## **MEMORANDUM**

**FROM:** Daniel Charles Mussatti, Editor, EPA Air Pollution Control Cost Manual

**TO:** Users of the Manual

**DATE:** November 1, 2001

**SUBJECT:** The New and Improved Cost Manual

### Dear Reader:

Welcome to the sixth edition of the EPA's most used guidance document. For many of you who have relied upon the Agency's experience in air pollution control costing, we have some new and exciting features for you. For those of you who are new to the Manual, you may not notice it, but the sixth edition is much easier to use.

For twenty-five years, the OAQPS Control Cost Manual has been the seminal work in costing those devices that reduce and eliminate a number of air pollutants - mainly particulate matter (PM) and volatile organic compounds (VOCs). And, as technology changed over the years, so did the Manual. Available at first only in hard copy, as the number of chapters in the original Manual increased, so did its ability to reach its readers. In the early 1990s, the Agency offered its first electronic versions of the Manual, available through the EPA's bulletin board system, the TTN - the Technology Transfer Network. When the Manual became available electronically, the demand for its information blossomed. By the time the Manual became available on the World Wide Web through the EPA's information website, CATC - the Clean Air technology center - we were able to boast over ten thousand copies of the Manual on desks at industrial sources across the country. By the end of the century, the EPA estimates the Cost Manual had been downloaded in whole or in part over a quarter of a million times!

But tremendous growth brings with it tremendous growing pains. As we switched from a paper media to an electronic form of the Manual, the substance of each chapter lagged behind. Prices needed to be updated. Technological discussions needed to incorporate the latest innovations. And, most importantly, the Manual needed a thorough face-lift to get its visual impression to match its importance in the field of pollution control costing and sizing. Consequently, we have introduced a number of changes to this sixth edition that we think you will appreciate.

First of all, we have completely re-done all of the figures and illustrations in the Manual to take advantage of improved imaging technology. This gives us clear, crisp diagrams and images, rather than the "copy of a copy of a copy" look that had begun to creep into the earlier versions of the Manual. Next, we have standardized all of the typefaces, fonts, and layout parameters within and across chapters. This standardization, along with the improved visual imaging in each section, gives the Manual the feel of a textbook. We hope you appreciate the time and effort it took for us to finally get these changes to you. Our last housekeeping detail handled by the sixth edition is updated pricing information to at least 1990. Updating equipment costs is an on-going effort at EPA with a goal of standardizing all costs to one base year. Price updates are developed by re-surveying affected industries and vendors for equipment costs and technology innovations. As new cost information becomes available, it is posted as addendums or chapter revisions.

Next, we have changed the layout of the Manual. If you expect to go to the sixth edition and download a copy of Chapter 4 on Adsorbers, you will be surprised to learn that there really is no chapter four, any more. Instead, the sixth edition is subdivided into major sections, each dedicated to a specific type of air pollutant. Consequently, to find out about VOC adsorbers, you have to go to Section 3 (VOC Controls), subsection 3.1 (VOC Recapture Controls), and then finally to Chapter 1, Adsorbers. The only part of the Manual that retains much of its original layout is in Chapters 1 and 2, which are now in Section 1. Section 2 has been dedicated to Generic Equipment and Devices, Section 3 to VOC Controls, Section 4 to NO<sub>X</sub> Controls, Section 5 to SO<sub>2</sub> and Acid Gas Controls, and Section 6 to PM. I have attached a copy of the Table of Contents to the end of this memo for you to see the layout of each section. I hope you like it. This format will allow us to add new material and new controls in a much more flexible manner, rather than just adding each new chapter to the end of the old Manual.

As you can see, we are entering new and uncharted territory for part of the Manual. Previous editions did not discuss  $NO_X$  or  $SO_2$  controls, and this edition starts the process of correcting that oversight. As you can see from the Table of Contents, we have an aggressive plan to expand into  $NO_X$  combustion controls and  $SO_2$  scrubbers. As these chapters become available, we will add them to the Manual on the CATC website.

We also have plans for adding a chapter for mercury controls in the near future, depending on the work being done at the Agency's Office of Research and Development (ORD). And, in the future, as new technologies become available for fine PM (2.5 microns or smaller), we will also add chapters to discuss these new technologies.

One last thing: You may have noticed that the name has changed. Up until now, if you have used the Manual, you have used the "OAQPS Control Cost Manual." However, this did not give full credit to other parts of the Agency who have provided immeasurable support to this effort. In particular, ORD has been a source of technical expertise, editing and quality control, and, most recently, authorship of the Manual. Consequently, we felt it was only fair to expand the name of the Manual beyond its narrow focus on the Office of Air Quality Planning and Standards, and recognize this partnership within the Agency's air offices.

So, once again, welcome to the EPA Air Pollution Control Cost Manual, sixth edition. I hope you find it useful. If you have any questions about the Manual, or you find an error that we need to address, please feel free to contact me at:

Daniel Mussatti, editor, EPA Air Pollution Control Cost Manual US EPA / OAQPS / ISEG Mail Code C339-01 RTP, NC 27711

919-541-0032 (w) 919-541-0839 (f)

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