## Exhibit 7 Summary of Sampling Frequencies and Analytical Suites for Gas Relief Wells, Monitoring Wells, and Water Supply Wells: Manlove GMZ Consent Order

NI	0-1	Description			Definition
Number	Category	Description	Sampling Frequency & Duration	Analytical Suite	Rationale
1	Gas Relief Wells	Existing (RW-1, RW-2, and RW-3) and four new gas relief wells that produce gas during pilot testing and are therefore incorporated into the gas relief system. As of the entry of the Consent Order, Illinois EPA has approved initial locations for the four new gas relief wells, subject to its review and approval of the Relief Well Installation Report.	<ul> <li>Quarterly</li> <li>Semi-Annual sampling thereafter with Illinois EPA approval</li> <li>Monitoring terminates when gas relief wells being monitored are no longer in operation (i.e., are no longer productive or completion of post-corrective action monitoring)</li> </ul>	<ul> <li>Dissolved methane, ethane, and propane</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) (analyzed initially, and repeated if there are significant changes in dissolved or free-phase gas concentrations)</li> <li>Water chemistry parameters as required for any discharge permit</li> <li>Performance data:         <ul> <li>Times of well operation versus downtime</li> <li>Volume and rate of water produced</li> <li>Volume and rate of air produced</li> <li>Estimated volume of natural gas produced at atmospheric pressure</li> </ul> </li> </ul>	Data will be utilized to evaluate the performance of gas relief wells over time, including support for decisions on continuing or discontinuing specific relief well operations
2	Gas Relief Monitoring Wells	At each gas relief well, three monitoring wells will be installed to evaluate gas relief well performance. <b>NOTE:</b> If water supply wells are used in place of monitoring wells specifically to monitor gas relief well performance, those will be subject to the same monitoring schedule and analytical schedule listed herein.	<ul> <li>Eight samples in the first year</li> <li>Quarterly sampling thereafter</li> <li>Semi-Annual sampling thereafter with Illinois EPA approval</li> <li>Monitoring terminates upon termination of operation of gas relief well being evaluated</li> </ul>	<ul> <li>First Event:</li> <li>Major cations and anions (calcium, potassium, magnesium, sodium, chloride, sulfate, and bicarbonate alkalinity)</li> <li>Nitrate</li> <li>Total and dissolved iron, manganese, and arsenic</li> <li>Total dissolved solids</li> <li>Dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) if these gases are present in sufficient concentrations</li> <li>All Subsequent Events:</li> <li>Dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) will be performed if dissolved methane carbon in crease to ≥10 mg/L (where concentrations were lower before)</li> </ul>	Data will be utilized to establish baseline conditions in newly installed monitoring wells, and thereafter, to provide information on temporal variation of dissolved methane concentrations and the effectiveness of the relief wells to meet the remediation objectives for the aquifer.
3	Other Groundwater Monitoring Wells	Monitoring wells not utilized for gas relief well evaluation and installed at other locations.	<ul> <li>Eight samples in the first year</li> <li>Quarterly sampling thereafter</li> <li>Semi-Annual sampling thereafter with Illinois EPA approval</li> <li>Monitoring terminates at completion of post-corrective monitoring in that portion of the GMZ</li> </ul>	<ul> <li>First Event:</li> <li>Major cations and anions (calcium, potassium, magnesium, sodium, chloride, sulfate, and bicarbonate alkalinity)</li> <li>Nitrate</li> <li>Total and dissolved iron, manganese, and arsenic</li> <li>Total dissolved solids</li> <li>Dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) will be performed if these gases are present in sufficient concentrations</li> <li>All Subsequent Events:</li> <li>Dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) will be performed if dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) will be performed if dissolved methane concentrations</li> </ul>	Data will be utilized to establish baseline conditions in newly installed monitoring wells, and thereafter, to provide information on temporal variation of dissolved methane concentrations and the effectiveness of the relief wells to meet the remediation objectives for the aquifer.
4	Water Supply Wells Located Within the GMZ Boundary not already classified as "Existing Device Households" or "Other Impacted Households"	Agreed water supply wells located within the boundaries of the GMZ.	<ul> <li>Assuming PGL is provided access by the landowner/homeowner, this would be a single event, field work to be performed within one hundred twenty (120) days of entry of the Consent Order, excluding counting days between November 1 and April 1 due to cold weather.</li> <li>During this sampling event, "Other Impacted Households" may be identified and be subject to Category No. 5 sampling</li> </ul>	<ul> <li>Major cations and anions (calcium, potassium, magnesium, sodium, chloride, sulfate, and bicarbonate alkalinity)</li> <li>Nitrate</li> <li>Total and dissolved iron, manganese, and arsenic</li> <li>Total dissolved solids</li> <li>Dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration (if wellhead is accessible for measurement)</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) will be performed if these gases are present in sufficient concentrations</li> </ul>	Data will be used to characterize baseline water quality and gas characteristics and to select wells for on-going monitoring to provide information on temporal variation of dissolved methane concentrations and the effectiveness of the relief wells to meet the remediation objectives for the aquifer.

## Exhibit 7 *(Continued)* Summary of Proposed Sampling Frequencies and Analytical Suites for Gas Relief Wells, Monitoring Wells, and Water Supply Wells: Manlove GMZ Consent Order

Number	Category	Description	Sampling Frequency & Duration	Analytical Suite	Rationale
5	Water Supply Wells at "Existing Device Households" or "Other Impacted Households" as defined in the Final Consent Order	<ul> <li>All water supply wells with ≥10 mg/L MC2 thermogenic methane based on initial sampling event (described in No. 4 above) ("Monitored Supply Wells")</li> <li>10 additional water supply wells with &lt;10 mg/L MC2 thermogenic methane at locations near or just outside the identified boundary ("Sentinel Wells")</li> </ul>	<ul> <li>Monthly water sampling for a period of two (2) years from the date of entry of the Consent Order, quarterly for the next two (2) years, bi-annually for the next two (2) years, then annually thereafter. However, if after the first year three (3) consecutive monthly samples at an Existing Device Household show concentrations of MC2 thermogenic methane below 10 mg/L in treated water, testing shall transition to quarterly then bi-annually then annually as described above. If any sample result shows concentrations of MC2 thermogenic methane below 10 mg/L in treated water, testing shall transition to quarterly then bi-annually then annually as described above. If any sample result shows concentrations of MC2 thermogenic methane above 10 mg/L in treated water, monthly sampling will be required consistent with this paragraph until the concentrations are reduced to below 10 mg/L.</li> <li>Monitoring terminates upon completion of post-corrective action monitoring in that portion of the GMZ</li> </ul>	<ul> <li>Dissolved methane, ethane, and propane</li> <li>Free-phase gas concentration (if wellhead is accessible for measurement)</li> <li>Stable isotopic analysis of methane (carbon and hydrogen) and ethane (carbon) will be performed if dissolved methane concentrations increase to ≥10 mg/L (where concentrations were lower before)</li> <li>Data collected from "Existing Device Households" or "Other Impacted Households" may be used for evaluation of the aquifer and assessing the remediation, but the Defendant's obligations to such households are set forth exclusively in the Final Consent Order</li> </ul>	Data will be utilized to track the stability and character of the aquifer over time, including progress toward and achievement of remedial objectives

Notes:

1) Analytical Suite is intended as a general description only and is subject to modification at specific wells or areas based on field conditions or other factors.

2) All sampling of privately owned wells will be subject to Peoples Gas being granted access by the well owners.

3) The specific analytical methods as listed in the GMZ apply to each category.

## Exhibit 7