APPENDIX G – CIG'S HYDROSTATIC TEST PLAN

Hydrostatic Test Plan:
South Platte River Water Withdrawal

Colorado Interstate Gas Company

High Plains Expansion Project
Weld, Adams, and Morgan, Colorado

INTRODUCTION

Colorado Interstate Gas Company (CIG) is proposing to construct a new 30-inch and 24-inch O.D. natural gas pipeline, to be referred to as the High Plains Expansion Project (Project). Once constructed, in order to assure compliance with U.S. Department of Transportation regulations, CIG must pressure test this line in accordance with CFR Part 192 requirements. For this Project, CIG plans to hydrostatically test the completed pipeline, using water pressured to the appropriate level.

WATER SOURCES

CIG proposes to obtain water for hydrostatic testing from the following sources:

Source	Approximate Location	Volume Withdrawn (gallons)	Volume Withdrawn (acre feet)	Maximum Withdrawal Rate	Duration of Use
South Platte River	Line 250A MP 41.2	17,355,600	53.3	1500 gpm 3.3 cfs	Up to 45 days
South Platte River	Line 252A MP 11.6	12,588,000	38.7	1500 gpm 3.3 cfs	Up to 45 days
Total Withdrawal		29,943,600	92.0		

All water will be discharged within the same drainage basin from which it is taken (South Platte River). Water withdrawals from the South Platte River will follow USFWS recommended procedures to protect larval fish populations.

The intakes will be screened to prevent fish entrainment and set in areas of flowing water to avoid sedimentation and the rate of extraction will assure a continued flow in the river, up to 1,500 gallons per minute (3.3 cubic feet per second). Water will be drawn out with a low pressure pump, pumping into the suction side of a high pressure pump that moves water into the pipeline. All pumps will be set into fuel/oil containment areas.

Any additional restrictions issued by the Federal Energy Regulatory Commission (FERC) on behalf of the USFWS will be observed where water is withdrawn. Withdrawal will likely begin between April 15 and June 15, 2008. Discharge should be complete by July 1, 2008.

TESTING

Water will be used for no more than forty five days. Discharges will occur at the locations described below. Prior to testing, pipe has been inspected and welds have been x-rayed. In the unlikely event that there should be an accidental release due to pipe or valve failure, the location of the release will be contained as quickly as practicable and, once the facility has been repaired and retested, the damaged area will be recontoured and reclaimed in compliance with the Reclamation Plan.

DISCHARGE

Once the pipe has been tested and the water is no longer needed, the water will be discharged over open ground within the same drainage basin where the water was withdrawn, which is the South Platte River drainage basin for the entire Project. Discharges are planned to occur at the following locations:

Currently Proposed Hydrostatic Test Water Discharges for the CIG High Plains Expansion Project					
Line No.	**Mile Post**	**Expected Discharge Volume (gallons)**	**Expected Discharge Volume (acre-feet)**	**Water Source**	**Water Disposal Site**
250A	7.3	1,648,800	5.1	South Platte River	Open Ground
250A	14.8	1,713,600	5.3		Open Ground
250A	22.4	1,713,600	5.3		Open Ground
250A	29.5	1,596,000	4.9		Open Ground
250A	41.2	2,644,800	8.1		Open Ground
250A	54.8	3,073,200	9.4		Open Ground
250A	62.5	1,724,400	5.3		Open Ground
250A	66.0	520,800	1.6		Open Ground
250A	84.8	2,720,400	8.4		Open Ground
	SUB-TOTAL	**17,355,600**	**53.3**	Line 250A	
251A	0.0	1,072,800	3.3	South Platte River	Open Ground
251A	7.5	2,028,000	6.2		Open Ground
251A	21.5	1,357,200	4.2		Open Ground
251A	30.9	1,699,200	5.2		Open Ground
251A	42.6	1,390,800	4.3		Open Ground
251A	52.2	828,000	2.5		Open Ground
	SUB-TOTAL	**8,376,000**	**25.7**	Line 251A	
252A	7.4	1,670,400	5.1	South Platte River	Open Ground
252A	9.3	429,600	1.3		Open Ground
252A	14.9	1,240,800	3.8		Open Ground
	SUB-TOTAL	**3,340,800**	**10.3**	Line 252A	
253A	6.1	871,200	2.7	South Platte River	Open Ground
	SUB-TOTAL	**871,200**	**2.7**	Line 253A	
Overall Total		**29,943,600**	**92.0**		

In addition to the above locations, all mainline valve (gate) locations are potential discharge points because the contractor may initially install manifolds at these locations before installing the valves. The pipe for the Project will be new. Typically, hydrostatic test water will pick up some iron oxide (rust) from new pipe, depending on the total duration the water remains in the pipe. The quantity is likely to be fairly small and may give the discharge water a slight red color. The water may also pick up some sand or dirt left over from the installation. While night caps are always installed after a days work, dirt may still find its way into the pipe. All hydrostatic test water will be discharged through a certified weed-free hay or straw

bale dissipation device to slow down the velocity and to help pick up solids (Procedure 11, Appendix A, Site Specific Plans, POD). Any contaminants in the discharge water will likely be below the required minimums. To ensure this conclusion, water will be collected and tested[a] at a certified water testing laboratory. For this reason there is no plan to use any chemical treatment of the hydrostatic test water. The only physical treatment for the water will be the certified weed-free hay or straw bale dissipation device. The discharge locations will be into nearly level or gently rolling, vegetated upland areas to help avoid erosion issues. Hydrostatic test water will be discharged into the drainage basin from which it is extracted but will not be discharged into areas with highly saline or seleniferous soils. Sites with restrictive drainage features (e.g., shallow depth to clay or bedrock) will be avoided.

[a] The hydrostatic test discharge permit in Colorado will require analysis of TSS, total iron, pH, and a visual for oil and grease (if a sheen is observed an oil and grease sample will be collected, if a sheen is not observed, it will be documented in field notes/reports).