DECEMBER

TENTATIVE AGENDA

LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

Sunday, December 12, 1999

5:00 p.m. - 7:00 p.m.

Senate Judiciary Committee Room, 208-W

1. **Approval of Minutes - October 18 and 19, 1999**

2. **Review of Legislative Rules:**

   a. **Division of Health**
   Food Establishments, 64CSR17

   b. **Division of Health**
   Public Water Systems Design Standards, 64CSR77

   c. **Office of Air Quality**
   To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors, 45CSR4

   d. **Alcohol Beverage Control Administration**
   Private Club Licensing, 175CSR2

   e. **Alcohol Beverage Control Administration**
   Retail Sale of Wine in Grocery Stores, Wine Specialty Shops and Private Wine Restaurants, 175CSR4

   f. **Lottery Commission**
   State Lottery Rules, 179CSR1

   g. **Lottery Commission**
   Limited Gaming Facility Rules, 179CSR4

   h. **Office of Waste Management**
   Sewage Sludge Management Rule, 33CSR2

   i. **Oil and Gas Conservation Commission**
   Rules of the Commission, 39CSR1

   j. **Division of Culture and History**
   Rehabilitation of Certified Historic Residential Structures Tax Credit, 82CSR4

k. **Family Protection Services Board**
Licensure of Domestic Violence and Perpetrator Intervention Programs, 191CSR2

l. **Board of Physical Therapy**
General Provisions, 16CSR1

3. **Other Business**

Sunday, December 12, 1999

5:00 p.m. - 7:00 p.m.

Legislative Rule-Making Review Committee
(Code §29A-3-10)

Earl Ray Tomblin
ex officio nonvoting member

Robert "Bob" Kiss
ex officio nonvoting member

Senate	**House**
Ross, Chairman	Hunt, Chairman
Anderson, Vice Chairman	Linch, Vice Chairman
Minard	Compton
Snyder	Jenkins
Unger	Faircloth
Minear	Riggs

The meeting was called to order by Mr. Ross, Co-Chairman.

Mr. Hunt moved that the rules proposed by the ***Division of Health-Food Establishments, 64CSR17,*** and the ***Office of Waste Management-Sewage Sludge Management, 33CSR2,*** be laid over until the Committee's January meeting. The motion was adopted.

Mr. Hunt moved that the rules proposed by the ***Alcohol Beverage Control Administration-Private Club Licensing, 175CSR2,*** and ***Retail Sale of Wine in Grocery Stores, Wine Specialty Shops and Private Wine Restaurants, 175CSR4,*** be moved to the foot of the agenda. The motion was adopted.

Mr. Hunt moved that the rule proposed by the ***Office of Air Quality-To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors, 45CSR4,*** be moved to the foot of the agenda. The motion was adopted.

Debra Graham, Committee Counsel, explained the rule proposed by the ***Division of Health-Public Water Systems Design Standards, 64CSR77,*** and stated that the Division has agreed to technical modifications. Dr. Henry Taylor, Public Health Commissioner, and Don Kuntz, Director of the Environmental Engineering Division, responded to questions from the Committee. Jack Frame, President of the West Virginia Water Well Drillers Association, addressed the Committee and responded to questions. Julia Morton, representing the West Virginia Association of Consultant Engineers, addressed the Committee.

Mr. Hunt moved that the proposed rule be laid over until the Committee's January meeting. The motion was adopted.

Ms. Graham reviewed her abstract on the rule proposed by the ***Lottery Commission-State Lottery Rules, 179CSR1,*** and stated that the Commission has agreed to technical modifications. She and John Melton, Counsel for the Lottery Commission, responded to questions from the Committee.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Graham explained the rule proposed by the ***Lottery Commission-Limited Gaming Facility Rules, 179CSR4,*** and stated that the Commission has agreed to technical modifications.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted.

Joseph Altizer, Associate Counsel, reviewed his abstract on the rule proposed by the ***Oil and Gas Conservation Commission-Rules of the Commission, 39CSR1,*** and stated that the Commission has agreed to technical modifications. Barry Lay, Oil and Gas Conservation Commissioner, responded to question from the Committee.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted.

Rita Pauley, Associate Counsel, explained the rule proposed by the ***Division of Culture and History-Rehabilitation of Certified Historic Residential Structures Tax Credit, 82CSR4,*** and stated that the Division has agreed to technical modifications.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Pauley reviewed her abstract on the rule proposed by the ***Family Protection Services Board-Licensure of Domestic Violence and Perpetrator Intervention Programs, 191CSR2,*** and stated that the Board has agreed to technical modifications.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Pauley explained the rule proposed by the ***Board of Physical Therapy-General Provisions, 16CSR1,*** and stated that the Board has agreed to technical modifications. She and Frankie Cayton, Administrator of the Board of Physical Therapy, responded to questions from the Committee.

Mr. Faircloth moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Pauley stated that the rule proposed by the ***Alcohol Beverage Control Administration-Private Club Licensing, 175CSR2,*** had been laid over from the previous meeting. Donald Stemple, Commissioner, addressed the Committee.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted. Mr. Faircloth and Mr. Unger voted "No".

Ms. Pauley stated that the rule proposed by the ***Alcohol Beverage Control Administration-Retail Sale of Wine in Grocery Stores, Wine Specialty Shops and Private Wine Restaurants, 175CSR4,*** had been laid over from the previous meeting. Jim Goodman, representing the Wine Institute, addressed the Committee.

Mr. Hunt moved that the proposed rule be approved as modified. The motion was adopted.

The meeting was adjourned.

DECEMBER INTERIM SCHEDULE
Legislative Interim Meetings
December 12, 13, and 14, 1999

Sunday, December 12, 1999

5:00 - 7:00 p.m.

Legislative Rule-Making Review Committee
(Code §29A-3-10)

Earl Ray Tomblin, ex officio nonvoting member

Robert S. Kiss, ex officio nonvoting member

Senate		House	
Ross, Chair	✓	Hunt, Chair	✓
Anderson, Vice Chair	✓	Linch, Vice Chair	✓
Minard	✓	Compton	✓
Snyder	✓	Jenkins	✓
Unger	✓	Faircloth	✓
Minear	✓	Riggs	✓

I certify that the attendance as noted above is correct.

Staff Person

Debra

5:00 - 7:00 p.m.

Legislative Rule-Making Review Committee
(Code §29A-3-10)

Sun. Dec. 12

Senate Judiciary Room

Earl Ray Tomblin, ex officio nonvoting member

Robert S. Kiss, ex officio nonvoting member

Senate
- Ross, Chair
- Anderson, Vice Chair
- Minard
- Snyder
- Unger
- Minear

House
- Hunt, Chair
- Linch, Vice Chair
- Compton
- Jenkins
- Faircloth
- Riggs

Ross called to order

Hunt adopted — Lay over DOH - food til Jan
Office of Waste Mgt

Hunt adopted — ABCC - Private Club
Wine
OAQ Odor
> foot of agenda

DOH - Public Water Supply Systems

I explained

Dr. Taylor, Public Health Commissioner responded to questions

Don Koontz, Dir Environmental Engineering Div " "
"

Jack Frame, Res, WV Water Well Drillers Assn. addressed the C and responded to q's

Julia Morton, WV Assn Consulting Engineers addressed the C

Hunt adopted — Lay over til January meeting

Lottery - State Lottery

I reviewed and responded to questions

John Melton responded to q's

Hunt adopted Approve as mod

Lottery - Limited Gaming

Hunt adopted Approve as mod

Oil & Gas Conservation Commission

Joe explained

? responded to q's from C

Hunt adopted Approve w/tech mod

Culture & History

Rita explained

Hunt adopted Approve as mod

Family Protection Services Bd

Rita explained

Hunt Approve as mod?

Physical Therapy

Rita explained & responded to q's

Frankie ans'd questions

Fair adopted Approve as modified

ABCA - Private Club Licensing

Discussed last month → had been laid over

Stemple addressed the C

Hunt Approve as mod - Unger & Fairchild voted "No"

ABCA - Wine

Discussed at last meeting — laid over

Hunt Approve as mod adopted

Jim Goodman, Wine Institute addressed the C

Representing, Educating and Promoting the Restaurant/Hospitality Industry

1200 SEVENTEENTH STREET NW, WASHINGTON DC 20036-3097 202/331-5900 FAX: 202/973-3952

NATIONAL RESTAURANT ASSOCIATION

MEMORANDUM

TO: Carol Fulks, Executive Director, WVH&TA

FROM: Jennifer Tong, Manager Technical Services JT

SUBJECT: Food Code Revisions

DATE: September 16, 1999

Per your request, we have reviewed the comments you received from the West Virginia Health Department. Overall, they did not agree with the comments that you sent to the legislature. The following are recommended talking points that you can use during your meeting with the health department in October:

- **Talking Point:** Most responses to the comments submitted justified the requirements by citing sections of the Food Code or annexes. It is important to note that your association takes exception with those sections of the Code or annexes and simply citing the Code does not adequately address your concerns.

- **Comment:** Recommend that Annexes 2 through 7 be incorporated by reference.

  Talking Point: As noted, the annexes provide essential guidance for implementation of key components of the code. We realize that these annexes are not in codified form and do not contain any provisions; however, if they are not included in the document, both the inspector and operator will lose an extremely valuable guidance tool. Is the Department going to include the annexes (for reference) in the "Book of Regulations" that will be distributed to operators and inspectors?

- **Comment:** Recommend incorporating a requirement for mandatory certification of local food safety inspectors.

  Talking Point: The Department of Health recognizes that sanitarian training is necessary for inspectors and has initiated training efforts by providing courses for their staff and requiring yearly continuing education. We think that this is a good "first" step. However, this training covers all aspects of environmental health and does not focus specifically on food safety training. While this type of professional training does reflect the broad depth and knowledge required of general sanitarians, it does not concentrate *solely* on professional development in the area of food safety and sanitation which is so vital to inspectors who inspect food establishments. The

department notes in its comments that their staff must be "standardized" in the field for one week. Who "trains the trainer?"

Ultimately, food safety inspectors and department training staff must be held at least to the same food safety knowledge standards as those foodservice operators whose establishments they inspect. Health inspectors must be able to demonstrate their knowledge in the area of food safety at a minimum through passing a test equivalent to that required of a certified food protection manager. Currently, the department of health training program does not require such an examination.

- **Comment:** The elimination of all bare hand contact with ready-to-eat foods is unattainable, unenforceable, and unnecessary. Department disagrees.

  Talking Point: We agree that infected food employees can be the source of contamination leading to foodborne illnesses and we are very supportive for reducing the chances for contamination of food products. However, elimination of all bare-hand contact with ready-to-eat foods is not the answer. Most often, the prohibition of bare hand contact is expressed by mandatory glove requirements. Realistically, there are many circumstances in restaurant setting in which it is logistically very difficult to avoid all bare hand contact with ready-to-eat foods and we know that gloves afford operators no greater protection than clean washed hands.

  The debate needs to move from an absolute prohibition to a more informed debate on effective hand wash and glove management principles. The solution lies in better hand-washing management and compliance by restaurant employees and not by covering up dirty hands with a pair of gloves. The FDA itself recognized hand-washing management in Annex 3 of the Food Code.

  Furthermore, FDA is still gathering information to serve as a scientific basis for this requirement. The National Advisory Committee for the Microbiological Criteria for Foods is currently in the process of completing a science-based study to determine if the no bare-hand contact requirement is justified. Until such time as this requirement can be clearly justified, it is unreasonable and unnecessary to pose absolute prohibitions to foodservice operators.

- **Comment:** The required maintenance temperature of 41 degrees Fahrenheit for cold foods is costly and may not be fully justified. Most open-top and prep-line refrigeration units will have to be replaced. Department feels that your concerns are adequately addressed in the Food Code.

  Talking Point: The Food Code does allow for a five year phase-in for upgrading or replacing equipment and acknowledges that a storage time of four days is acceptable at 45 degrees Fahrenheit. Since April 1998, all newly NSF listed refrigeration equipment has been manufactured to meet this new 41 degree standard. Unfortunately, the five-year exemption does not allow for a reasonable economic payback period for pre-1998 equipment. Furthermore, there is little public health

justification for the application of the standard to short-term storage of four days or less for these types of units. The Code itself, as mentioned above, allows for storage of four days at 45 degrees Fahrenheit. If this is an unsafe practice, why is it allowed by Code?

- **Comment:** Delete or revise for consumer advisory. Health department will retain in the Code.

  Talking Point: The department believes that pathogenic organisms on the external surface of the meat may be carried or pushed to the interior beef muscle during the pinning process. However, current studies conducted by the Kansas State University (attached) have clearly shown that the surface cooking of pinned steaks removes pathogens of significance. Accordingly, the safety of these steaks is no different than unpinned steaks. Therefore, there is little increased risk to the consumer to necessitate a consumer advisory.

  Additionally, as noted in your comments to the department, FDA research has shown that consumer advisories in general impart little information useful to consumers and are generally unwanted by consumers at retail. I have attached FDA focus group studies to provide the health department.

- **Comment:** Reduce hot holding temperature from 140 degrees Fahrenheit to 130 degrees Fahrenheit based on science and state government experience. The health department cited the Food Code as reason for provision.

  Talking Point: We know that the rate and extent of bacterial growth in potentially hazardous foods are temperature and time dependent. So, it should only make sense that regulatory Code requirements of holding temperatures should be based on science that indicates the growth of bacteria in foods. Research and kill temperatures show us that lowering the limit to 130 degrees Fahrenheit is safe. The highest known growth temperature for a foodborne pathogen is that of *Clostridium perfringens* at 127 degrees Fahrenheit. Further studies show that the growth temperatures for other foodborne pathogens such as *Staphylococcus aureus* and *Salmonella enteritidis* are far below this temperature.

  Additionally, the department indicates that the FDA does not agree with lowering the temperature. This is not true. In fact, the first FDA Unicode, introduced prior to the 1993 Food Code, recommended 130 degrees Fahrenheit for hot holding. In addition, the FDA has stated in many public meetings that they are not against lowering the temperature and that the states have been unresponsive to the change.

  I have attached the kill studies for your use.

- **Comment:** Section 2.1.1.1.A be changed to read "The food establishment has five (5) or more immediately uncorrectable critical items in violation at the time of the inspection." The department agrees. **However, in the Code changes, they changed it to correctable critical items in violation. Must be changed to read uncorrectable.**

- **Penalty Sections and Constitutional Protection:** The department indicates that other West Virginia laws cover these sections. I am unfamiliar with these laws. You may want to take a look at them to make sure that the industry's best interests are incorporated.

REGISTRATION OF PUBLIC
AT
COMMITTEE MEETINGS
WEST VIRGINIA LEGISLATURE

Committee: Legislative Rule-Making Review Committee **Date** 12-12-99

Please print or write plainly.

NAME	ADDRESS	REPRESENTING	Please check (X) if you desire to make a statement.
Karen Price	2001 Quarrier St.	WVMA.	X
[illegible]	3626 [illegible] Dr Charleston	WVDEP	

LS-C-66-1a
Revised 1-10-97

TENTATIVE AGENDA

LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

Tuesday, December 14, 1999

9:00 a.m. - 11:00 a.m.

Senate Finance Committee Room M-451

1. **Review of Legislative Rules:**

   a. **Office of Air Quality**
   To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors, 45CSR4

   b. **Office of Water Resources**
   State Water Pollution Control Revolving Fund Program Rule, 47CSR31

   c. **Office of Water Resources**
   Water Pollution Control Permit Fee Schedule, 47CSR26

   d. **Office of Mining and Reclamation**
   Rules for Mining and Restoration for Sandstone, Limestone and Sand, 38CSR2A

   e. **Office of Mining and Reclamation**
   Rules for Mining and Reclamation of Minerals Other Than Coal, Limestone, Sandstone and Sand, 38CSR2B

   f. **Division of Health**
   Behavioral Health Centers Licensure, 64CSR11

   g. **Division of Health**
   Behavioral Health Consumer Rights, 64CSR74

   h. **State Auditor**
   Purchasing Card Program, 148CSR7

   i. **Secretary of State**
   Elimination of Precinct Registration Books, 153CSR9

   j. **Secretary of State**
   Filing Fees for Organizations, 153CSR15

   k. **Division of Natural Resources**
   Recycling Assistance Fund Grant Program, 58CSR5

2. **Other Business**

a. **State Tax Commissioner**
Exemption of Property From Ad Valorem Property Taxation, 110CSR3

Tuesday, December 14, 1999

9:00 a.m. - 11:00 a.m.

Legislative Rule-Making Review Committee
(Code §29A-3-10)

Earl Ray Tomblin
ex officio nonvoting member

Robert "Bob" Kiss
ex officio nonvoting member

Senate	**House**
Ross, Chairman	Hunt, Chairman
Anderson, Vice Chairman	Linch, Vice Chairman
Minard	Compton
Snyder	Jenkins
Unger	Faircloth
Minear	Riggs

The meeting was called to order by Mr. Hunt, Co-Chairman.

The minutes of the October 18 and 19, 1999, meetings were approved.

Debra Graham, Committee Counsel, explained the rule proposed by the ***State Auditor-Purchasing Card Program, 148CSR7,*** and stated that the Auditor has agreed to technical modifications.

Mr. Ross moved that the proposed rule be approved as modified. The motion was adopted.

Joseph Altizer, Associate Counsel, explained the rule proposed by the ***Office or Air Quality-To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors, 45CSR4*** had been laid over from the Committee's October meeting. Karen Watson, Counsel for the Office of Air Quality, addressed the Committee and responded to questions. Mr. Snyder had copies of an amendment distributed to Committee members. Dr. Robert Diener, Professor at West Virginia University, addressed the Committee.

Mr. Ross moved that the proposed rule be moved to the foot of the agenda. The motion was adopted.

Mr. Altizer reviewed his abstract on the rule proposed by the ***Office of Water Resources-State Water Pollution Control Revolving Fund Program Rule, 47CSR31.*** Mike Johnson, Assistant Chief of the Office of Water Resources, responded to questions from the Committee.

Mr. Ross moved that the proposed rule be approved. The motion was adopted.

Mr. Altizer explained the rule proposed by the ***Office of Water Resources-Water Pollution Control Permit Fee Schedule, 47CSR26.***

Mr. Faircloth moved that the proposed rule be approved. The motion was adopted.

Mr. Altizer explained that the rules proposed by the ***Office of Mining and Reclamation-Rules for Mining and Restoration for Sandstone, Limestone and Sand, 38CSR2A*** and ***Rules for Mining and Reclamation of Minerals Other Than Coal, Limestone, Sandstone and Sand, 38CSR2B,*** are similar, and that Judiciary Subcommittee A, studying non-coal quarrying, is working on Legislation that may affect these rules.

Mr. Faircloth moved that both proposed rules lie over until the Committee's next meeting. The motion was adopted.

Having voted on the prevailing side, Mr. Minard moved that the Committee reconsider its action whereby the rule proposed by the ***Alcohol Beverage Control Administration-Private Club Licensing, 175CSR2,*** and ***Retail Sale of Wine in Grocery Stores, Wine Specialty Shops and Private Wine Restaurants, 175CSR4,*** was approved as modified. The motion was adopted.

Mr. Ross moved that the proposed rule be moved to the foot of the agenda. The motion was adopted.

Rita Pauley, Associate Counsel, explained the rule proposed by the ***Division of Health-Behavioral Health Centers Licensure, 64CSR11,*** responded to questions and stated that the Division has agreed to technical modifications. Sue Cater, Director of the Behavioral Health Program, and David Forinash, Deputy Secretary with the Department of Health and Human Resources, addressed the Committee and responded to questions.

Mr. Ross moved that the proposed rule be approved as modified. The motion was adopted.

Mr. Hunt stated that at this time the Committee would consider the rule under other business, ***State Tax Commissioner-Exemption of Property From Ad Valorem Property Taxation, 110CSR3.***

Mr. Altizer explained the issue of tax exemption for retirement homes. Delegate Joseph Smith and John Montgomery, representing the State Tax Department, addressed the Committee and responded to questions.

Mr. Jenkins moved that Counsel draft a bill exempting retirement homes from real property taxes and notify the county assessors regarding the proposed amendment. The motion was adopted.

Ms. Graham reviewed her abstract on the rule proposed by the ***Secretary of State-Elimination of Precinct Registration Books, 153CSR9,*** and stated that the Agency has agreed to technical modifications.

Mr. Linch moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Graham explained the rule proposed by the ***Secretary of State-Filing Fees for Organizations, 153CSR15,*** and stated that the Agency has agreed to technical modifications.

Mr. Faircloth moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Pauley reviewed her abstract on the rule proposed by the ***Division of Health-Behavioral Health Consumer Rights, 64CSR74,*** and stated that the Division has agreed to technical modifications.

Mr. Anderson moved that the proposed rule be approved as modified. The motion was adopted.

Ms. Graham explained the rule proposed by the ***Division of Natural Resources-Recycling Assistance Fund Grant Program, 58CSR5,*** and stated that the Division has agreed to technical modifications.

Mr. Anderson moved that the proposed rule be approved as modified. The motion was adopted.

The meeting was adjourned.

Amendment to 45 CSR 4
To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors

§45-4-2. Definitions.

"Best Available Control Technology" means an emission limit based on the maximum degree of reduction of an air contaminant emitted from a facility which the Director, on a case-by-case basis taking into account energy, environmental, economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques for control of such contaminants.

"Dilutions to Threshold (D/T)" means the number of dilutions of clean, odor-free air, plus the one volume of odorous air, necessary to reduce the odor to a level at which fifty percent (50%) of a particular odor panel can detect any odor.

§45-4-9. This section applies to new commercial sewage sludge composting facilities, major modifications to existing commercial sewage sludge composting facilities, and existing commercial or non-commercial sewage sludge composting facilities that have been determined to be creating or contributing to an off-site nuisance condition.

9.1. Proposed (new) commercial sewage sludge composting facilities shall:

9.1.a. Include air pollution control for all emissions from active composting operations and analyze whether other sources (general building ventilation air, mixing area, curing piles, etc.) need controls. The level of control, BACT, shall include all reasonable practices to reduce/minimize odors and add-on controls as determined by a BACT analysis;

9.1.b. Demonstrate through air dispersion modeling approved by the Director that any odors emitted will not result in a predicted off-site nuisance odor condition. All composting odors, all odors from non-composting operations at the site (i.e. wastewater treatment unit processes) that are generated at sufficient levels to cause off-site nuisance conditions and all residual odors remaining after control treatment should be included as inputs to the model; and

9.1.c. Prepare and submit to the Director for review and approval an odor management plan that incorporates Best Management Practices (BMPs). The odor management plan shall include at a minimum the following:

9.1.c.i. A plan that details specific operational procedures that shall be used to minimize odor generation;

9.1.c.ii. A contingency plan for facility upset and/or nuisance conditions; and

9.1.c.iii. A complaint response program and a proposal for a community outreach/involvement program for odor management.

9.2. Existing commercial or non commercial sewage sludge composting facilities that have been determined to be creating or contributing to an off-site nuisance condition shall:

9.2.a. Identify and quantify all sources of odor at the site, including odors from non-composting activities;

9.2.b. Prepare and submit to the Director, within the time frame determined by the Director, a compliance plan to remedy the existing odor problems that includes a schedule for initiation of control measures, including, but not limited to:

9.2.b.i. Optimization of operating and maintenance procedures to reduce the generation of odors;

9.2.b.ii. An air pollution control/treatment system for, at a minimum, all emissions from active composting operations;

9.2.b.iii. An evaluation of the need for an odor treatment/control system shall be conducted for all other areas such as mixing, curing, and storage areas;

9.2.b.iv. An evaluation of all other odor control options and their effectiveness/applicability to the source; and

9.2.b.v. A demonstration of control plan effectiveness through the Director approved air dispersion modeling referred to in section 9.1.b. of this rule.

9.2.c. Upon approval by the Director of the compliance plan, implement all steps of the plan.

9.3. A BACT analysis (determining BACT) shall be conducted in a "top-down" manner. All odor control methods and devices possible must be considered; elimination of specific strategies must be documented on technical, economic or other considerations. Odor Control methods currently and successfully in long-term use at other similar facilities will automatically be considered technically feasible unless substantial documentation to the contrary is provided.

9.3.a. The minimum level of air pollution control that will be considered BACT is that level which will not result in a condition of nuisance odors off-site. This criterion must be met regardless of the cost such control would entail.

9.4. Exemptions.

9.4.a. The Director will consider, on a case by case basis, exemptions from the add-on control requirement for new facilities in section 9.1.a., but not for existing facilities with odor problems, if the proponent can demonstrate a condition of odor will not occur due to the size and location of the facility.

9.4.b. Such exemptions will not be considered for facilities in urban areas or very close to

residential areas in rural areas.

9.4.c. A detailed dispersion modeling analysis and other supporting documentation must be submitted to the Director as part of any such exemption request.

9.4.d. Facilities that receive such an exemption must submit to the Director, for review and approval, a detailed contingency plan. The contingency plan shall include, but not be limited to:

9.4.d.i. A written agreement adequate to ensure that an available alternative disposal, handling, or composting facility exists should odorous conditions necessitate the routing of the compostable material to an alternate facility; and

9.4.d.ii. A detailed operation and maintenance steps that will be taken to minimize odors at the facility applying for the exemption should nuisance conditions occur.

9.5. Criteria for approval.

9.5.a. The design of proposed sources, as well as proposed modifications to a source, should be evaluated for an impact of five (5) Dilutions to Threshold (D/T) or less, as predicted by the Director approved air dispersion modeling.

9.5.a.i. Impacts should be evaluated at the property boundary or at the point of maximum impact beyond the property boundary, whichever results in a higher predicted impact, unless otherwise approved in writing by the Director.

9.5.a.ii. On a case by case basis, the Director may agree to allow use of the most sensitive receptor as the design point, even though this may result in a less stringent requirement than use of the property boundary, if requested by the applicant and if adequate justification is submitted to indicate that both the existing and future land use in between the receptor and facility property line supports such a request.

9.5.b. The Director may require that an applicant demonstrate compliance with a design standard (as predicted at the property boundary or at the point of maximum impact beyond the property boundary, whichever results in a higher predicted impact) of less than five (5) Dilutions to Threshold (D/T) at sites which the Director determines are appropriate due to local meteorology and topography, previous history of chronic odors, or intensity/density of local development.

9.5.c. Use of five (5) Dilutions to Threshold (D/T) as a minimum design standard in no case exempts a facility from having to operate in such a way as to prevent nuisance conditions from occurring off-site. The facility operator is responsible for ensuring that nuisance conditions do not occur off-site regardless of the D/T level designed for and regardless of the results of compliance testing.

9.5.d. For existing sources, as well as proposed and modified sources after they are in operation, a condition of odor will be determined by the Director during actual site visits and other pertinent information (such as complaints) as well as by compliance testing results. Modeling results which represent conditions at a particular point in time are not in and of themselves

sufficient to prove that an odor does not exist at an operating facility.

9.6. Air modeling procedures.

9.6.a. The acceptable limit, for purposes of design and compliance testing, is a modeled impact not greater than five (5) Dilutions to Threshold at the more stringent of either (a) the property boundary, or (b) the maximum ground-level impact off-site, under stability class E for ground level sources or the most conservative stability class for discharges from stacks, unless otherwise approved in writing by the Director.

9.6.b. Modeling protocols must be submitted to the Department for approval. The protocol shall at a minimum:

9.6.b.i. Use the EPA approved ISCST model and instruction manual;

9.6.b.ii. Use generic worst-case meteorological data. Site specific meteorology can be used for refined analysis if the limit is exceeded in screening. Site specific data must first be approved by the Director;

9.6.b.iii. Incorporate downwash and terrain factors in the model;

9.6.b.iv. Model all sources simultaneously for total impacts; and

9.6.b.v. Model using worst-case, short term, peak odor emission rates.

9.6.c. For purposes of dispersion modeling of property line/receptor impacts, emission from biofilters or scrubbers should be assumed to be not less than approximately 50 D/T on average unless adequate information is submitted otherwise.

9.7. Process operation and maintenance

9.7.a. New facilities must be designed to ensure that the facility will employ procedures and equipment effective to minimize odors.

9.7.b. Existing sewage sludge composting facilities that are determined by the Director to be causing or contributing to nuisance conditions must first optimize their operating and maintenance procedures so that odor generation is minimized as much as possible prior to the addition of any odor control equipment.

9.7.c. Plans submitted for approval regarding optimization of operating and maintenance procedures shall include but not be limited to:

9.7.c.i. An evaluation of materials handling practices prior to mixing with bulking agents including but not limited to; storage time and chemical addition prior to dewatering;

9.7.c.ii. Mixing systems designed to produce an initial homogenous mix without large clumps of raw compost material, or excessive moisture;

9.7.c.iii. Aeration systems designed to ensure that adequate and timely aeration is provided to all parts of the piles during active composting;

9.7.c.iv. Temperature feedback controlled systems such that the internal pile temperature is controlled within the optimum range--not greater than 60-65 degrees Centigrade, preferably below 60 degrees Centigrade;

9.7.c.v. Procedures for maintaining proper pile height, aeration rate, temperature control and cycle times for composting, curing and storage; and

9.7.c.vi. Air dispersion modeling showing whether curing piles should be located in an enclosed building.

9.7.d. All curing piles should be under roof, and facilities should be evaluated on a case by case basis to determine whether storage piles need to be under roof to prevent re-establishment of biological conditions conducive to odor generation.

9.7.e. All facilities should have, at a minimum, access to an available portable aeration system available for use on curing and/or storage piles.

9.7.f. Biofilters

9.7.f.i. Biofilters should be designed at a loading rate not to exceed three cubic feet per minute per square foot (3 CFM/SF);

9.7.f.ii. Biofilters should include an irrigation system and a humidification system that is adequate to prevent drying out of the unit;

9.7.f.iii. The biofilter design should contain an evaluation of whether pre-scrubbing is necessary to prevent excessive ammonia and particulate loading;

9.7.f.iv. Biofilters should be designed with an empty bed detention time of 45-60 seconds and should be three to four feet in depth;

9.7.f.v. The facility shall provide for short term contingency in the event of catastrophic failure or for routine replacement of the biofiltration system bed media. The duration of each contingency event shall be for a period necessary to re-establish a population of organisms within the bed for optimum pollutant removal.

9.8. Emission limitations.

9.8.a. The emission rates resulting from the BACT analysis and used in the modeling to demonstrate compliance with the design criteria of five (5) Dilutions to Threshold (D/T) , will become the facility's allowable emission rate.

9.8.b. A facility may have more than one emission limit if more than one odor source

exists at the facility. Potential sources include, but are not limited to:

9.8.b.i. Emissions from treatment systems such as biofilters and chemical scrubbers;

9.8.b.ii. Areas that are vented without treatment, such as through fans, stacks or through building ventilation systems; and

9.8.b.iii. Outside piles and storage areas.

9.9. Testing.

9.9.a. All new sewage sludge composting sources and associated air pollution/odor control equipment shall undergo compliance testing twice per year, or at a frequency that the Director determines is sufficient to demonstrate compliance with odor emission limits and/or control efficiencies as contained in any Director approval for the source.

9.9.b. Existing composting operations that the Director determines in writing are likely to be generating or contributing to off-site odor nuisance conditions may also be required to undergo compliance testing.

9.9.c. Compliance testing shall consist of odor panel analysis of samples taken at the points of generation and the analysis should be conducted in accordance with ASTM Method 679-91 unless otherwise approved by the Director. The director may also require samples to be taken at other on-site or off-site locations.

9.9.c.i. Samples shall be taken from the point(s) of generation, or other sites as required;

9.9.c.ii. In no case shall sample storage time exceed 24 hours prior to odor analysis;

9.9.c.iii. Odor samples shall be collected into gas sampling bags made of Tedlar unless otherwise approved by the Director;

9.9.c.iv. Odor samples shall be collected using a sampling line made of an odor-free, chemically inert and non-reactive material;

9.9.c.v. The sampling bag shall be purged with the sample at least once prior to collecting the sample;

9.9.c.vi. The gas shall be transferred directly into the sampling bag without going through any potential sources of contamination such as pumps;

9.9.c.vii. Samples should be maintained at ambient temperature and contact with direct sunlight should be avoided;

9.9.c.viii. Air flow shall be regulated at a minimum of three (3) liters per minute per sniff port unless otherwise approved in writing by the Director;

9.9.c.ix. During odor panel testing each diluted sample must be presented to the sample with two odor-free blanks, for statistical validation purposes, by using three (3) sniff ports;

9.9.c.x. Odor panels shall consist of a minimum of 6 to 8 individuals preferably comprised of non-smokers and of both genders. Panelists shall be screened and trained;

9.9.c.xi. All olfactometer parts that come into direct contact with the sample in any way must be chemically inert and nonreactive and must be able to be purged or cleaned quickly.

9.9.d. If the compliance testing indicates an exceedance of the "back-calculated" emissions limit, the composting facility shall at a minimum:

9.9.d.i. Initiate a preliminary investigation into the reasons for the exceedances. The preliminary investigation shall include at a minimum an evaluation of whether odor control system and aeration system components are operating correctly; and

9.9.d.ii. Submit, along with the preliminary investigation, a scope of work for tasks related to a more detailed and comprehensive evaluation of the reasons for the exceedances.

9.9.e. The scope of work shall include an evaluation of whether operating and maintenance procedures can be modified to minimize odor generation rates at the facility.

9.9.f. The preliminary investigation and scope of work shall be submitted to the Director for review and approval as soon as possible but in no case later than 30 days from the facility's receipt of the compliance testing results.

9.10. Determination of nuisance.

9.10.a. The determination of a nuisance condition resulting from composting odors should not be based on specific chemical thresholds. Because of synergistic effects, different levels of sensitivity to odors, and limitations on analytical methods and other factors, a nuisance may exist even when specific compounds are found to be below any established thresholds.

9.10.b. Limited testing can not cover all operating conditions and odor level testing includes some inherent variability. Therefore, the Director will also use site visits and will consider other pertinent information, such as complaints, when determining whether odor/nuisance conditions exist off-site regardless of emissions compliance test results. The operator shall complete a standard form, prepared by the Director, for all odor complaints received by the facility. Copies of the completed form shall be sent to the Director, the local Board of Health, and the complainant.

DECEMBER INTERIM SCHEDULE
Legislative Interim Meetings
December 12, 13, and 14, 1999

Tuesday, December 14, 1999

9:00 - 11:00 a.m.

Legislative Rule-Making Review Committee (Code §29A-3-10)

Earl Ray Tomblin, ex officio nonvoting member

Robert S. Kiss, ex officio nonvoting member

Senate		House	
Ross, Chair	✓	Hunt, Chair	✓
Anderson, Vice Chair	✓	Linch, Vice Chair	✓
Minard	✓	Compton	✓
Snyder	✓	Jenkins	✓
Unger	✓	Faircloth	✓
Minear	✓	Riggs	✓

I certify that the attendance as noted above is correct.

Staff Person

Debra

April 2000 presentation WEF odor Spec. Conf. Cinn. OH

Elements of Successful Odor Laws

Charles M. McGinley
St.Croix Sensory, Inc.

Thomas Mahin — Mass. DEP
Richard Pope — Malcolm Pirnie

Tom + I are co-chairs

keywords: odor, laws, rules, regulations, ordinances, annoyance

The search for the perfect "odor regulation" most likely began a few thousand years ago in a community that smelled something annoying. That search continues today in societies throughout the world. The European Community is taking a direct approach to regulate odor. In the US, odor is not an EPA regulated pollutant and, therefore, states and local jurisdictions have attempted or are attempting to regulate odor.

In the absence of regulation in the US, citizens and communities must often resort to the basic "common-law" nuisance law suits. However, exclusions and exemptions, such as "right-to-farm" laws, can sometimes make nuisance actions difficult and expensive to win.

From state to state and in communities across the US, odor issues are addressed by a variety of "odor laws", whether they are called an ordinance, rule, or regulation. These odor laws attempt to address community "odor issues" in several well defined approaches, i.e. ambient odor limits, ambient odorant limits, annoyance limits, source emission limits, and best available control requirements. The various standard approaches are not mutually exclusive and sometimes are combined in an odor law.

Underlying the "standard approaches" to odor laws are the basic elements that have been placed into successful regulation of pollutants other than odors. However, these elements must be adapted and formulated for the odor issues. Therefore, a number of successful elements of odor laws have been developed. Examples of the successful elements include: purpose statement, authority source, definitions, jurisdiction identified, complaint verification, standards and limits, notices of violation, penalties, remedies, appeals, standards of performance, permitting, exclusions, modeling, severability clause, and limitations.

This paper will present the standard approaches and successful elements of odor laws used by communities and states in the US and by other countries.

Water Environment Federation
WEFTEC'99
New Orleans, LA

OVERVIEW OF DIFFERENT APPROACHES USED IN ODOR REGULATIONS AND POLICIES

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ABSTRACT

Many states, countries, local officials and consultants have wrestled with the issue of what odor levels should be considered a nuisance. A number of different approaches are being used. A number of different approaches are being used. One of the reasons for the great variability in approaches is that there is disagreement within the odor control industry on many critical factors which are described in the paper.

The four main approaches in setting odor standards are:

1. Using general language about odor nuisances being unacceptable. This approach sometimes includes language relative to "quality of life" or "enjoyment of property".
2. Specifying the maximum acceptable off-site D/T (Dilutions/Threshold) or odor units/ou. meter (ou/m^3) level (D/T and ou/m^3 are the same). This approach

can use D/T either to (a) as a means to back-calculate D/T odor emissions limits at the source or (b) as part of a field approach using a device such as a Scentometer.

3. Specifying acceptable ambient (off-site) levels for individual compounds such as hydrogen sulfide.

4. Using odor intensity field measurements (such as butanol scale) to define odor nuisance.

There seems to be a trend towards using dispersion modeling (generally EPA's ISCST model the current version of which is ISCST3) to predict off-site D/T levels and compare the results against formal or informal acceptable D/T levels. The D/T level predicted by the model is then usually converted to a value for a shorter averaging time such as 5 minutes which increases the predicted D/T level.

KEYWORDS

odor, regulations, modeling

INTRODUCTION

Many states, countries, local officials and consultants have wrestled with the issue of what odor levels should be considered a nuisance.[1,2,3,4,5,6,7,8,9,10,11,12] A number of different approaches are being used. One of the reasons for the great variability in approaches is that there is disagreement within the odor control industry on many critical factors such as:

- What are appropriate flow rates to olfactometers (disagreement exists even while using standard ASTM procedures such as ASTM Method 679-91) and what are other standard approaches that should be used for olfactometers?
- What are the representative odor thresholds for common odor causing compounds such as hydrogen sulfide?
- What averaging time is appropriate when modeling odor impacts using standard odor dispersion models?
- Which form of butanol should be used for odor intensity measurements?
- What frequency of occurrence should exist before it is determined that odor nuisance conditions exist or will exist?

This paper and the presentation will summarize the different approaches and will analyze some of the important related issues such as averaging time.

DISCUSSION

The four main approaches in setting odor standards are:

1. Using general language about odor nuisances being unacceptable. This approach sometimes includes language relative to "quality of life" or "enjoyment of property".
2. Specifying the maximum acceptable off-site D/T (Dilutions/Threshold) or odor units/cu. meter (ou/m^3) level (D/T and ou/m^3 are the same). This approach can use D/T either to (a) as a means to back-calculate D/T odor emissions limits at the source or (b) as part of a field approach using a device such as a Scentometer. ASTM E679
3. Specifying acceptable ambient (off-site) levels for individual compounds such as hydrogen sulfide.
4. Using odor intensity field measurements (such as butanol scale) to define odor nuisance. ASTM E544

Some specific examples of different approaches follow.

Japan

Japan has had an Offensive Odor Control Law since 1971. The Law was amended in April 1995. According to the Law, the acceptable individual compound odor levels off-site should be set equivalent to the odor intensity between 2.5 to 3.5 on the five point odor intensity scale as noted below (it is left up to "Prefectural governors" to use natural and social conditions in their area to determine which part of the range to use):[13]

0	No Odor
1	Barely Perceivable (Detection Threshold)
2	Faint but Identifiable (Recognition Threshold)
3	Easily Perceivable
4	Strong
5	Repulsive

Netherlands

In the Netherlands the maximum concentration of H_2S in off-gases is 5 mg/m^3 for mass flows of at least 50 g/h. This is according to the National Emission Guidelines.

Besides that, there are local guidelines for odor.

The national guideline used to be:

New factories: the hour-average odor level for residential areas should be 99.5% of the time below 1 OU/m³ and for "old" the same, but 98 % of the time. Nowadays the municipal or provincial authorities can choose their own OU/m³ limit. It depends on the nature of the odor. For bakeries (pleasant odor) the 99.5 % and 98 % odor limit is mostly 5 - 10 OU/m³, but for H_2S (unpleasant) still 1 OU/m³ will be used. But that is up to the local policy.[14]

Ontario, Canada

One (1) D/T has reportedly generally been used in the province of Ontario (which includes Toronto) as a guideline for predicting whether there is the potential for causing an adverse odor effect.[15]

Taiwan

The regulatory odor standard for off-site levels of hydrogen sulfide near petrochemical industrial parks is 50 ou/m³.[16]

Australia

The New South Wales (area that includes Sydney) EPA is proposing to use an odor performance criteria of 2 OU/m³ which would only beapplied at the population density greater than 2000. It is still not clear whether the number of 2000 means "2000 persons" or "2000 residences". 7 OU/m³ is only used if the population density is "single residence". These values are one second values and model output should be converted from 1 hourly averages using peak-to-mean ratio of 2.3.[17]

Columbia (South America)

A target odor threshold of 10 ppb (11.5 ug/m3) for hydrogen sulfide was used for modeling purposes for the San Fernando Wastewater Facility in Medellin, Columbia a few years ago.

Germany

In the past Germany has defined odor such that no illegal annoyance is present if odors are present that are above the perception threshold less than 3% of the hours of one year. They have also illegal annoyance has to be considered if during more than 5% of the hours of one year odors are clearly perceivable.[18]

Massachusetts

Massachusetts has a draft odor policy that calls for new facilities to generally be designed such that off-site impacts do not exceed 5 Dilutions/Thresholds (D/T).[19,20,21] Regional offices are allowed to set a more stringent off-site D/T limit based on site specific conditions such as the density of nearby residential development, history of odor problems in the area, etc.

New York

The state uses an ambient air standard of 10 ppb (one hour average) for hydrogen sulfide. The City of New York uses one (1) ppb of hydrogen sulfide as a guideline for defining off-site odors at sensitive receptors (schools, homes, etc.).

California

California uses 30 ppb as the odor standard for hydrogen sulfide (1 hour average). In addition, regional air quality districts have their own standards as noted below.

San Diego Metropolitan Wastewater Department (MWWD)

Also the San Diego MWWD uses a guideline of 5 D/T at the fenceline to be met 99.5% of the time. The averaging time to be used for the purposes of dispersion modeling is 5 minutes.[22]

Bay Area Air Quality District (BAAQD)

The BAAQD in the San Francisco Bay area uses a fenceline standard of 4 D/T (4 dilutions of odor free air) but it is only invoked when a minimum of 10 complainants complain about odor nuisances from a facility within a 90 day period.[23]

North Dakota

A fenceline standard of two (2) "odor concentration units"[24] (2 dilutions of odor free air or 2 D/T) is used as well as a hydrogen sulfide standard of greater than 50 ppb (two samples at least 15 minutes apart within a 60 minute time period).[25]The standard is apparently used in response to complaints and not as a design standard. Regulatory agency personnel are certified as odor inspectors.

New Jersey

The New Jersey Guidelines include among other protocols a five (5) point odor intensity scale as noted below[26]:

0	Odor not detectable.
1 - Very Light	Odorant present in the air which activates the sense of smell but the characteristics may not be distinguishable.
2 - Light	Odorant present in the air which activates the sense of smell and is distinguishable and definite but not necessarily objectionable in short durations but may be objectionable in longer durations.
3 - Moderate	Odorant present in the air which easily activates the sense of smell, is very distinct and clearly distinguishable and may tend to be objectionable and/or irritating.
4 - Strong	Odorant present in the air which would be objectionable and cause a person to attempt to avoid it completely, could indicate a tendency to possibly produce physiological effects during prolonged exposure.
5 - Very Strong	Odorant present which is so strong it is overpowering and intolerable for any length of time and could tend to easily produce some physiological effects.

New Jersey Sludge Odors

Where the applicant has proposed an odor control device to remedy odors from an existing sludge handling or treatment operation then either[27]:

- 5 D/T at the sensitive receptor with the highest impact as predicted by dispersion modeling must be met or
- The facility must remove 95% of the target odor causing compound(s) such as hydrogen sulfide or ammonia and achieve an outlet concentration of that compound(s) that is below the individual odor compound threshold(s).

For any new municipal sludge handling and/or treatment system or existing ones with a history of odor complaints then 5 D/T at the sensitive receptor with the highest impact as predicted by dispersion modeling must be met. New Jersey guidance requires that D/T levels predicted by dispersion models be converted to short term peaks of 5

minutes or less.

Connecticut

The Connecticut regulation which dates back to 1990 is a field based standard and implies the use of a Scentometer type device. It states that the a DEP Inspector has to detect an odor beyond the property boundary and that the odor is equal to or greater than the detection threshold based on:

- three samples or observations in a one hour period separated by 15 minutes each
- seven parts of clean air to one part sampled air (7 D/T)

It has however been reported that notwithstanding the standard described above that DEP typically determines nuisance odor conditions based on the perceptions of an individual inspector without the use of odor detection or measurement devices and that the quantitative aspects of the standard aren't really used.[28] Connecticut also defines the odor threshold for hydrogen sulfide as 6.3 ug/m^3 (4.6 ppbv) and methyl mercaptan as 2.2 ug/m^3.

State of Washington

While the authors are not aware of any overall D/T standard it is noted that for the Metropolitan Seattle Regional Wastewater Treatment Plant Expansion (Renton, WA) a few years ago the criterion for eliciting odor complaint responses was assumed to be an odor magnitude of 5 D/T for a period of 5 minutes. ISCST model output was assumed to equal 60 minutes and was adjusted to 5 minute averages using an adjustment factor of 2.29. Also it is noted that for the Chambers Creek Wastewater Facility (Pierce County, WA) project a few years ago that a "practical threshold odor detection level" of 3 to 7 parts per billion was used for hydrogen sulfide.[29]

Pennsylvania

While the authors are not aware of any overall D/T standard it is noted that for the Allegheny County Wastewater Facility a few years ago a two (2) minute odor "goal" of 4 D/T was established. Model output was adjusted from 60 minutes to a 2 minute averaging time by using an adjustment factor of 2.0.[30]

Illinois

While the authors are not aware of any overall D/T standard it is noted that for the Kankakee, Illinois Wastewater Utility project a few years ago an odor threshold of 4 D/T and two minute averaging time were used. ISCST model output was adjusted from 60 minutes to two (2) minute impacts by increasing model predicted impacts by a factor of 2.0.

Palm Beach County, Florida

For the Palm Beach County, FL Biosolids and Yard Waste Composting Facility project, the Palm Beach County Solid Waste Authority assumed that a level of 7 D/T at the property line would be acceptable.[31]

North Carolina

For the Regional Composting Facility (Hickory, NC) project a few years ago 4 D/T was used as a "conservative nuisance threshold" ISCST model output was assumed to equal 15 minutes and the output was adjusted to a 30 second averaging time resulting in an adjustment factor of 1.97.[32]

Portland, Oregon

Portland uses 1 to 2 D/T (1 to 2 dilutions of clean air) to define a nuisance (using a Scentometer) with anyodor less than 15 minutes being exempt.[33]

Colorado

Regulation No. 2 states that for residential and commercial properties that 7 D/T is the limit with 2 measurements being made within an hour separated by at least 15 minutes (Scentometer type approach).[34]

CONCLUSIONS

A number of different approaches are being used by different regulatory agencies. One of the reasons is a lack of agreement in the odor control industry on standard approaches. Another reason is the varying resources within different regulatory agencies to implement what can be resource intensive approaches. There seems to alot of interest in using common sense field evaluations to evaluate odor complaints in the field. There is still a need for determining what are acceptable off-site levels at the time of permitting new wastewater facilities and significant expansions. There seems to be a trend towards using dispersion modeling (generally EPA's ISCST model the current version of which is ISCST3) to predict off-site D/T levels and compare the results against formal or informal acceptable D/T levels. The D/T level predicted by the model is then usually converted to a value for a shorter averaging time such as 5 minutes which increases the predicted D/T level.

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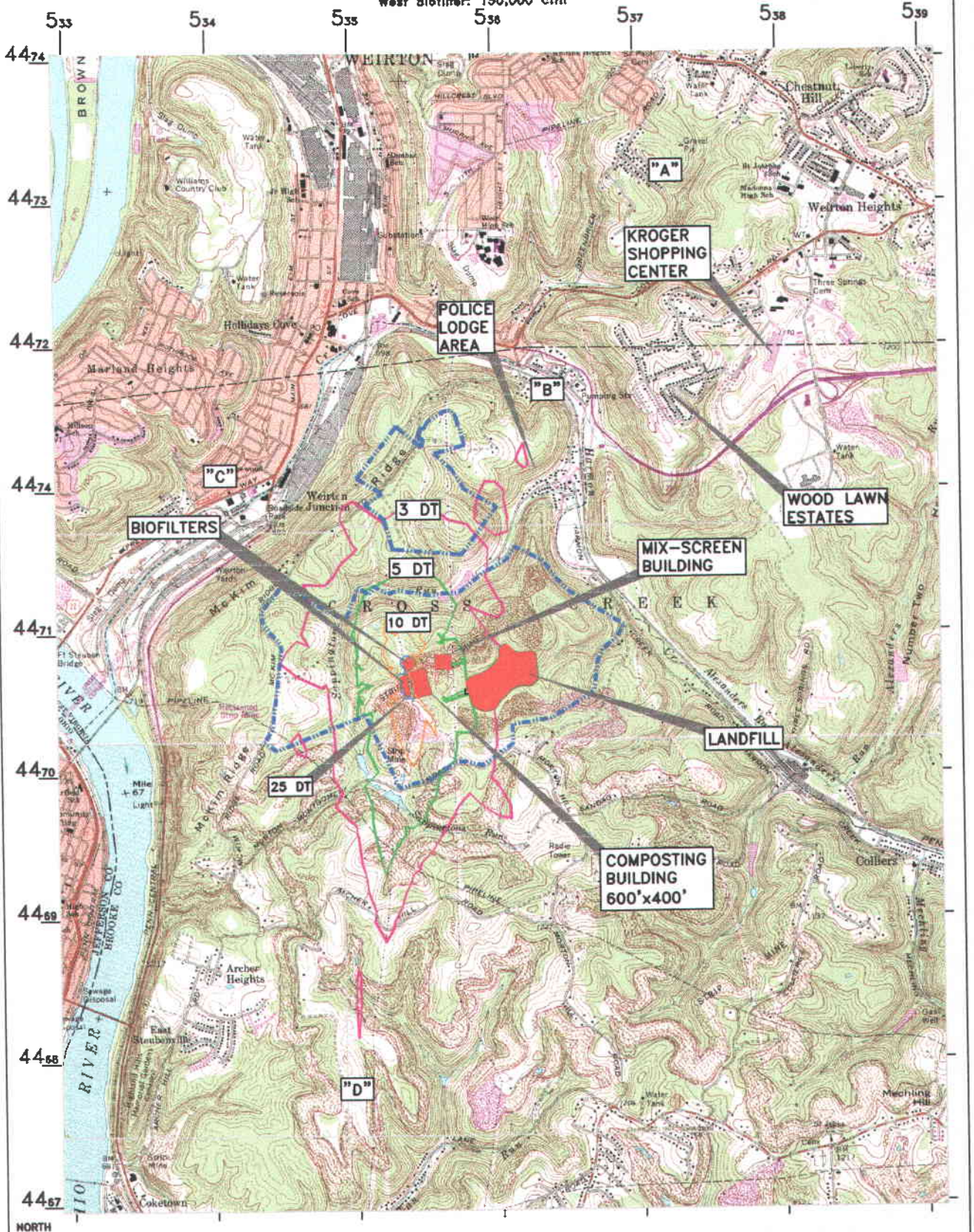
Brooke County Composting Facility
Air Dispersion Modeling
ISCST 1-hr Max Concentration
5YR 1987-1992 Weather Data
(100 DT intial) Reduced Loading

North Biofilter: 70,000 cfm
West Biofilter: 150,000 cfm



NORTH

Scale:
1"=300 meters
UTM Coordinate System

3 DT
5 DT
10 DT
25 DT

COMPOSTING BUILDING & NORTH/WEST BIOFILTERS

VALERO TERRESTRIAL INC. PROPERTY BOUNDARY

WEST BIOFILTER: 82,512 SQFT
NORTH BIOFILTER: 52,414 SQFT

25.2.2. An orphan asylum is exempt from ad valorem property taxation if such orphan asylum is operated for charitable purposes in accordance with Section 19 of these regulations, is an educational institution in accordance with Section 16 of these regulations or is exempt state, county or municipal property or property of the United States or otherwise exempt public property in accordance with these regulations.

§110-3-26. Homes For Children Or For The Aged, Friendless, Or Infirm, Not Conducted For Private Profit.

26.1. A home for children or for the aged, friendless, or infirm not conducted for private profit is exempt from ad valorem property taxation if such home is for charitable purposes in accordance with Section 19 of these regulations, or an educational institution in accordance with Section 16 of these regulations or is exempt state, county or municipal property or property of the United States or otherwise exempt public property in accordance with these regulations.

26.2. A home for the aged will not qualify for this exemption if in order to gain admittance a person must deposit a substantial amount of money which can be equated to the prepayment of rent, must pay an application fee, must pay a damage deposit or must agree to pay a room charge unless the charge is substantially less than market value and the difference is not subsidized through a government program. It is necessary that the exempt activity meet the constitutional requirement of charitable use.

§110-3-27. Fire Engines And Implements For Extinquishing Fires, And Property Used Exclusively For The Safekeeping Thereof, And For The Meeting Of Fire Companies.

27.1. All fire engines, implements for extinquishing fires, all equipment which is used by firemen in conjunction with their job and all real estate upon which fire houses are located is exempt from ad valorem property tax if such property is used exclusively for a charitable purpose in accordance with Section 19 of these regulations or is exempt state, county or municipal property or property of the United States or otherwise exempt public property in accordance with these regulations.

27.2. To the extent that a private corporation maintains at a manufacturing facility, or other facility of business, a separate structure which houses one or more fire engines and to the extent that such structure and only that structure has been divided from the remainder of the business facility, such structure is exempt.

27.3. If a private person, whether an individual, a corporation or otherwise, is in the business of selling, leasing, repairing or servicing equipment used for extinguishing fires, the exemption provided herein shall not apply to any such equipment which is intended to be used by a client or customer of the business.

§110-3-28. Property On Hand To Be Used In The Subsistence Of Livestock On Hand At The Commencement Of The Assessment Year.

28.1. All personal property on hand which is to be used in the subsistence of livestock on hand at the commencement of the assessment year is exempt from ad valorem property taxation.

28.2. For example: Feed troughs and water troughs not permanently affixed to realty, portable coops, horse trailers and portable livestock pens are exempt to the extent that they are actually and directly used for, and reasonably necessary for the care or feeding of livestock on hand at the commencement of the year. Feed troughs and water troughs, coops and livestock pens which are affixed to realty and fences, gates, barns and outbuildings are not subject to the exemption, notwithstanding the fact that they are necessary for the care and feeding of livestock.

28.3. Livestock includes, but is not limited to: cattle, horses, sheep, chickens, domestic ducks, domestic geese, domestic turkeys, catfish, rabbits, buffalo, mink, foxes, otters, pigs, mules, donkeys, domestic goats, ponies and earthworms when raised for profit or consumption or use on the farm.

§110-3-29. Household Goods And Personal Effects.

29.1. Household goods and personal effects if not held or used for profit are exempt from ad valorem property taxation. W. Va. Const. Art. X, §1b.

29.2. Household goods to the value of two hundred dollars ($200.00), if used for profit, are exempt from ad valorem property taxation.

29.3. Household goods, if used for profit, shall be

REGISTRATION OF PUBLIC
AT
COMMITTEE MEETINGS
WEST VIRGINIA LEGISLATURE

Committee: Legislative Rule-Making Review Committee **Date** 12-14-99

Please print or write plainly.

NAME	ADDRESS	REPRESENTING	Please check (X) if you desire to make a statement.
Karen Watson	State Capitol	DEP-OAQ	If requested
John Benedict	State Capitol	DEP-OAQ	
Mike Johnson	617 Broad St	DEP- OWR	
John Montgomery		Tax Dept	If requested
~~Bob~~ Hoffman		Tax Dept	
Glen Gainer III	State Capitol	State Auditor	
Tom Susman	405 Capitol St	MBP	
Robert Driver	Morgantown	SELF	yes
Rex Burdock	Charleston	Atty Gen Off	yes -
MIKE CHAMBERS	CHARLESTON	WV CRUSHED AGGREGATE Council	✓

LS-C-66-1a
Revised 1-10-97

Tuesday, December 14, 1999

9:00 - 11:00 a.m.

Legislative Rule-Making Review Committee
(Code §29A-3-10)

Senate Finance Room

Earl Ray Tomblin, ex officio nonvoting member

Robert S. Kiss, ex officio nonvoting member

Senate

✓ Ross, Chair
✓ Anderson, Vice Chair
✓ Minard
✓ Snyder
✓ Unger
✓ Minear

House

✓ Hunt, Chair
✓ Linch, Vice Chair
✓ Compton
✓ Jenkins
✓ Faircloth
✓ Riggs

Called to order by Coahairman Hunt
Minutes of Oct 18, & 19th approved

State Auditor – Purchasing Card

I explained

? adopted Approve as mod

OAQ – Odors

Joe explained status
Karen Watson addressed C & responded to q's

Ross adopted Foot of agenda

Snyder had copies of an amendment distributed

Dr. Deaner?, WVU addressed the C

Water Resources – Revolving Fund

Joe explained

Mike Johnson, DEP responded to q's

Ross adopted Approve

Water Resources - Permit Fee Schedule

Joe explained

Faircloth adopted — Approve

Mining & Reclamation - Sandstone

Faircloth adopted — Lay over

Mining & Reclamation - Other minerals

Faircloth adopted — Lay over

ABCC - Wine

Baird adopted — Moves C reconsider

Ross adopted — Foot of agenda

Div. of Health - Behavioral Health Licensure

Rita explained & responded to q's

Sue Cater, OHFLAC responded to q's

~~Dave~~ Folinath Dept Sec HHR " " "

Ross — Approve as mod

State Tax Commissioner (Other business)

Joe explained issue - tax ~~exception~~ exemption for retirement homes

Del Smith addressed the C

John Montgomery addressed the C

Jenkins — Counsel to draft bill

Mathis Assessors Change.

Sec of State – Elim

I explained

Linch adopted — Approve as mod

SOS – Filing Fees

I explained

Faircloth adopted — Approve as mod

Div. of Health – Behavioral – Consumer Rights.

Rita explained & responded to qs

Anderson adopted — Approve as mod

DNR – Recycling

I explained

Anderson — Approve as mod.