Comments on Options Discussed in the Negotiated Rulemaking Process
During the negotiations, several options that various participants felt would address the statutory charge were considered. These are briefly discussed below with the state representatives' perspectives and recommendations highlighted.

Approach A – Package of Elements

Background. This option was a package of elements developed by U.S. EPA staff to accommodate perspectives raised by all groups participating in the negotiations. The package included a number of revisions to CDR aimed at enhancing data quality, eliminating critical data gaps, and reducing reporting burdens by simplifying and clarifying reporting requirements. Components, discussed further below, included: 1) elimination of existing, potentially high risk reporting exemptions for byproducts, which was viewed by many Committee members as reducing manufacturer burden by eliminating the need to determine eligibility for reporting exemptions and eliminating concerns over potential enforcement vulnerabilities attributable to mistakes in determining exemption eligibility; 2) use of category reporting, which would reduce reporting burden by simplifying the reporting universe and eliminating the need to identify and measure all chemical constituents; 3) Modified Processing and Use Information (Form U Part III) reporting, which would streamline and simplify, but not eliminate, reporting.

The state representatives support this approach, as the package of elements would, taken together, improve data quality and reduce reporting burdens. The elements included in this option are discussed below.

1) **Eliminate/Restrict Potentially High-Risk Exemptions.** The existing exemptions that would have been eliminated under Option A included those for disposal or use in a landfill and as soil amendments, use as a fuel, and physical extraction. The state representatives were particularly concerned about the use as a fuel and soil amendment exemptions because they involve significant potential exposure risks; are artifacts of past unfinished/incomplete policymaking; and have no articulated scientific or policy justification. Additionally, information regarding the extent to which these exemptions are being used, or regarding the types and quantities of inorganic byproducts that are being managed through these exemptions, is not available from U.S. EPA, states, or industry. In light of these concerns, the states supported eliminating the exemptions for burning as a fuel and use as a soil amendment, or significantly restricting them with additional data gathering elements (i.e. one-time reporting) to better delineate the chemical composition, quantity, and fate of the inorganic byproducts currently exempt from reporting under these provisions.

    A) **Burn as a fuel**: U.S. EPA and industry initially indicated that the Burn as a Fuel exemption would not be applicable to inorganics due to a lack of fuel value. Industry subsequently noted that this exemption was likely being used in some sectors. The state representatives support ending or restricting the Burn as a Fuel exemption, as inorganic byproducts do not provide fuel value and combustion of inorganic byproducts has significant potential for environmental releases and exposures. Although other regulations such as the Clean Air Act (CAA) may require air emission/pollution control devices and emissions monitoring that would control the environmental impacts of such burning, there is no assurance that all relevant air toxics emissions would be addressed or that all combustion facilities using the material would be adequately regulated or even covered by CAA regulations. If this exemption is to be retained the state representatives strongly encourage U.S. EPA to implement, in the near term, a one-time reporting requirement to gather data on how, and on the extent to which, this exemption is being used along with the imposition of clear limitations/requirements, including a minimal BTU value; combustion only in facilities with appropriate air pollution controls; and clarification as to when inorganics need to be reported when they are a component of a mixed byproduct stream. (U.S. EPA stated that they had issued guidance for burning mixtures, which

are not exempt from reporting, on page 2-5 of the 2016 CDR Guidance, but states believe that this section does not provide clear or sufficient guidance on burning mixtures as a fuel and at least one industry representative indicated that they were not aware of this guidance.)

B) **Disposal, including land application**: The state representatives expressed the view that, for soil enrichment, the exemption should either be eliminated or should be limited to situations where data is being reported under TRI, with a requirement that the manufacturer note this on the reporting form. The exemption should not be allowed for highly toxic or bioaccumulative inorganics, like mercury, arsenic, and lead. A one-time reporting mechanism should be implemented in the near term to determine who is currently using the exemption.

2) **Reduce Reporting Burden via Category Reporting.** This element was identified as a way to limit reporting and to address concerns noted by some industry participants regarding difficulties in precisely identifying chemical constituents and their levels in byproducts. It would allow a company to report without detailing exact components and small variations in quantities, which would help address industry concerns regarding the potential for enforcement penalties when reporting has, unintentionally, not been accurate. Providing an additional option to report by categories, if well formulated, could provide accurate information, while reducing the potential for chemical characterization and reporting decisions that could be erroneous and subject a manufacturer to some type of compliance and enforcement activity.

   Under this approach manufacturers would have had the choice to report information on inorganic byproducts either as listed on the TRI Inventory or broader categories, to be determined, of inorganic byproducts. The category approach would only be used for CDR inorganic byproduct reporting, and would not exempt industry from reporting in other parts of TSCA. Category reporting would relieve the burden of having to identify specific components and their amounts in a byproduct stream, which can be complicated by process and input variability, impurities, or components present in small amounts or concentrations. The proposal continues to allow reporting chemical substances as unknown or variable composition, complex reaction products, and biological substances, or UVCB's. The UVCB category currently limits reporting burdens but is narrower than the proposed categories. The state representatives supported this proposal, provided that the categories are carefully selected to ensure the data collected is informative.

3) **Modified Processing and Use Information (Form U Part III).** This element would limit reporting and reduce reporting burdens by simplifying and reducing the data reported on this form. Form U reporting is critical to carrying out one of TSCA's main purposes, assessing exposure of workers and sensitive populations to toxic and hazardous substances, including inorganic byproducts, throughout their recycling streams into final products. However, some simplification of the data categories was considered to be achievable, which would reduce the reporting burdens of manufacturers, without unduly compromising data relied upon by U.S. EPA to evaluate potential risks. The state representatives supported streamlining this form in a way that preserves useful data, rather than eliminating it or requiring U.S. EPA to request reporting on a case-by-case basis, as this latter approach would be overly resource intensive and would not generate information on a timely basis.

Approach B - Expand Commercial Use Exemption

This proposal would exempt reporting for inorganic byproducts that undergo recycling through chemical reactions. This would extend the current reporting exemption for inorganic byproducts recycled using physical, non-chemical means, which itself is inconsistent with the Lautenberg Act as it prevents conditions of use from being identified. The state representatives were concerned about the information loss

attributable to the fact that recovery/recycling of a single component of a mixed inorganic byproducts stream would be sufficient to exempt reporting for the entire mixture. The state representatives concluded that, together with the exemption for physical separation, this proposal could essentially eliminate inorganic byproducts reporting by most generators, resulting in a significant loss of information that U.S. EPA relies upon. State representatives noted that it is possible to narrow the scope of this proposal to exempt reporting of specific mixtures or compound classes of low concern, but that the existing exemption petition process already offers a mechanism to do this.

In summary, the state representatives did not support Option B as it would result in a very broad reduction in data U.S. EPA relies on in their risk evaluation process. The state representatives were, however, willing to consider other approaches related to Option B, but these were not formally advanced prior to the withdrawal of the Industry Caucus from the negotiations. Initial ideas for alternative approaches to this wholesale exemption included "one-time reporting" by all byproduct manufacturers/recyclers during the next CDR reporting cycle with future reporting only required if there was a "distinguishable change" in the inorganic byproduct composition or quantity. The state representatives emphasized that a clear and narrow definition of what constitutes "distinguishable change" would be needed as this option would have the potential to lead to a broad loss of data to U.S. EPA if "distinguishable change" was defined loosely.

Approach C - Eliminate Form U, Part 3 Reporting

Approach C was proposed by an industry representative and called for the elimination of Form U Part 3 reporting for many inorganic byproducts, while preserving Parts 1 and 2. The state representatives did not support this option and instead called for streamlining rather than eliminating this section. Part includes much data that U.S. EPA indicated is used in their risk screening efforts and elimination of Part 3 reporting would significantly hinder U.S. EPA's ability to assess inorganic byproduct risks. U.S. EPA also suggested that an alternative, more tractable approach would be to look at ways to improve Form U Part 3 to reduce burdens while preserving needed data. This alternative approach, initially recommended by the state representatives, was ultimately captured in Approach A, and would have simplified reporting by using appropriately informative categories and streamlining, rather than eliminating, Form U reporting.

Approach D - Require Reporting by Processors Rather Than Manufacturers of Inorganic Byproducts.

This approach was advanced by an NGO representative. It focused on reducing manufacturer reporting burden and improving data by eliminating exemptions for byproduct reporting and placing the reporting burden on those directly involved in recycling, reuse, and reprocessing. This proposal would have reduced manufacturer decision-making and reporting burdens by eliminating all inorganic byproduct reporting exemptions. This would simplify manufacturer decision-making and would provide comprehensive information for U.S. EPA and the states to assess potential environmental and health impacts of inorganic byproduct conditions of use, as required by the Lautenberg Act. Further, manufacturer burden could be reduced and data quality improved by shifting the burden of inorganic byproduct reporting to processors and others that are performing the actual recycling, reuse, or reprocessing. This is anticipated in the Lautenberg amendments. Section 2607[(8(a)] allows the Administrator to "apply any reporting obligations to those persons likely to have information relevant to the effective implementation of this subchapter." This need not mean subjecting the population of processors to the same requirements as manufacturers now meet. The same section allows for "differing reporting and recordkeeping requirements on manufacturers and processors" and also says reporting "shall include the level of detail necessary to be reported." U.S. EPA noted that the proposal shifted the reporting burden to processors and others downstream of manufacturers that were not represented on the Committee for the negotiated rulemaking and therefore could not be adopted without further process. The state representatives believe that this proposal may have considerable merit and should be further considered by U.S. EPA.

Approach E - Limit Reporting for Site-Specific Catalyst Recycling

Approach E would limit reporting for catalyst recycling, where the catalyst is or its components are inorganic byproducts that are recycled, reused, or reprocessed either on-site or at a "captive" off-site facility and then returned to the site of generation for further use. The state representatives supported this approach provided it was restricted to on-site, closed-loop regeneration with no release or exposure pathways, which would reduce the risk of release and exposure during transportation, storage, and processing, associated with an off-site location, and also ensure that the catalyst reprocessing operations do not 'commingle' catalysts and byproducts from more than one industrial facility.

Approach F - Reuse of Inorganic Byproducts

This approach would exempt reporting of an isolated intermediate byproduct reintroduced into a manufacturing process to make a final product, if it is "chemically indistinguishable" from the raw materials or final product. Limited reporting would only be allowed for on-site activities. Many Committee members recommended that Approach F be considered as part of the broader CDR Revisions Rule because it could impact both inorganics and organics. The state representatives felt that aspects of this option may warrant further discussion in the context of inorganic byproducts; however, the state representatives, as well as other Committee members, noted that many key issues would need to be addressed. The key issues are how to identify and define isolated intermediates, and establish clear criteria for demonstrating that the byproduct is chemically indistinguishable from the raw materials, including all toxic components of the intermediate. The state representatives noted that to be a viable option this approach would need: clarity regarding requirements on how to determine and ensure that byproducts are chemically identical to the original process inputs and to rule out use of this new exemption for byproducts contaminated or enriched with various impurities of concern (e.g., resulting from use or inclusion of materials from pollution control devices); clearer definitions; and requirements for storage and handling to prevent exposure. The state representatives felt that as presented, the proposal was overly broad and lacked details in these key areas.

Approach G - Modernize Data Systems Approach

This proposed approach focused on developing an improved data reporting and management system to simplify and streamline reporting across programs and make data more readily accessible. The state representatives noted that several state environmental agencies are updating electronic systems for permit applications and other data reporting and are realizing significant systematic improvements and efficiencies.

All groups concluded that this was an approach that U.S. EPA should consider to simplify reporting and to make data more accessible and user friendly.