The area ABCE represents the welfare gain to the producer caused by a shift in the supply curve from S to  $S_1$ . The minimum price required to supply each level of output is now lower, and is everywhere further from the market price received by the producer.

Changes in net social welfare caused by LRTAP effects on marketable commodities can be determined by examining the net change in consumer's and producer's surpluses. Suppose, for example, that the reduction of LRTAP deposition results in an increased supply of some product. The supply curve has then shifted to the right from S to  $S_1$ , while the demand curve for the product remains stationary at D, as shown in Figure 7-11.

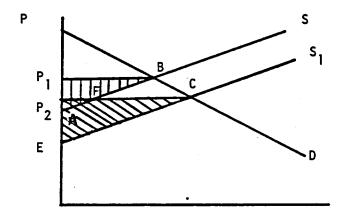


Figure 7-11 Hypothetical change in producer's surplus due to reduction in LRTAP deposition.

The area EP $_2$ C is the new producer's surplus, caused by the price fall due to the supply increase, compared to AP $_1$ B at the original supply and price levels. Producer's surplus changes for two reasons. The producer's surplus is increased by EAFC as a result of increased production at lower cost, with a given market price. Producer's surplus decreases by P $_2$ P $_1$ BF a result of market pressures decreasing output prices and stimulating production. The net change in surplus is therefore ABCE.