

Response to Comments
Pilot Study Implementation Plan
Site 88, OU 15
MCB Camp Lejeune, North Carolina

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Introduction

The purpose of this document is to address comments on the Draft Pilot Study Implementation Plan for Site 88. The United States Environmental Protection Agency (USEPA) had no comments on the document. The North Carolina Department of Environment and Natural Resources (NCDENR) provided the comments listed below. The responses to comments are provided in bold.

North Carolina Department of Environment and Natural Resources Comments (Dated August 2, 2010)

General Comments

This appears to be a potentially effective Implementation Plan, if the aquifer characteristics and deep contaminant issues do not limit substrate and augmentation distribution. However, we will likely need to reapply one or more of the remedies in this plan during the remedial design/remedial action to include the zone 2 and zone 3 Pilot Study areas. It is generally observed that more than one application of an injection remedy will be required to reduce the contaminants to the standard or close enough to the standard to justify a less aggressive final remedy.

This comment is respectfully acknowledged.

Specific Comments

1. Why did we assume a 50% lactate to 50% emulsified oil ratio for the injectant/substrate during groundwater modeling? The actual ERD substrate being proposed for injection at Site 88 is 3DMe with bioaugmentation. This is a microemulsion. If it doesn't include emulsified oil we should not assume a

50/50 ratio as noted above. This could give us a radius of influence greater than the actual field implementation.

The groundwater modeling consisted only of particle tracking that assumed unretarded movement of substrate. The assumption of 50% lactate to 50% emulsified oil will be removed from the text.

2. Next to the last paragraph on page 2-6 discusses “zone and 3”. Please make appropriate correction.

The text will be corrected to read “zones 2 and 3”.

3. Is IW05 hydraulically down-gradient of MW39MP? If not please make appropriate corrections in the second paragraph of the section on Well Installation on page 4-1 or discuss, in this section, why it is expected that the monitoring wells in 4 different directions are all down-gradient of MW39MP.

No, the text will be modified to “in the vicinity of MW39MP”.

4. The first paragraph on page 4-3 references C Street and Figure 4-1 for the fire hydrant and flush water supply. This should reference the fire hydrant on Virginia Dare Drive. C Street is not north of the ERD injection area of zone 2.

The text will be modified to reference the fire hydrant on Virginia Dare Drive.

5. All IDW drums should be stored at a 90 day facility rather than on parachute road as discussed on page 5-2. Drums should not be moved from the site until they are characterized. It would be better to leave the drums on-site than to move them to a remote area like parachute road.

IDW will be characterized and managed in accordance with the Waste Management Plan.