**Khắc phục ô nhiễm vi nhựa trong nước thải**

Hoạt động sinh hoạt và sản xuất kinh tế của con người là tác nhân chính tạo nên rác thải vi nhựa. Các sản phẩm được tạo thành từ hạt vi nhựa như mỹ phẩm, kem đánh răng, xà phòng,… là nguồn phát thải hạt vi nhựa nguyên sinh. Bên cạnh đó, hạt vi nhựa còn có thể được tạo ra từ những sản phẩm lớn hơn như quần áo, đồ chơi, nguyên liệu đóng gói trong quá trình phân hủy được gọi là nguồn phát thải thứ cấp. Cơ chế phát tán hạt vi nhựa của hai nguồn phát thải chính này cũng khác nhau. Trong khi những hạt vi nhựa nguyên sinh có thể được loại bỏ trong quá trình xử lý tại các nhà máy xử lý nước thải trước khi thải ra môi trường thì các hạt vi nhựa đến từ nguồn phát thải thứ cấp thường trực tiếp thải ra môi trường thông qua các hoạt động sinh hoạt đặc biệt là sản xuất nông nghiệp của con người. Sau đó, chúng di chuyển theo hệ thống sông ngòi và trực tiếp thải ra biển.

Ngoài ra hạt vi nhựa còn xuất hiện trong hệ sinh thái đại dương bởi hoạt động đánh bắt và nuôi trồng hải sản trên biển. Hạt vi nhựa có tác động tiêu cực đến hệ sinh thái đặc biệt là hệ sinh thái dưới nước. Chúng tác động thông qua một cơ chế phức tạp trong chu trình của hệ sinh thái. Cuối cùng, chúng tác động đến toàn bộ các loài động vật trong chu trình này, từ những sinh vật phù du đến những sinh vật hàng đầu trong chuỗi như san hô, cá, chim các loài bò sát và động vật có vú sinh sống dưới biển. Ba tác động chính của hạt vi nhựa là ảnh hưởng đến quá trình tiêu hóa, tác động của các chất phụ gia (chất hóa dẻo) và cuối cùng là ảnh hưởng các chất gây ô nhiễm (các chất hữu cơ khó phân hủy) có trong hạt vi nhựa đến sinh vật.

Để hiểu rõ hơn Cục Thông tin KH&CN quốc gia xin giới thiệu một số bài nghiên cứu đã được xuất bản chính thức và các bài viết được chấp nhận đăng trên những cơ sở dữ liệu học thuật chính thống.

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