CLEAN AIR ACT AMENDMENTS IMPLEMENTATION

OVERVIEW OUTLINE

I. Baseline Assessment
The baseline assessment is the foundation of a well managed air program. It includes accurate emissions data and verifying current status with all existing air regulations.

II. Assess Future Status
This consists of making projections of which regulations will apply to specific units and what physical changes will need to be made as a result of the new regulations. It also includes reviewing and commenting on proposed regulations.

III. Integrate Business Plans into Air Planning
Future permitting of expansions and modifications will be more difficult and take longer. It is very important that business plans be understood early so that environmental permitting will not be the bottleneck to expansions or alternate operating scenarios.

IV. Identify Resources Necessary to Implement CAAA
Resources in terms of manpower, capital and operating cost, and consultant help need to be identified as part of the each of the above steps.

V. Develop, Communicate and Update CAAA Action Plan
A detailed action plan to complete CAAA work needs to be developed for each location and consensus on the plan needs to be developed. This plan would be updated on some regular frequency and become more definitive as more details are known.

VI. Prepare Title V Permit Application
Title V permits need to be viewed as a detailed compliance plan for all applicable air regulations. Details on monitoring and recordkeeping must be included. This will be required for certification that a facility is in compliance with all applicable air regulations.

This also includes permit strategy such as alternate operating scenarios and operating modes, how to divide operating permits at a site, and managing emissions as assets.

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CLEAN AIR ACT AMENDMENTS IMPLEMENTATION

DETAILED OUTLINE

It is suggested that a large matrix be developed for each plant. On one axis the emission sources should be listed. On the other axis, the data listed in this outline should be listed. This will include emission data, current and future requirements, and status with the various requirements. An outline of items that can be included in the matrix is attached.

I. Baseline Assessment

A. Emissions inventories already exist. However, these inventories may not always include all operating scenarios, or all emission parameters. The inventories need to include air dispersion model input data such as stack height, flow rates, velocity etc. Separate inventories of Hazardous Air Pollutants may not be available. Analytical techniques or sampling procedures need to be examined for conformance to EPA reference methods. Also the variability in emissions and operating parameters for each emission point should be known.

B. In many cases, compliance with new air regulations will be demonstrated or monitored via surrogate parameters (such as temperature or differential pressure). This data needs to be correlated with actual emissions measurements. This will be the basis of compliance in many cases.

C. Documentation of current compliance with all applicable standards is a must. This includes State SIP's, State Air Regulations, NESHAP, NSPS, PSD. The applicability sections of these regulations need to be examined with documentation of why the regulation is or is not applicable to the unit in each case.

Documentation of applicability of NSPS and PSD regulations is especially important to understand. In the case of NSPS, the effective date is the proposal date. This is usually several years before the final regulation is promulgated. In effect this makes the regulations retroactive. It is important to document that these regulations are or are not applicable to facilities. In the case of PSD regulations, we have made many decisions over the years. It is important to understand these decisions and have complete documentation with backup calculations. Houston Environmental files may be a source for this information if it cannot be found at the plants.

D. Commenting on regulations as they are proposed is a very important activity. Our comments can make a difference in the final regulations. Our comments should be more than

just complaints. The best comments present data and logical arguments on alternate compliance strategies.

II. Assess Future Status

For Title I, this means determining if there are any changes in attainment status or major source status under the regulations. It also includes projections of regulations the facility will be subject to 1) RACT requirements (VOC and NOx reductions) 2) VOC reductions 3) enhanced monitoring for Ozone, NOx, and VOC's and 4) Employee trip reduction requirements.

For Title III, this means understanding status under air toxics and accidental release prevention regulations. Baltimore, LCLAB and LCVCM will be subject to the HON. The HON should also be used as a model for future air toxics regulations and state air toxics programs. Care needs to be taken not to unknowingly trigger MACT via 112(g) modifications. If modifications are made that increase actual emissions, MACT must be installed even if it has not been defined for the source category. Risk management plans will be required for facilities that use extremely hazardous substances.

Title VI regulations affect LCVCM for carbon tetrachloride usage and unintentional production. It also regulates CFC's in terms of phase-out, equipment maintenance, and recordkeeping. This will impact refrigeration units at some plants.

III. Integrate Business Plans into Air Planning
This is becoming more important as permits will be more difficult and take longer to obtain. Many modifications will be subject to public comment and a more formal review process.
A projection of expansion plans and other significant changes in operation should be formulated. With this information, a strategy can be developed which may include controls in non-expansion areas, emissions averaging, and project timing to maximize benefits.

IV. Identify Resources Necessary to Implement CAAA
Resources necessary to implement CAAA need to be identified. These include manpower, capital and operating costs, and contractor help. For example, contract help may be needed for emissions testing. Training programs will be required to ensure plant personnel understand their role in complying with the CAAA and the enforcement provisions that will result from non-compliance.

V. Develop, Communicate and Update CAAA Action Plan
An action plan to complete CAAA work needs to be developed. This plan should include:
1) changes or modifications required by CAAA.

2) time line for compliance.
3) business plans and strategic planning.
4) estimates of capital and expense to implement CAAA.
5) specific resources that will be required to complete the action plan including outside help.
6) any corrective action required as a result of the baseline assessment.
7) training and revision of operating procedures.
8) issues or concerns to be communicated to Senior Management.

The plan should be developed on a plant basis and then communicated to Senior Management to obtain consensus.

This plan will require periodic updating. Meetings with management on the updates should be held to maintain consensus.

VI. Prepare Title V Permit Application

Title V permits need to be viewed as a detailed compliance plan. Title V regulations require that all emissions of regulated air pollutants be included in the permit application. Further, the citation and description of all applicable requirements with associated test methods for determining compliance with each applicable requirement must be in the permit applications. Vista must also describe the compliance status with respect to all applicable requirements. Compliance plans are to be included for items not in compliance. Finally, Vista must certify compliance with all applicable requirements at least annually.

In order to certify compliance with all applicable requirements, the baseline assessment data will be used as a basis. Regulations that a facility is subject to must be gone through item by item. Documentation of how compliance is achieved and monitored will be required. The data on emission parameters will be used to prove compliance with the regulations. This again points to the importance of having accurate emissions data with enough data to statistically set limits. If additional testing will be required to establish the limit, the testing should be scheduled soon.

Lots of thought needs to be given to alternate operating scenarios and operating modes. This may include such things as alternate feedstocks, using backup or spare equipment and unusual operating conditions. If these are not included in the permit, a modification of the permit may be required to operate in this mode. Failure to predict these modes could have severe consequences on the operation of our plants.

Regulations on enhanced monitoring have not yet been issued. However, it is believed that these will require major sources to install, test, operate and maintain an acceptable enhanced

monitoring system for each emission limit. This will be the basis for compliance certifications. It may be very cost effective to monitor emissions via a surrogate parameter versus actual on-line measurement. For example, monitoring the temperature of a combustion control device will be cheaper and easier than measuring the constituents. In order to prove that temperature is a valid emissions parameter, performance tests will be required. Each monitoring device will also need QA/QC procedures, calibration, operation within design parameters and maintenance procedures.