.

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Processes that convert post-consumer and post-industrial plastics into petrochemical products that are fuels, or are used to make fuels, do not meet the NRC's Definition of Recycling and thus cannot be considered recycling or material recovery. Such non-recycling processes should be regulated to ensure the protection of environmental justice communities that are disproportionately impacted by these facilities.

Plastic products should be redesigned to eliminate toxics and problem additives, so they do not cause problems for people, the environment, or recycling. Facilities that are volatile, dangerous, or cause adverse burdens and impacts on communities and community members' health are unacceptable. In areas with these facilities, Clean Air Act provisions (including Title 5) and other laws that protect public health and the environment should be monitored and enforced. The owners of these facilities should also meaningfully engage with the community, conduct a cumulative health impact assessment, and enter into enforceable community benefits and monitoring agreements to ensure the facility does not cause adverse burdens and impacts on communities and community members' health.

### NRC Existing Policy

- NRC Policy 40, Definition of Recycling, states, "Recycling is a series of activities by which material that has reached the end of its current use is processed into material utilized in the production of new products." "NRC policy further excludes from its definition of recycling any materials that are used as a fuel substitute and those used for energy production."
- NRC Policy 19, Hierarchy of Waste Management Preferences, states, "The National Recycling Coalition endorses and supports a hierarchy of waste management preferences that gives first priority to source reduction, reuse, recycling, and composting to minimize the amount of waste to be otherwise managed."

### NRC's Guiding Principles

- NRC clearly states in its Guiding Principles: "Thermal combustion is not recycling"; "Recycling is resource management, not waste management"; and "Sustainable Materials Management is a critical strategic shift away from the past strategy of waste management toward a holistic resource management system that strives to use less materials overall, reduce toxins, recover more used materials, create new jobs, and foster economic development."

### Cross-references

ISRI (ReMA) July 2022 Policy on Chemical Recycling

NRC Guiding Principles: Thermal combustion

NRC Policy 5 - Research Development Technology Transfer

NRC Policy 19, Hierarchy of Waste Management Preferences

NRC Policy 35 - Market Development Increasing Demand for Recycled Products

NRC Policy 40, Definition of Recycling

NRC Policy 41 -Zero Waste

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NRC Policy 42 – Incineration

NRC Policy 43 – ReUse

NRC Policy 44- Framework For Advancing Container Recovery

NRC Policy 45 – Extended Producer Responsibility

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### Resources to Include on the NRC website with this Policy (Posted [here](#))

- ISRI, Position on Chemical Recycling (7-14-22)
- Beyond Plastics, Chemical Recycling – A Dangerous Deception (10-30-23)
- NCEL, “Chemical Recycling” of Plastic presentation (10-16-23)
- World Wildlife Fund, Chemical Recycling Implementation Principles (Jan. 2022)
- NRDC, Chemical Recycling Analyses (Issue Brief, Fact Sheet, and Spanish Fact Sheet, 2022)
- GAIA, Plastics Circularity – beyond the hype (May 2023)
- Global Plastics Treaty references