Appendix B13:
Emission Reduction Credits from Shutdowns and Curtailments

Section IV.C.3 (Emission Reduction Credits from Shutdowns and Curtailments) of Appendix S to 40 C.F.R. pt. 51, states that emissions reductions achieved by shutting down an existing source or curtailing production or operating hours may be credited for offsets if such reductions are surplus, permanent, quantifiable, and federally enforceable and the shutdown or curtailment occurred after the last day of the base year (12/31/2002) for the SIP planning process. Appendix S allows the use of pre-2002 shutdown and curtailment credits of $PM_{2.5}$, and its precursors (SO_2 and NO_x), emissions for offsets, provided the projected emissions inventory used to develop the attainment demonstration explicitly includes emissions for offsets from such previously shutdown or curtailed emission units.

The banked emissions from pre-2002 facility or equipment shutdowns were not included in the 2002 modeling inventory. However, as discussed in detail in Appendix C, there is a modeled differential between the modeled design values for 2009 and the $PM_{2.5}$ annual NAAQS of 15.0 $\mu g/m^3$, which has been used to allow banked credits in the future. In this SIP revision, New Jersey has assigned 268 tpy of $PM_{2.5}$, 1,227 tpy of SO_2, and 573 tpy of NO_x from the estimated modeled differential for potential use as emission offset credits from the bank.

Table B13.1 shows New Jersey's banked emission credits for facility or equipment shutdowns from 1998-2002 (Step 1). Banked credits prior to 1998 were not included in accordance with the discounting provision of N.J.A.C 7:27-18. In addition, for any new control requirements in place since the credit was put into the bank and any future use of banked credits will also be discounted at that time based on the age of the shutdown credits. The estimated 2009 modeled differential, after the contingency measures have been subtracted out, is shown as Step 2. This is the estimated difference in tons per year between the modeled design values for 2009 and the $PM_{2.5}$ annual NAAQS of 15.0 $\mu g/m^3$. For more details on contingency measure calculations and modeled differential calculations, see Appendix C. A comparison of the banked emission credits in Step 1 to the estimated modeled differential in Step 2 demonstrates that there are enough modeled differential emissions to accommodate the banked emission credits, should facilities choose to use those reductions for offset credits in the future. The remaining estimated 2009 modeled differential, after contingency measures and the banked emission credits have been subtracted out, is shown as Step 3. Shutdowns that have occurred post-2002 have not been backed out of the modeling inventory. Therefore, those banked emissions are already incorporated into the attainment demonstration.

Table B13.1:
New Jersey Banked Emission Credits from Shutdowns Prior to 2002

Step 1	**Banked Emission Credits (tpy) 1998-2002**		
New Jersey Portion of NAA	**Total Suspended Particulates (TSP)**	**SO_2**	**NO_x**
NNJ/NY/CT NAA	11	59	179
SNJ/Phila. NAA	13	26	68
Atlantic, Cape May, Cumberland, Hunterdon, Ocean, Salem, Sussex, Warren	243	1,142	327
Statewide	268	1,227	573
Step 2	**2009 Modeled Differential after Contingency Measures Subtracted Out (tpy)***		
	$PM_{2.5}$	**SO_2**	**NO_x**
NNJ/NY/CT NAA	1,785	44,559	144,943
SNJ/Phila. NAA	216	9,113	25,348
Statewide	2,001	53,672	170,291
Step 3	**Remaining 2009 Modeled Differential after Contingency Measures and Banked Emission Credits Subtracted Out (tpy) (Step 2 - Step 1)**		
	$PM_{2.5}$	**SO_2**	**NO_x**
NNJ/NY/CT NAA	1,774	44,500	144,764
SNJ/Phila. NAA	203	9,087	25,281
Statewide	1,733	52,445	169,718

*See Appendix C for details on Contingency Measure Calculations and Modeled Differential Calculations