

# ARMA Health, Safety, and Environment Committee

## ARMA Health, Safety, and Environment 2019 Committee Discussion

Chair: Devlin Whiteside, Owens Corning  
Vice-Chair: Bob Hockman, TAMKO

ARMA Summer HSE Committee Meeting  
September 11, 2019



# ARMA HSE Committee Update

## Washington State Study Review Update



# Washington Roof Runoff Study Review

## ARMA Sponsored Review of Washington State Study

- Dr. William Warren-Hicks (EcoStat) presented a high-level overview of his review of the WSC study at the spring HSE Committee meeting
- White paper first draft is now complete; Task Force has been reviewing

# Washington Roof Runoff Study Review

## ARMA Sponsored Review of Washington State Study

- After the spring meeting, the HSE Committee made recommendations to EC in order for ARMA to decide what to do with the review.
  - Dr. Warren-Hicks indicated he does not find the report publishable based on poor study methodology – This doesn't mean it won't get published.
  - Possible continuation of study with better methodology
  - Potential for future risk assessment studies using existing data available online.
    - Data collected at roofs not relevant to local ecology – fate & transport
  - At the time it was expected that ARMA would submit the white paper for EC review then share with WSC as a “friendly gesture”
- Upon review of first draft of white paper, the Task Force has generated some questions/concerns

# Washington Roof Runoff Study Review

## ARMA Sponsored Review of Washington State Study

### **1. Should the EcoStat review be finalized for internal or external use?**

- Are EcoStat's findings technically sound?
- EcoStat's review is limited to shingles (particularly AR shingles) "because metals concentrations in the low-slope panels were generally consistent with control concentrations." Do the deficiencies EcoStat identified in the steep-slope data undermine the findings of no significant runoff from low-slope materials?
- As a whole, are EcoStat's findings useful to ARMA?
  - Are the findings useful in preventing legislation that could be detrimental to ARMA? (if legislation were based wholly on WSC's work)

# Washington Roof Runoff Study Review

## ARMA Sponsored Review of Washington State Study

### 2. What objectives should be addressed by a white paper based on the EcoStat review?

- A resource for ARMA and ARMA members for responding to regulatory or related developments?
- A technical review to be furnished to WSC in the event that WSC reveals that it is preparing an article for publication in a scientific journal based on the WSC report? Or for use in developing a rebuttal (e.g., letter to the editor) to such an article?
- A resource for commenting on any proposal to continue the WA roof runoff study (Rounds 4 and beyond), or to proceed to fate and transport modeling?
- A resource for developing materials promoting asphalt roofing products as environmentally superior choices?

# Washington Roof Runoff Study Review

## ARMA Sponsored Review of Washington State Study

- **Preliminary TF Recommendations:**
- The TF met by conference call on September 4 to discuss these issues, and reached the following preliminary conclusions:

# Washington Roof Runoff Study Review

## **ARMA Sponsored Review of Washington State Study**

- Subject to the questions mentioned below, no significant technical weaknesses were identified in EcoStat's findings. Taken together, they appear to support EcoStat's overall conclusion that WSC's Round 3 report does not "meet sufficient scientific quality for decision making." Although significant editing is needed, addressing this should be deferred until a clear objective for the paper is identified.



# Washington Roof Runoff Study Review

## **ARMA Sponsored Review of Washington State Study**

- Because there have been informal indications that WSC may seek to publish a scientific article on the roof runoff study supporting policy implications unfavorable to the asphalt roofing industry, ARMA should ask EcoStat to reconfigure and finalize the draft into a white paper evaluating whether the study has produced valid findings quantifying runoff concentrations for asphalt shingles as compared to both the control panels and to other steep-slope roofing materials. This white paper would be written for external use if ARMA has the opportunity to comment on the propriety of WSC publishing a scientific article. It would also provide the scientific basis for a rebuttal if necessary. It may also be valuable to have an internal version of the paper available as needed with additional information (fate and transport, next steps etc.)

# Washington Roof Runoff Study Review

## **ARMA Sponsored Review of Washington State Study**

- As ARMA requested, the latter sections of the EcoStat draft contain (i) recommended methodological changes should WSC decide to continue the roof runoff study (Round 4 and beyond), and (ii) suggested approaches to fate and transport modeling and risk assessment. It is premature and strategically risky to include these subjects in a document that might be furnished to WSC in the near future. Accordingly, these sections should be separated into a separate “future steps paper” for internal use only.

# Washington Roof Runoff Study Review

## **ARMA Sponsored Review of Washington State Study**

- If finalizing a separate paper is approved, ARMA should ask EcoStat to address how improving study methodology for the ongoing runoff investigation will yield data useful for decision making since the existing panels have already aged significantly and the methodology changes may preclude direct comparison to Rounds 1-3.

# Washington Roof Runoff Study Review

## **ARMA Sponsored Review of Washington State Study**

- ARMA should ask EcoStat whether the shortcomings identified in its review undermine its assertion that “metals concentrations in the low-slope panels were generally consistent with control concentrations.” If EcoStat maintains the view that this finding can be defended as valid, ARMA should explore the development of appropriate promotional materials because the Executive Committee has supported such an effort, provided that EcoStat is involved in the review of any such materials.

# Washington Roof Runoff Study Review

## **ARMA Sponsored Review of Washington State Study**

- As a professional courtesy, and to maintain a good working relationship with WSC, would it be prudent to contact WSC before publication of an external paper with Bill Warren-Hick's findings to discuss them at a high level. Publishing without contact with WSC may create conflict that does not currently exist between ARMA and that entity.

# Other Projects

# Further Discussion?

