ATTACHMENT 1
INFORMAL RESPONSES TO EPA COMMENTS (Letter 8WM-WQ)
DRAFT OU1 HABITAT MITIGATION PLAN

RESPONSE

(1) page 1, ¶ 2: It is important to note that the term "wetland" as used in the draft habitat mitigation plan refers to a jurisdictional wetland rather than a true, fully functional wetland. The "wetland" at OU1 was characterized only by the presence of hydrophilic vegetation (willows and cattails) and did not meet all of the criteria which define true wetlands (soil type, hydrology, geology, saturated soil for 15 or more days per year, etc.). The OU1 wetland was not sufficiently developed to fulfill any functions, other than habitat functions, normally ascribed to true wetlands under the Clean Water Act.

(2) page 1, ¶ 3: Concur. The "will" in the first sentence of the introductory paragraph will be changed to "did" when the draft habitat mitigation plan is fully revised.

(3) page 1, ¶ 4: As stated in Response (1), only a depauperate jurisdictional wetland existed at OU1 prior to construction. For this reason, the draft habitat mitigation plan focused on restoration and augmentation of habitat values rather than on the creation of wetland values at OU1, which never previously existed. It was felt that it was technically and ecologically impractical to attempt development of a "true" wetland in an area where one did not exist previously.

(4) page 1, ¶ 5: The 1200 m^2 area of tree and wetland habitat (only 400 m^2 of which was wetland vegetation) described in the draft habitat mitigation plan was the largest and most significant area of wetland vegetation on the OU1 hillside. Small patches of cattails were present upslope and to the west of this large habitat; a few of these patches were removed during construction, but several still remain. Patches of cattails contained in the skimming pond (IHSS 107) were also impacted by construction activities. None of these patches of cattails fulfilled functions, other than habitat functions, normally ascribed to true wetlands.

(5) page 2, ¶ 1: Although groundwater seeps occur with some regularity below the pediment elsewhere in the buffer zone, they are rare along the 881 Hillside. Extensive surface water sampling in the area has revealed only two, small ephemeral seeps (SW-71 and SW-72) on the hillside east of Building 881. In addition, construction of Building 881, which is a concrete structure that extends four stories underground, is likely to have disrupted any natural seeps that may have been in the vicinity of the impacted 1200 m^2 habitat area. Given these factors, it is possible, but highly improbable, that significant natural sources of water existed in this region of the 881 Hillside.

(6) page 2, ¶ 2: See Responses (1) and (3).

(7) page 2, ¶ 3: It should be noted that the OU1 habitat site never possessed sufficient natural or anthropogenic water resources to supply the needs of a true, saturated soil wetland. Excavation of the French Drain revealed a 5 m to 7 m (17 to 20 feet) layer of porous sandy soil underlying the former site of the tree and wetland vegetation habitat; a soil type inconsistent with development of a true, saturated soil wetland. The French Drain that now occupies the site is a similarly porous structure and creation of a true, saturated soil wetland above it would require not only provision of an artificial water source, but construction of an impermeable basin to maintain the required degree of soil saturation. In the absence of such an impermeable basin, most of the water intended for saturation of the wetland would simply flow down into the French Drain. Far from

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enhancing operation of the Drain, this excess volume of water is more likely to overburden the treatment facility and hinder effective remediation of contaminated groundwater. These very significant engineering and ecological restrictions caused the habitat mitigation plan to emphasize creation of full function wetland habitat elsewhere in the buffer zone, where chances of successful establishment are much higher.

(8) page 2, ¶4: See Response (7).

(9) page 2, ¶5: The 1 to 3 year planning period is being viewed incorrectly as an attempt to avoid restoration of habitat and wetland values rather than as the basis for providing levels of mitigation well is excess of minimum requirements. This portion of the plan was crafted in response to U.S. Fish and Wildlife Service recommendations that all wetland impacts, plant-wide, be mitigated in one concentrated effort rather than on a piecemeal basis. The plan thus proposes to replace 400 m^2 of marginal, depauperate wetland vegetation with several hectares of full function, high value wetland in a buffer zone area where the possibility of successful establishment is the greatest. It is our considered professional opinion that such bulk replacement of wetland is an ecologically relevant, technically feasible, and potentially more successful solution than replacement on a project by project basis. As noted in the plan, a construction effort of this magnitude will require a considerable level of planning and coordination to be successful and the 1 to 3 year time frame merely reflects the realities of undertaking such work at Rocky Flats Plant.

(10) page 2, ¶6: Concur. A meeting to discuss the various issues surrounding wetlands and the draft habitat mitigation plan would be extremely useful.