

**EVE 290**  
**Introduction to Environmental Engineering**  
**Fall 2010**

**Homework #7**

1. Problems 4.24 and 4.25 in text.
2. There are two local recycling plants, one in Minneapolis and one in St. Paul, each with an aluminum can separator. See details below.

| <b>Minneapolis</b> | <b>Influent</b> | <b>Effluent1</b> | <b>Effluent2</b> |
|--------------------|-----------------|------------------|------------------|
| # Al cans/min      | 300             | 280              | 20               |
| # Steel cans/min   | 100             | 3                | 97               |
| <b>St. Paul</b>    |                 |                  |                  |
| # Al cans/min      | 350             | 320              | 30               |
| # Steel cans/min   | 90              | 2                | 88               |

- (a) Which process produces the highest purity?
- (b) Which process has the higher Worrell-Stessel efficiency?