

risk by summing the carcinogenic risks for all waste constituents for a given exposure pathway and then summing the carcinogenic risks for each pathway analyzed in the delisting risk assessment. The DRAS also computes the cumulative noncarcinogenic risk by summing the Hazard Quotients for all waste constituents for a given exposure pathway to obtain exposure pathway-specific Hazard Indexes (HIs), and then summing the HIs associated with each exposure pathway analyzed. For a one-time exclusion, the results of the cumulative risk assessment may be used in lieu of the calculated delisting levels. Since this is a one-time delisting, we do not need to establish monitoring concentrations for each batch of waste that is subsequently managed under the exclusion. Therefore, we set the evaluation levels in the cumulative risk process at the established target risk range (1×10^{-4} to 1×10^{-6} for carcinogenic waste constituents and a HI of 1.0 to 0.1 for noncarcinogenic waste constituents). Use of the cumulative risk analysis allows the risk associated with an individual waste constituent to extend to a less conservative risk level as long as the cumulative risk for the entire petitioned waste lies below or within EPA's target risk range.

For calculation of delisting levels for multi-year (batch) waste generation, EPA Region III generally defines acceptable risk levels as wastes with an excess cancer risk of no more than 1×10^{-6} and a hazard quotient of no more than 0.1 for individual constituents. For a one-time delisting, EPA Region III evaluates the cumulative cancer risk and cumulative hazard index of the petitioned waste. A cumulative cancer risk less than 1×10^{-4} and a cumulative hazard index less than or equal to 1 are considered to be protective of human health and will be considered acceptable for this type of delisting determination.

B. What Other Factors Did EPA Consider in Its Evaluation?

We also consider the applicability of groundwater monitoring data during the evaluation of delisting petitions where the petitioned waste is currently managed or was once managed in a land-based unit (e.g., a landfill or surface impoundment).

We use the results of groundwater monitoring data evaluations as a check on the reasonable worst case evaluations performed, in order to provide an additional level of confidence in our delisting decisions. Because groundwater monitoring data are descriptive of the impact of the

petitioned waste under actual conditions, and not reasonable worst case assumptions, we believe that evidence of groundwater contamination originating from a land-based waste management unit may be sufficient basis for petition denial.

In this case, SPSA/Onyx has not generated the subject ash until this recent incident (described earlier in this preamble) which resulted in a small amount of the ash being used as daily cover in the SPSA Regional Landfill. We have determined that it would not be helpful to request groundwater monitoring data since the small amount of ash used as daily cover would not have a detectable impact on the groundwater at this Regional Landfill.

C. What Conclusion Did EPA Reach?

EPA believes that the information provided by SPSA/Onyx provides a reasonable basis to grant SPSA/Onyx's petition. We, therefore, propose to grant SPSA/Onyx a one-time delisting for the 1410 cubic yards of petitioned ash currently located at the SPSA Regional Landfill. This includes both the ash which has been segregated in a waste pile at the site as well as the ash that has been used as cover material in the Landfill. The data submitted to support the petition and the Agency's evaluation show that the constituents in the SPSA/Onyx ash are below health-based levels used by the Agency for delisting decision-making, and that the ash does not exhibit any of the characteristics of a hazardous waste.

For this delisting determination, we used information gathered to identify plausible exposure routes (i.e., groundwater, surface water, air) for hazardous constituents present in the petitioned waste. We determined that disposal in a RCRA Subtitle D landfill is the most reasonable, worst-case disposal scenario for SPSA/Onyx's petitioned waste. We applied the DRAS described above to predict the maximum allowable concentrations of hazardous constituents that may be released from the petitioned waste after disposal, and we determined the potential impact of the disposal of SPSA/Onyx's petitioned waste on human health and the environment.

The estimated total cumulative risk posed by the waste, as calculated using the DRAS, is 4.1×10^{-5} . We believe that this risk is acceptable both because the value is within the generally acceptable range of 1×10^{-4} to 1×10^{-6} and, as stated above, for a one-time delisting, EPA Region III considers a cumulative cancer risk less than 1×10^{-4} to be protective of human health.

The estimated cumulative hazard index for this waste is calculated by DRAS to be 3.2×10^{-1} . We likewise believe that this risk is acceptable both because the value is within the generally acceptable range of 1.0 to 0.1 and, for a one-time delisting, EPA Region III considers a cumulative hazard index less than or equal to 1 to be protective of human health.

We believe the data submitted in support of the petition show that the waste will not pose a threat when disposed of in a RCRA Subtitle D landfill. We, therefore, propose to grant SPSA/Onyx's request for a one-time delisting for the 1410 cubic yards of ash currently located at the SPSA Regional Landfill.

IV. Conditions for Exclusion

A. What Conditions Are Associated With This Exclusion?

The proposed exclusion would apply only to the estimated 1410 cubic yards of ash currently located at the SPSA Regional Landfill as described in SPSA/Onyx's petition. No ash other than the ash described in this petition could be managed as nonhazardous waste under this exclusion.

If SPSA and/or Onyx discovers that a condition or assumption related to the characterization of this waste that was used in the evaluation of this petition is not as reported in the petition, SPSA and/or Onyx will be required to report any information relevant to that condition or assumption in writing to the Regional Administrator and the Virginia Department of Environmental Quality within 10 calendar days of discovering that condition.

The purpose of this condition is to require SPSA and/or Onyx to disclose new or different information that may be pertinent to the delisting. This provision will allow us to reevaluate the exclusion based on this new information in order to determine if our original decision was correct. If we discover such information from any source, we will act on it as appropriate. Further action may include repealing the exclusion, modifying the exclusion, or other appropriate action deemed necessary to protect human health or the environment. EPA has the authority under RCRA and the Administrative Procedures Act, 5 U.S.C. 551 *et seq.* (1978), (APA), to reopen the delisting under the conditions described above.

SPSA/Onyx state in their petition that the waste, if delisted, will remain at the SPSA Regional Landfill. However, in order to adequately track wastes that have been delisted, in the event that a decision is made to dispose of all or part