bituminous aggregate base in production exceed 10 percent of the mix by dry weight.

908.053 Quality Control for PGM Binder. The Contractor's Plant Operation Quality Control Plan (Supplement 1056) shall include plans for meeting this specification and any handling requirements of the PGM Binder supplier. If the Contractor does additional testing or plant modifications, this shall be explained in the plan.

A preapproved asphalt ignition oven is required to obtain an aggregate sample from an asphalt concrete sample. The asphalt ignition oven may be used in place of hot bin or belt samples.

Some solvent testing may be performed early in a project as information in helping to verify plant operation and determining an Asphalt Content Nuclear Gauge (AC Gauge) or asphalt ignition oven calibration. However, any solvent testing shall be accompanied by an asphalt ignition oven test.

For SBR polymers added at the asphalt concrete mixing plant, the flow meter printouts shall be totaled for each day's production. The percent of polymer versus neat binder in the mix shall be calculated each day and recorded on the TE-199. Calculation worksheets and printouts shall be available in the plant laboratory for review by the Monitoring Team. A +/- 0.2 percent tolerance from the target amount of SBR polymer shall be used as a guide for an acceptable amount of SBR polymer use, but shall not be consistently low. Disposition of all data records shall be at the direction of the DET.

Table A
Material Requirements for PGM Binder

Test / Requirement	SBR Polymer		SBS Polymer		Notes
Final PG Binder Grade	70-22 (a)	70-22 (b)	70-22 (a)	76-22 (a)	c
Actual Pass Temperatures	Report		Report		i
RTFO Mass Loss, percent	□ 0.5		□ 0.5		d
Phase Angle, max	76		80	76	d
Elastic Recovery, min			65	75	e
Toughness, in lb	118				f, d
Tenacity, in lb	68				f, d
Elongation, in, min	20				f, d
Ductility, in, min	28				j, d
Separation, F max	10		10		g
Homogeneity			None Visible		h, d

a. Preblended PGM Binder with a base binder of at least -22 grade or stiffer.
b. Post blended PGM Binder made from neat Supplement 1032 certified or preapproved standard PG Binder grade and rubber solids amount equal to or above 3.5 percent by weight of total binder to achieve the PG Binder grade.
c. As required by 908.052.
d. PGM Binder
e. ASTM D 113, 10cm @ 25C, on RTFO material
f. ASTM D 5801, 50cm/min @ 25C
g. Softening point difference of top and bottom of frozen sealed aluminum tube conditioned at 340F for 48 hours. Compatibility of polymer and neat binder is sole responsibility of supplier. PGM Binder shall be formulated to retain dispersion for 3 days minimum. Failure in the field to retain dispersion for this time will mean automatic removal from Supplement 1032 certification.
h. Heat a minimum 400 gram sample at 177C for 2.5-3 hours. Pour entire sample over a hot No 50 (300 µm) sieve at 340F. Look for retained polymer lumps.
i. Actual high and low temperature achieved by PGM Binder beyond required grade, but shall not grade out to the next standard PG Binder grade for low temperature.
j. ASTM D 113, @ 4C, 1 cm/min