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Orsola Capovilla-Searle*, Duke University, Duke University, durham, NC. *Weinstein handle decompositions of complements of toric divisors in toric 4 manifolds.*

We consider toric 4 manifolds with certain toric divisors that have normal crossing singularities. The normal crossing singularities can be smoothed, changing the topology of the complement. In specific cases this complement has a Weinstein structure, and we develop an algorithm to construct a Weinstein handlebody diagram of the complement of the smoothed toric divisor. The algorithm we construct more generally gives a Weinstein handlebody diagram for Weinstein 4-manifolds constructed by attaching 2 handles to T^*S for any surface S , where the 2 handles are attached along the conormal lift of co-oriented curves on S . Joint work with Bahar Acu, Agnes Gadbled, Aleksandra Marinkovic, Emmy Murphy, Laura Starkston and Angela Wu. (Received January 16, 2021)