

Dover Town Clerk
126 East Duncan Hill Road
Dover Plains, N.Y. 12522

RE: Final EIS Document for Dover Knolls

Dear Town Board,

This letter is a follow-up to my presentations at both public hearings, regarding the final Environmental Impact Statement, for the Dover Knolls project. Re-development of the Harlem Valley Psychiatric Center could be very beneficial to the Town of Dover, within strict guidelines. The EIS as presented, is incomplete and short-sighted in coverage of significant water and wastewater infrastructure issues.

A prior engineering study, commissioned by the Dutchess County Water and Wastewater Authority in 1993, i.e. the Gray, Railing, and Heinsman report , was largely ignored. In contrast to the Developer's engineering report, the GRH document was based on a wealth of detailed HVPC site operational records over several decades, as well as interviews of the support personnel. It is clear that the DCWWA was taking the long view with this study, i.e. requirements were sought to bring the water and wastewater plants to a "true" operational capacity of 1.2MGD, as well as potentially doubling the throughput to 2.4MGD.

The primary concern with the Developer's approach, is the ultimate abandonment of the existing reservoir water system, in favor of one based on site groundwater wells:

-the well supply system will not have a centralized treatment facility, and will require several satellite pumping stations, in addition to the numerous large well pumps. As opposed to the predominantly gravity flow, existing plant, the new scheme is more complex, and will consume much more energy to operate. This translates to higher support costs. There is no mention in the EIS of this impact, and projected costs.

-the GRH report references the disposal of PCB containing transformers from the old power plant, on the HVPC site, buried in one of the land-fills. It was recommended that monitoring wells be drilled, to continuously check for this environmental hazard to the aquifer. The EIS only references PCB containing equipment identified in site structures, such as fluorescent light ballasts, elevator equipment, transformers, and hydraulic vehicle lifts. There is no explicit mention of the large power transformers that were buried, or mitigation and monitoring of same. It is not a question of “if” the transformer casings corrode and release the PCB’s, but “when” this will occur. Sanctioning a well-based system, with a known environmental hazard, may expose the Town to liability issues.

-the aquifer recharge rates offered by (3) engineering models, are marginal at best. With a projected population of 3,000 people, which does not account for any growth on the adjacent parcels to the site, maximum water demand, without irrigation, is 874,412 gpd (using the Engineering Handbook 1.7 multiplier). Irrigation of common areas and the golf course could add 217,000 gpd to that, for a total of over 1 million gpd. Some mitigation may come, if the NYSDEC permits the use of “gray” water for the irrigation. The Chazen aquifer recharge model projects 808,059 gpd, but under drought conditions (estimated 30%

reduction) only 565,641gpd. The Swamp River Base Flow analysis, predicts an aquifer recharge rate only 17% higher than the Chazen model. However, the recent Swamp River flow rates provided, are much higher than those stated in the GRH report, which cites drought years 1970 and 1993. The third model is based on rainfall statistics distant from the site location.

Conclusion: The maximum daily demand for a population of just 3,000 people, with no consideration for peripheral growth, exceeds the drought year projections of both the Chazen and Swamp River Base Flow analysis models.

Recommendation: maintain the current water supply system, and use the Ten Mile River as a supplementary source of water for the reservoir.

-the 49,000,000 gallon reservoir has a dam 225 feet long, and 64 feet in height, at it's tallest point. This structure already has violations, and is in need of repair, to prevent failure. There is no mention of long term maintenance and insurance costs for the structure, in the EIS.

Secondary concerns revolve around the sewage treatment plant. Although rated at 1.2MGD, the sand beds for sludge drying, operate at a flow rate of only 385,000 gpd, i.e. limiting actual capacity to less than one-third the rated capacity. The GRH report recommends installation of a belt filter press for sludge processing, combined with composting, which would produce a sellable by-product. Otherwise, dried sludge from the sand beds would have to be disposed of at a sanitary landfill. Other problems with the facility include un-heated "digesters", which reduces operational efficiency in winter months, and no tertiary treatment of effluent. Hopefully, the NYSDEC mandates tertiary

treatment, if “gray” water is permitted for irrigation. The EIS does not commit the Developer to anything but “possible” improvements, and no mention as to the cost projections for plant operation, sludge removal, etc.

In conclusion, the EIS provides “rosy” financial estimates as to increased Town and School District revenues, as the result of this project. Nowhere is there any kind of breakdown or listing of water and wastewater infrastructure operation costs, as well as long term costs regarding replacement of worn components, typically a 20 year cycle. Furthermore, no cost analysis is provided for the reservoir dam. Lastly, full details of a known environmental hazard were omitted from the EIS. As stated earlier, the Dover Knolls project could help the economic situation in Dover. If the Developer is permitted to “cut corners” on key physical plant details, the result will be potentially huge future costs to all Dover taxpayers.

Sincerely,

Alan Surman

CC: NYS Dept. of Health

Dutchess County Dept. of Health

NYS Dept. of Environmental Conservation, Region 3

Dutchess County Water and Wastewater Authority

Dover Planning Board