



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC 20 2017

Mr. Darren Koh  
Pollution Control Department  
National Environment Agency  
40 Scotts Road, #12-00 Environment Building  
228231 Singapore  
Singapore

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE  
NOW THE  
OFFICE OF LAND AND  
EMERGENCY MANAGEMENT

Subject: RCRA Classification of Singapore Refining Company Spent Catalyst

Dear Mr. Koh:

This letter is in response to your July 24, 2017 letter regarding spent "UOP R-264X platforming catalyst" proposed to be shipped from the Singapore Refining Company to the Sabin Metal West Corporation in the United States for recovery. Your letter requested that the U.S. EPA clarify the hazardous/non-hazardous waste classification of this spent catalyst under the U.S. Resource Conservation and Recovery Act (RCRA), the U.S. law on waste management.

Before responding directly to your request, we would emphasize that under the RCRA regulations as implemented in the U.S., it is the responsibility of persons generating the waste (i.e., the 'generator') to make a hazardous waste determination. The RCRA regulations require the generator to determine whether the waste is hazardous because it is the generator who should be most familiar with the composition of their waste, and the process that produced the waste. In situations where persons in the U.S. are importing waste into the U.S., such persons are also defined as 'generator' and must determine whether the waste is hazardous under RCRA subtitle C. While in many instances EPA can provide assistance to the regulated community and others in understanding how the hazardous waste regulations may apply to particular wastes,<sup>1</sup> our inherent lack of first-hand knowledge of specific wastes in some circumstances underscores the importance of generators in making accurate hazardous waste determinations.

In the U.S., a waste is defined as hazardous waste under RCRA either by being listed as hazardous (i.e., a description of the waste appears in EPA's regulations under 40 Code of Federal Regulations (CFR) part 261 subpart D) or by exhibiting a hazardous characteristic (the criteria for identifying the RCRA hazardous waste characteristics are in 40 CFR part 261 subpart C). As stated in our August 17, 2016 email to you, wastes that are not listed hazardous waste may still be defined as characteristic hazardous waste in the United States if they exhibit any of the RCRA characteristics. Based on the descriptions with which we were provided, these spent catalysts do not appear to be listed hazardous waste under RCRA.

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<sup>1</sup> For example, EPA can often assist in determinations of whether a waste is a 'listed' hazardous waste under RCRA based on a detailed description of the waste and the process that generated it; similarly, when provided with analytical results EPA can offer its assistance as to whether a waste exhibits the RCRA Toxicity Characteristic under §261.24.

We also reviewed the safety data sheet and testing results that you attached to your letter. Based on this information, this spent catalyst is not characteristically toxic. However, the safety datasheet contains cautionary statements regarding static charges and hydrocarbons retained on the spent catalyst. As you know, there can be variability in the conditions under which certain catalysts are taken out of service, which could affect whether or not any particular batch of spent catalysts display properties that might cause them to be considered reactive hazardous waste under RCRA.<sup>2</sup> Safety data sheets can be informative for hazardous waste identification purposes, but should be seen as augmenting, not replacing, an accurate hazardous waste determination made by the generator based on their knowledge and familiarity with the properties of any particular waste.

Therefore, because these indications were concerning but not necessarily determinative, our office consulted with the state environmental authority directly responsible for the oversight of the RCRA program at the Sabin Metal West facility located in Williston, North Dakota, to learn more about the facility and the spent catalysts that they recycle. We learned that this facility is aware of their obligation to make accurate hazardous waste determinations for the waste they import, including platinum-bearing spent catalysts, and that the state agency is familiar with the facility's operations and has previously concurred with the facility's management of spent catalysts from other sources. Based on that agency's feedback and information, EPA finds that the management of the spent catalyst identified in your letter as non-hazardous waste is appropriate, where the facility has made such a determination.

This document will no longer be valid if the information on which the EPA relies is incorrect, incomplete or fraudulent.

Should you have any questions or require additional information please do not hesitate to contact Eva Kreisler via email at [kreisler.eva@epa.gov](mailto:kreisler.eva@epa.gov) or via telephone at (202) 564-8186, or, Laura Coughlan at (703) 308-0005 ([coughlan.laura@epa.gov](mailto:coughlan.laura@epa.gov)).

Sincerely,



Barnes Johnson, Director  
Office of Resource Conservation and Recovery  
United States Environmental Protection Agency

cc: Cindy Schafer, EPA Region 8  
Annette Maxwell, EPA Region 8

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<sup>2</sup> Based on EPA's previous studies of several types of spent petroleum refining catalysts; see record supporting EPA's listing determination for petroleum refining wastes promulgated August 6, 1998.