

**Explaining Goodstein**

1. "For example, a factory owner might install a low-cost technology that generates substantial air pollution, in spite of the fact that he and his family live nearby and will be exposed to the toxic materials. The owner captures the full benefits of the pollution (the profit from "low-cost" production), while his family bears only a small portion of the total risk." p. 34

2. "*When natural capital is used efficiently, long-run economic profits will be earned by those who retain access to the resource.* It is precisely those profits that attract entry into the market and lead to overexploitation of the source or the sink." p. 38

3. On p. 51 two alternatives are given for allocating water in California, charging farmers the efficient price (\$70 according to Goodstein) and charging them \$10 but letting them resell their water rights without restriction. Suppose the outcomes we care about are these: the amount of water used for agriculture, the amount of water used for cities and the distribution of income among all parties, public and private. Which of these will be the same irrespective of which alternative is adopted? Which will be different? Explain.

4. "Because a move to efficiency almost always creates losers as well as winners, such a move is not "socially optimal." Rather, the best defense of efficiency is that over time *most people* (NOT just polluters) will eventually reap net benefits from a move toward more efficient pollution standards." p. 61

5. "A **Coase theorem corollary** can be stated as follows:

If there is a well-functioning permit market, a cost-effective outcome will be achieved by a marketable permit system *regardless* of the initial ownership of the permits." (p. 312)

6. "*If regulators knew with certainty the location [of marginal cost and benefits curves], then they could achieve efficient pollution reduction to  $C^*$  using either form of incentive-based regulation. They might issue just enough marketable permits to achieve the desired cleanup or, alternatively, charge a pollution tax of  $T^*$ .*" (p. 324)