**Model Error Resolution Document**

Complete only applicable items.

<table>
<thead>
<tr>
<th>INITIATION</th>
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<tbody>
<tr>
<td>1. Originator: Alicia Aragon</td>
</tr>
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<td>3. ERD No.: MDL-NBS-HS-000023 ERD 01</td>
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<td>6. Description of and Justification for Change (identify applicable CRs and TBVs):</td>
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**I Background Information Summary**

This ERD addresses CR 11824 which identifies an error in Figure E-7 of the model report *Simulation of Net Infiltration for Present-Day and Potential Future Climates* (MDL-NBS-HS-000023 REV 01 [DIRS 174294]).

**CR Description (CR 11824)**

"Figure E-7 in MDL-NBS-HS-000023 REV 01 shows satellite image of the Yucca Mountain region with the infiltration modeling boundary and the boundary of the region used for Dark Object Subtraction (DOS) atmospheric correction. The figure is from output DTN SN0608NDVIANAL.001, file: "B3_B4_DOS_ROI_2.xls". The error is that the figure in the report is displayed as a mirror image. In other words, the left side of the figure is the eastern side of the region and the right side of the image is in the western side of the region. The figure in the output DTN is displayed correctly. This error is only in the graphical representation of Figure E-7. The analysis results are not affected.”

Since initiation of CR 11824, an addendum to the AMR (MDL-NBS-HS-000023 REV 01 AD 01 [DIRS 182145]) has been approved. Corrections are to be applied to this addendum which includes the parent document.

**II Inputs and/or Software**

No new input sources or software are used in this ERD.

(see attached)

<table>
<thead>
<tr>
<th>CONCURRENCE</th>
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<tbody>
<tr>
<td>Printed Name</td>
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<tr>
<td>7. Checker</td>
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<tr>
<td>8. QCS/QA Reviewer</td>
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<tr>
<td>9. Originator</td>
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<td>10. Responsible Manager</td>
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III Analysis and Results

To resolve this issue, Figure E-7 on page E-21 is to be replaced with a correctly oriented image from output DTN: SN0608NDVIANAL.001, file: "B3_B4_DOS_ROI_2.xls" as shown below. The caption and sources listed for Figure E-7 are to remain unchanged.

IV Impact Evaluation

As stated in CR 11824, the analysis results are not affected by the graphical error. The correction to Figure E-7 does not impact the conclusions or output from MDL-NBS-HS-000023 REV 01 AD 01 [DIRS 182145] and its included parent report MDL-NBS-HS-000023 REV 01 [DIRS 174294]. This correction has no impact on the following downstream products that cite the reports.

Controlled Documents that cite MDL-NBS-HS-000023 REV 01 AD 01 [DIRS 182145]

- ANL-WIS-MD-000024 Rev. 01: Postclosure Nuclear Safety Design Bases
- ANL-WIS-MD-000027 Rev. 00: Features, Events, and Processes for the Total System Performance Assessment: Analyses.
- MDL-NBS-HS-000006 Rev. 03, Addendum 01. UZ Flow Models and Submodels.
• MDL-WIS-PA-000005 Rev. 00, Addendum 01: Total System Performance Assessment Model/Analysis for the License Application.
• MDL-WIS-PA-000005 Rev. 00, Miscld 01: Total System Performance Assessment Model/Analysis for the License Application - Volume I.
• MDL-WIS-PA-000005 Rev. 00, Miscld 02: Total System Performance Assessment Model/Analysis for the License Application - Volume II.
• MDL-WIS-PA-000005 Rev. 00, Miscld 03: Total System Performance Assessment Model/Analysis for the License Application - Volume III.
• TDR-PCS-SE-000001 Rev. 05, ACN 01, Addendum 01: Performance Confirmation Plan.
• TDR-PCS-SE-000001 Rev. 05, Addendum 01: Performance Confirmation Plan
• TDR-WIS-PA-000014 Rev. 00: TSPA Information Package for the Draft SEIS.

Controlled Documents that cite MDL-NBS-HS-000023 Rev 01 [DIRS 174294]

• ANL-EBS-MD-000049 Rev. 03, Addendum 01: Multiscale Thermohydrologic Model.
• ANL-NBS-HS-000058 Rev. 00: Calibrated Unsaturated Zone Properties.
• MDL-EBS-MD-000001 Rev. 00, Addendum 01: In-Drift Natural Convection and Condensation.
• MDL-MGR-HS-000001 Rev. 00: Irrigation Recycling Model.
• MDL-NBS-HS-000001 Rev. 05: Drift-Scale THC Seepage Model
• MDL-NBS-HS-000006 Rev. 03: UZ Flow Models and Submodels
• MDL-NBS-HS-000011 Rev. 03: Saturated Zone Site-Scale Flow Model.
• MDL-NBS-HS-000019 Rev. 01, Addendum 01: Abstraction of Drift Seepage.
• MDL-NBS-HS-000021 Rev. 03, Addendum 01: Saturated Zone Flow and Transport Model Abstraction.
• TDR-MGR-MD-000056 Rev. 00: Performance Confirmation Annual Report Fiscal Year 2007.
• TDR-NBS-HS-000020 Rev. 00: Data Qualification Report for Simulation of Net Infiltration for Present Day and Potential Future Climates Preliminary Output.
• TDR-TDIP-NS-000001 Rev. 00: Total System Performance Assessment (TSPA): Data Input Package for Unsaturated Zone Flow Parameters and Weighting Factors (UZ-1).
• TDR-TDIP-NS-000005 Rev. 00: Total System Performance Assessment (TSPA) Data Input Package for Site-Scale Saturated Zone Breakthrough Curve.
• TDR-TDIP-NS-000006 Rev. 00: Total System Performance Assessment (TSPA) Data Input Package for Saturated Zone 1-D Transport Model.
• TDR-WIS-PA-000014 Rev. 00: TSPA Information Package for the Draft SEIS.