From: Gustavo Cragnolino [gcragnol@cnwra.swri.edu]
Sent: Thursday, February 22, 2007 7:28 PM
To: Xihua He; Ken Chiang; 'CSPE_Group'
Subject: RE: Question regarding the welded regions of the waste packages

We need to look on this issue of heat affected zone carefully because I don't think that is similar to the case of sensitization of HAZ in stainless steel welds caused by Cr depletion at grain boundaries. .

-----Original Message-----
From: Xihua He [mailto:xhe@cnwra.swri.edu]
Sent: Wednesday, February 21, 2007 3:18 PM
To: kchiang@cnwra.swri.edu; 'CSPE_Group'
Subject: RE: Question regarding the welded regions of the waste packages

Pavan,

3) According to Osvaldo, approximately 0.01 of the total surface is comprised of welds. But heat affected zone (HAZ) is also more susceptible to LC than mill annealed material. Up to 10% of the WP surface could be HAZ (extreme case) (recent file from Osvaldo on parameters).

4) The attached is one figure I obtained from Darrell, which shows the most recent WP design according to him, but I found it is not publicly available.

The publicly available figure that shows the design is at:

DOE. "Yucca Mountain Science and Engineering Report—Technical Information Supporting Site Recommendation Consideration." DOE/RW-0539-1. Rev. 1. Las Vegas, Nevada: DOE, Office of Civilian Radioactive Waste Management. 2002.

-Xihua

-----Original Message-----
From: Kuang-Tsan Ken Chiang [mailto:kchiang@cnwra.swri.edu]
Sent: Wednesday, February 21, 2007 2:36 PM
To: 'Pavan Shukla'; 'CSPE_Group'
Subject: RE: Question regarding the welded regions of the waste packages

Pavan,

Answers to 1, and 2 can be found in IM CNWRA 2007-01.

Ken

-----Original Message-----
From: Pavan Shukla [mailto:pshukla@cnwra.swri.edu]
Sent: Wednesday, February 21, 2007 2:22 PM
To: 'CSPE_Group'; 'Ken Chiang'
Subject: Question regarding the welded regions of the waste packages

All,

I have following questions on the waste package design.
I need this information to complete the TPA code user's manual.

1) What is the expected composition of the welded material used to weld the closure lid with the waste package body?

2) Will the welding be used on the main body of the waste package?

3) Is there an estimate for area ratio of welded region and mill-annealed region ?

4) Does any one has a latest reference of DOE's waste package design?
A DOE report will be good.

Sincerely

Pavan K. Shukla
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Subject: RE: Question regarding the welded regions of the waste packages
Sent Date: 2/22/2007 7:27:30 PM
Received Date: 2/22/2007 7:27:33 PM
From: Gustavo Cragnolino

Created By: gcragnol@cnwra.swri.edu

Recipients:
"Xihua He" <xhe@cnwra.swri.edu>
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Files	**Size**	**Date & Time**
MESSAGE	2540	2/22/2007 7:27:33 PM

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