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Gary Kennedy, 1760 University Drive, Mansfield, OH 44906, and **Lee J McEwan***
(mcewan.1@osu.edu), 1760 University Drive, Mansfield, OH 44906. *On The Milnor Fiber of a
Quasi-Ordinary Hypersurface*. Preliminary report.

We give an explicit topological description of the Milnor fiber, and its boundary, of a quasi-ordinary hypersurface. Our description generalizes the classical construction of the Milnor fiber of a plane curve singularity, in terms of canonical pieces that are invariant under, and acted on finitely by, the monodromy. In this more general setting, there are several monodromies. Among our results is a recursive formula (in terms of the characteristic tuples) for the Betti numbers of both the Milnor fiber and its boundary. (Received August 10, 2015)