UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

NOV 03 1988

REPLY TO: 6T-AN

MEMORANDUM

SUBJECT: Request for Use of ISC 6.2

FROM: James W. Yarbrough
Air Modeling Contact, Region 6 (6T-AN)

TO: Dean Wilson
Modeling Clearinghouse (MD-14)

Because of continued difficulties in providing users with an accurate ISC computer code that incorporates the Schulman-Scire algorithm and due to pressing needs on the part of several companies in Region 6 to do air dispersion modeling to support PSD permit applications, I request that ISC version 6.2 be allowed for both short-term (ISCST) and long-term (ISCLT) averaging times in several instances. The affected PSD applications are the following:

(1) IBM Corporation, Austin plant cogeneration facility

(2) CCPC Chemical, Corpus Christi ethylene plant expansion

(3) Mobil Refining, Beaumont refinery plant expansions

(4) Koch Refining, Corpus Christi refinery plant expansions

(5) Capitol Cement, San Antonio plant

In all the above cases, I have been informed by the companies' agent that the Schulman-Scire downwash algorithm would be triggered if ISC 6.7 is used. (See the attached documentation.) This request for use of ISC 6.2 is predicated on the basis that Schulman-Scire would be triggered in all the above cases.

As I have been informed that the expeditious use of ISC 6.2 is necessary in order for these companies to remain on their schedules for PSD application submittal, I would appreciate your timely, positive response to this request. Thank you.

Attachments

cc: John Hepola (6T-E)

WAID AND ASSOCIATES
ENGINEERING & ENVIRONMENTAL CONSULTANTS
8000 CENTRE PARK DRIVE, SUITE 270, AUSTIN, TEXAS 78754
(512) 835-6112

October 24, 1988

Mr. Jim Yarbrough
U.S. Environmental Protection Agency
Air Programs Branch, 6T-AN
1445 Ross Avenue
Dallas, Texas 75202

Subject: ISC Modeling Procedure

Dear Mr. Yarbrough:

As you know, possible errors have been identified in the current version (UNAMAP 6 Change 7) of the Industrial Source Complex (ISC) models. These possible errors are thought to affect both long and short-term versions of the ISC models and are thought to primarily be in the revised Schulman-Scire building wake effects algorithms.

From your phone conversations with Tony St. Clair (Waid and Associates) and Cyril Durrenberger (Texas Air Control Board) last week, we understand that the current version of ISC is probably not useable for current modeling projects. We understand also that your current guidance is to use the last version of ISC which did not incorporate the Schulman-Scire algorithms - UNAMAP 6 Change 2. Change 2 did not employ the Schulman-Scire algorithms and instead used only the Huber-Snyder analysis of wake effects.

As recommended by both you and Cyril Durrenberger, we plan to use UNAMAP 6 Change 2 of the ISC model for current projects involving ISC modeling. We will use the UNAMAP 6 Change 2 version for on-going projects, including the following:

-   IBM Corporation, Austin Plant Cogeneration Facility
-   CCPC Chemical, Corpus Christi Ethylene Plant Expansion
-   Mobil Refining, Beaumont Refinery Plant Expansions
-   Mobil Exploration, Pegasus Engine Addition
-   Koch Refining, Corpus Christi Refinery Plant Expansions
-   Capitol Cement, San Antonio Plant

The above projects are either currently on-going or expected to be underway within the next two to four weeks. Otherwise, for future projects, we will plan on using future revised versions of ISC after its problems are resolved.

In order to avoid delay of the above projects, we would appreciate your written approval with our plans to proceed with UNAMAP 6 Change 2 until resolution of the questions on the new versions of ISC.

Sincerely yours,

Tony St. Clair, P.E.   Patrick J. Murin
Senior Engineer   Project Manager

cc: Mr. Cyril Durrenberger, Texas Air Control Board

Date: November 2, 1988

To: Jim Yarbrough, EPA

From: Pat Murin, Tony St. Clair, P.E., Waid and Associates

Subject: ISC Modeling

As per your recent telephone conversation with Tony St. Clair concerning immediate ISC modeling requirements, we would like to verify our intent to use UNAMAP 6 Change 2 of the ISC models on several projects.

In our letter to you dated October 24, 1988, we outlined six current projects which will require ISC modeling. We have verified that all those projects, with the possible exception of Mobil Exploration, would require the revised Schulman-Scire downwash analysis. For this reason, the current versions of ISC (UNAMAP 6 Change 7) are not useable.

Since all of the details of the Mobil Exploration project are not known at this time, we will postpone determining which version of ISC will be required until a later date.

We look forward to your approval to use UNAMAP 6 Change 2 for the following:

- IBM Corporation, Austin Plant Cogeneration Facility

- CCPC Chemical, Corpus Christi Ethylene Plant Expansion

- Mobil Refining, Beaumont Refinery Plant Expansion

- Koch Refining, Corpus Christi Refinery Plant Expansions

- Capitol Cement, San Antonio Plant Fuel Modification

Patrick J. Murin
Project Manager

Tony R. St. Clair, P.E.