Division of Compensation Analysis and Support Program Evaluation Report	Document Number: DCAS-PER-058 Effective Date: 11/21/2014 Revision No. 0

Dow Chemical Co. (Madison Site)

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RECORD OF ISSUE/REVISIONS			
ISSUE AUTHORIZATION DATE	**EFFECTIVE DATE**	**REV. NO.**	**DESCRIPTION**
11/21/2014	11/21/2014	0	New document to determine the effect on previously completed claims due to a revision to the Dow Chemical appendix.

1.0 Description

On 4/3/2014 revision 1 of Battelle-TBD-6000 Appendix C, Dow Chemical Co. (Madison Site) was issued. Both revision 0 and revision 1 of the appendix provided a prescriptive dose estimate to be used for employees of the Dow Chemical site in Madison Illinois (Dow).

2.0 Issue Evaluation

The revision to appendix C was based on revisions to Battelle-TBD-6000 and ORAUT-OTIB-70. One of the changes to TBD-6000 was the deposition time used to calculate external dose from contamination. This value was changed from 7 days to 30 days causing an increase in the photon dose from this exposure. Another change was the inclusion of beta dose from contamination that was not included in the previous revision.

ORAUT-OTIB-70 provides a depletion rate for residual contamination after operations end. A revision to OTIB-70 on 3/5/2012 reduced that depletion rate and thus increased doses in the residual period.

Together these result in at least some increased dose for all cases in the operational and residual period.

3.0 Plan for Resolution or Corrective Action

All Dow claims completed prior to 4/3/2014 with a probability of causation (POC) less than 50% were included in the affected population of claims for this PER. This totals 96 claims however, during this evaluation, 3 of the claims were returned to NIOSH for other reasons. Those claims will be reworked using revision 1 of the Appendix C so no further evaluation under this PER is necessary. Also, 13 claims also had employment at General Steel Industries (GSI). These claims will be evaluated under PER-0057 (GSI) which

includes revising dose estimate for Dow per revision 1 of Appendix C. Therefore, no further revaluation of those 13 claims was necessary under this PER.

The dose for each of the remaining 80 cases was recalculated using revision 1 of Appendix C as well as the current revision of any other applicable documents. 77 of these claims resulted in a POC below 45% while none resulted in a POC above 50%. For the remaining 3 claims, IREP was ran 30 times at 10,000 iterations per NIOSH procedures and the resulting POC less than 50% for the each of the 3 claims.

NIOSH will provide the Department of Labor with the list of all the claims evaluated under this PER. Since none of the claims resulted in a POC greater than 50%, NIOSH will not request the return of any of the claims.