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CONVERTING EXISTING BRINE SUPPLY CAVERNS TO PROPANE AND
BUTANE STORAGE – FROM TECHNICAL ASPECTS TO PERMITTING
HURDLES IN NEW YORK STATE

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Abstract

In 2009, Inergy, now Crestwood, prepared a permit application to convert several existing salt caverns to propane and butane storage service at Reading, New York on property owned by US Salt, LLC. Almost six years later, a Draft permit was issued by the New York State Department of Environmental Conservation under Article 23 of the State Code. Unfortunately, environmental activists cried “Wine not Brine” as their mantra, since the area is populated by numerous active wineries. Those same activists use propane to heat their homes, to heat their water and for cooking. Coming from as far away as California, they have resorted to civil disobedience in their quest to stop the project by blocking access to Crestwood’s property and chaining themselves to company gates. Under Law, the local constabulary has resorted to arresting and jailing the protestors.

The original intent of presenting this paper was to discuss the technical details of converting existing brine supply caverns to propane and butane storage based on rigorous testing, sonar surveys, casing inspection logging, finite-element analysis, environmental studies, 20 years of previous LPG storage at the site and the history of nearby natural gas storage activity. In addition, the intention was to focus on the theories offered by the technical experts for those groups opposing the project and to offer Crestwood’s technical responses to those theories; however, all of this information pertaining to cavern integrity is now restricted by a confidentiality order enacted during the regulatory review process. The documentation regarding opposition theories and Crestwood’s responses were provided to an Administrative Law Judge in February of this year and a decision is pending as to whether the technical concerns raised by the project opponents warrant adjudication. This paper is limited to a general description of the technical substance of the application, opposition theories, and Crestwood’s responses to those theories. These limitations to the content of this paper are necessary in order to honor the confidentiality requirement and to not jeopardize Crestwood’s case in the event of adjudication.

Key Words: Bedded Salt Deposits, Caverns for Liquid Storage, Environmental Protection and Regulatory Affairs, Geology, History, New York, Salina Basin

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